



Finding Humanity in Design

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Abstract:

The Calgary Board of Education's Design the Shift was a radical step away from typical professional development opportunities. It was a year-long collaboration designed for educators to provoke a shift in practice by redefining curriculum through design. Our definition of design evolved from a linear business model to a much more generous movement. As designers of learning, the participants took up "what really [mattered] to them", with design becoming an intersection of creativity, place, and community (Chambers, 1998, p. 17). We created opportunities for participants to charge up against an experience, causing them to make, unmake, and remake the curriculum of their classrooms. All experiences inspired the participants to stop, notice, listen and awaken, drawing on Maxine Greene's (1977) wide-awakeness philosophy.

Keywords: design thinking; human-centred mindset; creative problem solving; wide-awakeness, professional learning; curriculum

Finding Humanity in Design

Sawdust shimmers in the morning sunlight as a small group of us lean in to study the luthier's unfinished violin. We listen, birds chirping quietly through the open door of his workshop, as he muses about the slow, meditative quality of planing, filing, sanding. We make silent comparisons to our classrooms, drawing insight from how the luthier finds both satisfaction and problems in his designs. We are on a field trip for teachers, designed to help us see how our disciplines live in the world. We called this radical experiment in professional learning *Design the Shift*, a year-long exploration of the applications of design thinking in education. As facilitators and participants¹ engaged in provocative activities designed to get us to redesign our experiences, we began to uncover how these experiences led us to redefine ourselves as teachers and as humans.

For three summer days, a self-selected group of 120 teachers, spanning the grades of Kindergarten to Grade 12, walked along the river, participated in field trips, and did improvisational theatre. These experiences in unique places were at the surface unrecognizable as professional learning, yet provided profound connections to classroom practice. The teachers were reconvened four times throughout the school year around provocations designed to shake participants out of their routine. They were provoked to reimagine a new way of being and to design innovative learning experiences.

Design thinking is a method of creative thinking originating in product design, often attributed to the international design firm IDEO and Stanford's d.school (Camacho, 2016). Design thinking flips the traditional way of inventing a product or service wherein a product is designed, and marketing creates a need. Instead, design thinking starts from a user-centred approach of gaining empathy and of designing a product that meets a need. Educators have since begun to explore how design thinking might apply in teaching and learning.

Design thinking, often presented in models as a linear process, includes phases such as discover, define, ideate, prototype, and test (see, for example, IDEO, 2012; Kelly, 2016). In the initial architecture of *Design the Shift*, we wanted to use a more generous working definition. If we relied on design thinking as a process, we risked teachers seeing design thinking as another thing they had to do, rather than as an empathy-based, human-centred approach to bringing curriculum to life. Our resulting definition added nine mindsets: embracing ambiguity, learning from failure, optimism, radical collaboration, thought to form, mindfulness of process, iteration, human centeredness and empathy. These mindsets emerged from a synthesis of existing design-thinking models, such as IDEO's (2015) *Field Guide to Human Centred-Design*, research on creative practice, including Robert Kelly's work (2012, 2016), and interpreted through the lens of research by curricular theorists such as Ted Aoki (1986/1991), David Smith (2014), Maxine Greene (1977), and David Jardine (2014).

The mindsets had to be established before a process of creative problem-solving could be useful. Dwelling within the human-centred mindset and situating a problem within the needs of the user allows educators to really get to the heart of teaching and learning: people, humanity, society

and community. For these reasons, design thinking became the vehicle through which we provided teachers with experiences where they could disrupt old ways of thinking and redesign learning so students become active participants in the learning design process. We started with our own design question: How might we use design thinking to nurture professional growth so teachers have creative confidence to enact engaging and meaningful tasks? The design of professional learning rarely considers the context of the world around us. We wanted to challenge assumptions, strip away comfort levels, and build a foundation created by this shared experience, from which we could guide educators towards embracing the indwelling between Aoki's (1986/1991) curriculum-as-planned and curriculum-as-lived. Typically, educators plan activities that have an element of safety where the outcome is known. When teachers use design thinking as an approach to planning for learning, they consider students' needs, desires and interests, as well as the essence of the topic. Design thinking is not just a method of planning; rather, it allows us to loosen the constraints of traditional planning methods and connect our learning to the world. We asked teachers to walk in the shoes of their students, and to think deeply about who they are as educators and human beings.

Finding Meaning through Métissage

What follows is a weaving together of three facilitator and two participant observations and reflections, through various forms of life writing, such as poetry, narrative and rumination, where we then braided our voices together as a métissage. Erika Hasebe-Ludt, Cynthia Chambers and Carl Leggo (2009) have gifted us with the approach of métissage as an ethos; and writing this piece has allowed us to "craft pieces of autobiographical writing in which [we] research and teach ourselves" (p. 9). Following Richardson and St. Pierre (2005), we use writing as "a method of inquiry, a condition of possibility for 'producing different knowledge and producing knowledge differently (St. Pierre, 1997b, p. 175)'" (p. 969). Creating the métissage transformed our work, opening the discourse between facilitator and participant, deepening our understanding of who we are as educators. In our métissage, we juxtapose our stories with the voices of scholars. We invite the reader to *shift* visually between these voices and awakenings, with participant reflections being right aligned on the page, facilitators' reflections and narratives appearing to the left, and anchoring thoughts from scholars in italicized font in the centre to create a visual and theoretical braiding of our stories.

Awaken

If the humanities are indeed oriented to wide-awakeness, if dialogue and encounter are encouraged at every point, it might be possible to break through the artificial separations that make interdisciplinary study so difficult to achieve. If students (and their teachers as well) are enabled to pose questions relevant to their life plans and their being in the world, they might well seek out answers in free involvement with a range of disciplines. Once this occurs, new perspectives will open up—perspectives on the past, on cumulative meanings, on future possibilities. (Greene, 1977, p. 23)

If we teach deliberately, our students learn deliberately. The three days during the summer were oriented towards wide-awakeness. As facilitators, we wanted to open a space where teachers could ask the questions on their mind about learning and the world we inhabit with our students. Through this “conscious endeavour”, we come closer to deliberateness (Greene, 1977, p. 120).

For us, the best learning happens when students have an encounter with a topic that shakes them to their core. Because of this, they question the way the world is, the way they express themselves, and the way they find meaning. They start to think about how they can create a more just world, a place for themselves where they have agency and community and feel peaceful. We wanted to create an environment for such an opportunity for our teachers so they, in turn, could give this to their students. We asked them to stop being teachers. We asked them to consider their experiences from the point of view of the learners they are.

Our objective was awakening.

Everything Designed Can Be Redesigned

We offered an activity that seemed silly on the surface: redesign lunch.

Asking our teachers to choose something about the lunch experience and turn it on its head, we watched as people ate their lunch sitting on the floor of the library where we had gathered. Some ate from their plates without utensils, making small messes, causing them to burst out in frequent laughter.

A small group brought fine china, silverware, and a candle as they dined atop a pristine white tablecloth.

The premise was everything designed can be redesigned.

It dawned on them: this included their classrooms. *I smiled.*

– Erin Quinn, facilitator

Teachers enter the classroom with a planned curriculum (Aoki, 1986/1991); knowing they are tasked with ensuring their students learn the mandated outcomes sometimes causes them to teach what needs to be checked off a list instead of inviting students into a topic. The remnants of the industrial model of education are still present in schools (Jardine, 2008). The result of this is teachers safely teaching the way it has always been done. For a sign of this, we might see a teacher pulling a trusted box of activities off the shelf with lessons that will teach grade one students about their five senses, or a teacher prompting students to memorize the steps to

execute long division. There is comfort in knowing exactly what will unfold in that box and that you have given your students everything they need so they don't have to struggle. What if we broke free from efficiency and "simple instructions for repeated tasks" (Jardine, 2008, p. 186)? What if we imagined another way, a way that invites students into a topic, to be called upon (Jardine, 2008)? Maxine Greene writes, "sometimes I think that what we want to make possible is the living of lyrical moments, moments at which human beings (freed to feel, to know, and to imagine) suddenly understand their own lives in relation to all that surrounds" (Greene, 2001, p. 7). We provoked the participants during the summer so that they might imagine another way.

Shifting Science

I took it as a sign
when I could not find
the emailed instructions
for a big building project

I shifted

No longer frittered away energy
encouraging, offering and hoping
unwilling associates will join me on the path
Of creating cool curricular connections

I lead by example

Design the Shift has awakened confidence
that my teaching is cutting edge
that provoking pupils' problem solving
is doing the right thing
Fear of failure faded

I took a leap of faith

Handed more control and responsibilities
over to students
with high expectations for them
to solve arising problems

I stepped surer into the unknown

Believed
we could succeed
redirected my energy
toward creating an explorational classroom

Lack of step-by-step instructions
enabled student-led productions
allowed for building explorations
and open storage of power tools,
saws, nails, hammers and screws
sky-high safety expectations

I made two distinguishable changes

Expanded responsibility given to students and
retracted energy encouraging rigid colleagues

I found my clan

That gave me courage
to be inspired and connected

this gives me hope for a brighter tomorrow

– Kim Miner, participant

Disrupt

Teaching, if it is to be done well, must be built on vision and commitment; learning, if it is to be meaningful, depends on imagination, risk-taking, intention, and invention. Stripped of these elements, teaching is mechanical and sterile and learning is the stuff of pigeons pecking for food or mice running a maze. (Ayers, 2001, p. 62)

Reclamation

We were lead into a stairwell in the local art college.

The chemical smell of spray paint came first, and then the multi-coloured patterns and words next.

The stairwell was covered, from ceiling to floor, in graffiti art.

We were told this is student-claimed space and has been added to, layer upon layer, for twenty years. The college had tried, several times, to stop it from happening, but the students would not allow it.

They continued to claim this space for their art.

I take out a Sharpie and add small block letters above a handrail:

“EMPATHY FIRST.” *I act.*

– Erin Quinn, facilitator

Our intention was to disrupt how teachers think about teaching, learning and their students. What we had not considered was the degree of tension teachers

Finding Humanity in Design

experienced between design thinking disrupting schooling and schooling disrupting possibilities for design thinking. Teachers left our time together high-spirited, bubbling with ideas to bring to their students. Walking through the door of their schools, however, they were jolted sober by the volume of administrative demands.

Schooling Disrupting Thinking

Teacher

At school 7:30am–5:00pm

Working days, working evenings, working weekends, at home, at school

Task design

Task assessment

Intentional inclusion of school improvement goals

System initiatives—literacy, numeracy, Indigenous education, inquiry

Supervision

Extracurricular activities

Report cards

Individual program plans

Student family conferences

Open house

Celebration of learning

Own family

Own health

Own interests

Time

Lack familiarity

Lack confidence

Lack support of colleagues

Lack support of administration

Parents questioning

Don't know how to enact this design thinking

Dabble or big project

The show versus the learning.

– Laurie Alisat, facilitator

We heard stories from the participants. Stories about teaching partners, parents, administrators, students with complex needs. Stories of confusion about how to begin. Stories about a struggle, between the kind of learning we engaged in together in Design the Shift, and the kinds of questions on the standardized test at the end of grade six. We couldn't discount these tensions, and, in fact, addressed them head on.

We asked participants to identify barriers preventing them from doing this work in their schools. We had them write these barriers on a large piece of craft paper. Then in a bold, metaphorical act, we asked them to literally run through the paper, tearing through the barriers. In this moment, the participants realized these barriers were actually opportunities for design, designable elements they had the ability to control and shape, to emphasize or deemphasize. We offered different mindsets and strategies, grounded in story, experience and current research, provoking teachers to recognize alternative perspectives in their teaching practice, creating a culture of optimism and a bias towards action. When the mindsets became embedded in teaching practice, opportunities for design presented themselves in all areas of the curriculum. We needed to remind the participants often: these barriers are ever-present and as designers we need to be ready for these opportunities for design.

Playful Acts

The complexity of teaching in a mathematics classroom resides in the tension created by the dichotomies between the way I learned math and the way math ought to be taught. Math classrooms often emphasize “certainty instead of wonder, detachment instead of engagement, touring instead of dwelling, observing instead of obsessing, scripted performances instead of playful acts” (Davis, 2001, p. 23). Thinking about the mindsets, I considered the needs of the diverse learners in my care: the students whose number sense far exceeds their peers, and the students still rooting themselves in the base 10 number system.

Some students think flexibly, equipped with a range of tools. Others struggle to interpret the words on the page, afraid to take a first step. Grappling with the best approach, I recognize the necessity of foundational skills, but I see the eyes glaze over when students aren’t learning anything new. I have also presented challenging mathematical problems and have seen students who have limited skills and understanding sit stunned, scared and sad about being in the math classroom.

I strive to strike a balance, between guided support with scaffolded activities and rich, engaging problems that ask students to think, question, take risks, fail, and live in the struggle of a mathematical problem.

Students are learning that mathematics is a strict set of rules and procedures to be memorized, instead of what mathematics truly is: a language that helps to explain our complex world. Design the Shift has caused me to ask, what do my students need to be awakened in the mathematics classroom? And how might I disrupt the status quo?

– Sandra McNeil, participant

Place

In many Indigenous communities, literacy could be described as that which makes it possible to dwell in the land that nurtures them, to belong to and with each other, human and other-than human, in that place. (Chambers, 2012, p. 188)

We introduced place as a new literacy to the participants, layering experiences atop familiar and unfamiliar landscapes to remind the participants that topics live in the world, and it is our job as educators to take our students to them. The most significant place-based activity during our summer was the river walk. The participants wandered around a loop in downtown Calgary, a place where many topics converge. Our route took participants past Fort Calgary, to the confluence of the Bow and Elbow Rivers, towards a homeless shelter, past soaring downtown office buildings, and over to an island park peppered with hundred-year poplar trees. At each of these stops, participants were asked to notice and listen to the stories of engineers, ecologists, designers of outdoor play spaces, homeless people, city counsellors, city planners, elders and neighbourhood residents, whom they encountered along the way. These local experts shared their interpretation of these places as well as stories connected with them. Our intention, in redesigning participants' experience of place, was to introduce them to varying perspectives of the same place; to disrupt what Adichie (2009) refers to as the danger of the single story. The different layers and topics that were revealed through the interpretations of place opened up multitudes of topics for the participants, and they discovered "what it means to 'learn' about this place—to realize, to deeply experience how it is that this topic asks something of me beyond what I might ask of it" (Jardine, 2008, p. 41).

To Dwell

Experiencing each mindset helps teachers and learners to be literate beyond reading text on a page or spelling a word correctly. Instead the mindsets help students become literate in human interaction, problem finding and problem solving.

Empathy helped me to truthfully dwell in the land with my students, with my colleagues, and with myself.

Design thinking isn't about working through a linear series of steps.

Design thinking is about re-imagining, reconsidering how something was once done.

It is about questioning the status quo and challenging the dominant discourse.

– Sandra McNeil, participant

Perspectives

We stood at the confluence of two rivers
on a cool, rainy August day.
The rushing river drowned out the sounds
of the urban cityscape.
Dramatic storm clouds lit up the golden grasses,
causing them to glow in the foreground,
layering ancient Indigenous lands and traditions
with the downtown towers
clustered together in the background.
Caught in the juxtaposition
between a capitalist economy
and the history of the land,
no one minded the rain.
We spoke in wondrous tones as we learned
of the trading that happened between Indigenous nations
thousands of years ago,
then gazed over at the fort and
pondered the lasting, ongoing effects of colonialism. *I grieve.*
– Erin Quinn, facilitator

We were spellbound by the impact of these stories and the implications on us as members of our greater community. To many of us, this was a profound and lasting awakening, immersed in a storytelling experience within a natural space, surrounded by urban busyness. As educators in an ever-changing society, we must try to awaken to new possibilities and connections for the students in our care. Then we can encourage our students to respectfully learn about multiple perspectives and to learn to care for our community in different ways.

Time

It is beyond doubt that teachers and students alike experience this phenomenon of time always running out with great intimacy and regularity. Teachers and students alike have become accustomed to the mood, tempo and consequences, personal and pedagogical, of how attempts to try to keep up with this time that is always running out, seem, in the end and seemingly inevitably, to give us less and less time. (Jardine, 2014, p. 64).

The Shape of Time

Time.

I don't have much time.

I need to make time.

Time is running out.

At my school, the timetable is quite flexible relative to many schools I know.

We have six bells all day: 8:35 am (warning) 8:40 am (we are serious)

11:30 am (lunch) and 12:15 pm (warning the afternoon is about to begin)

12:20 pm (we are serious again)

and 3:00 pm (time to leave).

In the past couple of years, the timetable has taken on a life of its own.

It has become the beat of our school,

the guiding force and structure,

as I think it does in most schools.

A perplexing saying, "I need to make time."

Time, like energy, can be neither created nor destroyed, but can change form.

How might we change the form of time in schools?

– Sandra McNeil, participant

More, Please

The form of time changes as we sit down
to interview members of our community
and gain empathy for their work.

Teachers ask questions, dig deeper, and fish for stories.

Pairs of chairs are clustered here and there.

Teachers huddle together with engineers, artists,
community mobilizers and change makers.

I wander around, trying to make
my eavesdropping less obvious.

A city engineer squeals with enthusiasm
as she pulls out a bar graph tracking the changes she's been able to make.

Her joy is contagious and the teachers sitting with her laugh and lean closer.

The timer on my phone rings and I get
ready to announce it's time to switch partners.

A teacher sitting near me hears the timer,
and pleads "Five more minutes! Please?" *I wait.*

– Erin Quinn, facilitator

Kairotic time (Smith, 2014) is when time is almost suspended while we live in the present moment. Chronological time does not matter here. Sometimes magic rises up to meet us and enhances our day. There is no recipe. Kairos leaves us suspended and breathless, losing track of time as we know it. Standing at the confluence of the rivers gave teachers what James Hillman (1999) describes as a “sudden, short intake of breath” (p. 201). They lingered, pondered and reflected in journals and with each other. They lost track of time, the issue most often stated as a barrier to design thinking. What if this was what mattered? To get us into *kairos* and to celebrate what is important in this moment. In conversation, David Jardine said, “I can plan how I think my day might go, but I can’t truly plan my day until I look into the eyes of my students” (personal communication, 2014). Surely, we could all teach and learn at such a profound level.

Trust

The educational culture of collaborative creativity is a very rich, process-intensive educational environment. Immersion in this environment builds social trust, process trust, and creative trust through collaborative empowerment, all of which leads to creative production. (Kelly, 2016, p. 23)

Imagine a group of adults, wide-eyed, and so engaged in activity, that they were almost squealing at times and moved to tears the next moment. Such was our witnessing of the shift from teacher to learner during Design the Shift. We knew going in that teachers giving up three days of their summer to engage in professional learning would be special. Giving freely of their holiday time with family and friends, they trusted us, trusted the process and lived with ambiguity. They believed something good was going to come out of this experience, though they were not sure what it would be.

Beginning our three-day professional workshop with improvisational theatre was both unexpected and meaningful for participants and facilitators alike. The intent as facilitators was to help participants embrace ambiguity and take risks. We ask our students to take risks and partake in challenges all the time. Knowing this, we wanted to begin by showing teachers that to teach actively, with learners and their voices at the core of planning, we had to embrace “outcome unknown” (Kelly, 2016, p. 220). This was a raw moment for us, the first time we were together as a group. Improvisational theatre asked us to be honest with ourselves and each experience. It began to weave the threads of trust and collaboration that would determine our culture.

On This Day

Shifting one’s practice is not without challenges and is messy, unknown work. We began our year on a quest to uncover stories less told in Canadian history. Our exploration led us to a need to better understand the residential school system in Canadian schools. We watched a powerful documentary called “Elder in the Making”, read countless picture books, deconstructed the Indian Act, and engaged in

meaningful discussions. We didn't know where our work would take us, but our goal was for students to build a collective understanding of the past, in order to make change in our current society.

This needs to happen in our schools.

Stories need to be told in order for healing to begin. Students need to be educated and to educate their parents so that we may actively work towards Truth and Reconciliation. We envisioned a more truthful understanding than we ever had in our own schooling.

While taking up this work, my professional practice was challenged in a way I never expected. An invited guest, with a Cree background, shared stories of her family's experience, along with the importance of oral storytelling. This sharing was to serve as a bridge between our focused work about residential schools and Canadian stories the students found that they deemed necessary to tell. Our guest speaker was one we had invited into our classroom previously; she was engaging and wise. The excitement about her return was palpable.

On this day, as she began to tell her stories,
I was silenced.

The content was harrowing and not at all age-appropriate for my students.
Stunned and horrified by the abuse explained in her stories,
yet striving to not silence an already-silenced culture,
we waited.

We waited for the discussion to shift, but student questions fueled her stories. Eventually my teaching partner and I gently urged our speaker to finish with a healing song. We were painfully cognizant that these were not our stories to quiet, but also painfully aware that the children listening were in our care. It was our duty to protect them. The talk ended and the aftermath was significant. Some of our students were traumatized by the stories they were exposed to. They cried, had nightmares, and needed to talk. Immediately following the experience, we reached out to parents, preparing them for the conversations they would undoubtedly have that evening.

We entered a space of ambiguity, which led us to a place of trying to restore trust with our students and their parents. Discussions with our administration and the school board crisis team resulted in personal communication with each and every family. I wanted our speaker to tell the truth but was blinded by my own schooling:

A Western schooling whose dominant discourse left me unaware of an entire knowledge system and way of being that would be revealed.

I carry guilt for allowing the speaker to talk for as long as she did, for the trauma inflicted on the students in my care, and for assuming that she would filter the content for the age of the audience.

I failed.

And I learned.

I learned that I can take accountability for my mistakes.

I learned to be more literate in this place.

–Sandra McNeil, participant

The participants opened themselves and their students up to joy, delight, productive struggle and growth. In doing so, they also opened themselves up to failure, rejection, and in some cases, trauma. Loosening the bounds of traditional approaches to teaching comes with great risk. In accepting “outcome unknown,” teachers accept that any eventuality could occur, either positive or negative (Kelly, 2016, p. 220). Careful, thoughtful design can steer a learning journey towards the positive, but when dealing with difficult topics like reconciliation, teachers and students wade into feelings of guilt, grief and shame. Even in this place of sorrow, learners and teachers can be transformed, learning to listen, learning to be better human beings, and learning to create a better way forward.

On Being Still

The world went dark as I stood
in warm summer sun.
Soft cloth covered my eyes
in a blindfold activity designed
to make us feel notice
without our eyes.

“Come. Hold my hand,” she says.
I walk, stumbling
off the path in search
of the tree my partner chose
for me to find. Clumsily, I feel.

At first, I don’t listen. I can’t
hear her gentle guiding words.
Until I stop.
Trust. Listen.
Then I hear.

Finding Humanity in Design

So this is trust. Quiet
my mind. Still
my hands. Close
my eyes. I feel.

I found trust as thoughts
Swirled, settled. Blindfold removed,
Eyes laughed.

We wonder if this rush
of feeling is what we mean when we ask
teachers to embrace life with their students.

To tangle together
in joyful messy learning. To lose
themselves in time. Moments
that slip slide,
flutter slowly away.
–Stephanie Bartlett, facilitator

A (Re)awakening

We asked participants to give their full selves to the experience. People grew, laughed, disclosed discomfort, and shared powerful connections to their teaching practice, linking themselves as educators and as citizens of the world. Design thinking asks for optimism and openness, but teachers are often up against barriers that quash this. We strove to provide a refuge and discovered that focusing on the design thinking mindsets helped to keep us wide awake (Greene, 1977) as we provoked these teachers to call attention to themselves as people and as educators.

Through Design the Shift, design thinking itself became transformed. It became less about a process to follow and more about a way of being in the world. Our constant observation and careful listening from a stance of empathy let us really listen to what participants were telling us. Living the mindsets in and through this approach guided us towards a definition of design thinking that increases the possibility for both teachers and students to immerse themselves in solving the meaningful problems in the world. We learned that this human-centred approach, rooted in empathy, created spaces for us to be awakened. As we reflected through writing in creating our métissage, we came to new understandings about these themes, which uncovered lessons core to the essence of teaching, and indeed, to humanity. We found these lessons in design thinking. We interpreted them through the act of writing. In doing so, we were changed.

As we stood together in the closing circle during our last community of practice, people were visibly emotional. We had all been moved by some invisible force, closer together, yet further out in the world as participant after participant shared their unique stories of personal and professional

transformation. Months later, as authors, we found ourselves sitting in a circle yet again. As we reflected through writing, we echoed this same yearning, to hold onto the shift that happened inside each of us during Design the Shift. We were inspired to redesign and remake ourselves and our classrooms. As we re-centred ourselves in the humanity we found in design, we became awakened (Greene, 1977).

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Finding Humanity in Design

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Endnotes

¹ Erin Quinn, Stephanie Bartlett, and Laurie Alisat were facilitator-designers, and Sandra McNeil and Kim Miner were teacher-participants in Design the Shift.