1

Buckle Up

Questioning of previously unnoticed assumptions
can be painful, and many people resist it energetically.
I sense I need the reader's goodwill in at least
entertaining the idea of it.
~ Dr. Mary Midgley

Slowly, deeply, I breathed in Maui. It was early on an April day. Birdcalls filled the air as children stood with their *nā kumu a lākou* (teachers) facing east. A young girl blew a conch shell, inviting all to morning protocol. After a pause, a kumu raised her voice in an ancient *oli* (Hawaiian chant), welcoming the rising sun. Other kumu answered. The ageless words echoed between them, mingling with birdsong. The voices paused. Then the kumu lifted their voices as one and the children answered. As the last oli hung in the air, we stood quietly, the breeze whispering past our faces.

After a moment, the adults and children walked to a low-slung building, its green clapboard siding almost indistinguishable from the surrounding rainforest. I turned to follow, walking next to Kili, the school's director. The preschoolers climbed the steps, slipped off their shoes, and went inside.

At the bottom step a boy stopped and tapped the arm of a teacher wearing a yellow T-shirt, cuffed shorts, and flip-flops ("*slippahs*" on Maui). He spoke in *ʻŌlelo Hawaiʻi* (the Hawaiian language). She responded in kind. Kili and I stopped.

"May I watch?" I whispered.

"Of course," Kili nodded, and headed up the stairs.

Pūnana Leo ʻO Maui is an ʻŌlelo Hawaiʻi immersion preschool nestled at the foot of the West Maui Mountains. A group of Hawaiian educators founded Pūnana Leo preschools in 1982 to revitalize the Hawaiian language and preserve their culture. At the time of my visit, I was Senior Director, Strategic Initiatives, with Arizona's statewide early childhood agency. Our organization worked with thirteen of the American Indian Tribes in Arizona. I was eager to learn the role ʻŌlelo Hawaiʻi immersion preschools played in preserving and revitalizing Hawaiian's indigenous language and culture. But I wasn't on the island for work. About a dozen years earlier I had lived on Maui, just a few miles from the school. I visit as often as I can. The island calls me back again and again.

E hoʻi mai ʻoe (come back).

I watched as the child at the bottom of the steps pointed to the ground and spoke in ʻŌlelo Hawaiʻi. The teacher, Kailani, responded by pointing, then saying a different word. The child, with puckered forehead, tilted his head and repeated it. Kailani responded and the child shook his head, rubbed his arm, and pointed at the ground. The back-and-forth continued like tennis. But this was no game. It was cultural resuscitation. Two learners breathing life back into an ancient language and culture.

Their language. Their culture.

Calling them back. E hoʻi mai ʻoe.

Regenerating what was almost lost forever.

After several exchanges, the child dropped to the ground, rolled over, and laid flat on his back. He raised his arm, pointed to it, then the ground, repeating a word Kailani had said. Kailani threw up her hands, exclaiming in delight. The boy jumped to his feet and hugged her. They joined hands and together walked up the steps.

I followed, slipping off my shoes just outside the door. They seemed enormous next to the row of little slippahs. Kili gestured for me to sit on a small chair toward the side of the class. Calendar time was starting. The children sat cross-legged and barefoot on

a large woven mat, eyes focused on one of the older children, who stood speaking in ʻŌlelo Hawaiʻi. The lead child gestured toward two others who came forward as the child leader sat down.

The two children stood at opposite ends of a large wooden easel with a calendar of April taped on the front. The children led the lesson, using a pointer to tap the square representing each day as the class counted in ʻŌlelo Hawaiʻi. I have seen hundreds of calendar lessons. This was the first time I had seen children lead it.

I looked wide-eyed at Kili and mouthed, "That's impressive."

She leaned in and whispered, "The older children are rising kindergarteners. They're only with us a few more weeks. From the first day, children take responsibility for their own learning and for supporting others as we all learn together."

When they completed the lesson, I expected the class to move on to something else. Instead, the child leaders carefully spun the wooden easel around on its wheels. The reverse side held a poster of the lunar cycle surrounded by pictures of Maui's seashore and land, and the plants and animals that live in each.

Kili leaned over and whispered, "The *keiki* (children) learn both the Roman calendar and the Hawaiian lunar calendar." The children leading the lesson pointed to pictures of the lunar cycle as the class responded in ʻŌlelo Hawaiʻi. Kili continued, "The Hawaiian calendar teaches the patterns of the earth and sea and their relationship to the phases of the moon. The keiki learn what should be planted and harvested in each season and each lunar phase, and what is *kapu* (forbidden). The children learn that we live in cycles and relationships. They learn how respecting the cycles of the land and sea protect and nurture life. They learn to respect what is not to be taken so that life can flourish."

As the child leaders pointed to pictures of fish and plants, other children raised their hands and spoke in ʻŌlelo Hawaiʻi, their teachers and classmates nodding in recognition. In over two decades as a professional educator, I had never seen anything like it. Four- and five-year-old children easily discussing

the cycles of life in their local ecosystem in a language that had nearly died a couple decades before.

I had only planned to stay an hour, but when the children began setting up lunch, I realized the morning was gone. Gently, almost imperceptibly, the happy chatter that had filled the morning faded to silence. A few children brought food to the tables and set places for each person to eat, all in silence. When they finished, the rest of the class sat down, paused for a moment, then began eating, also in silence.

While the children ate, Kili and I stepped outside. She explained that in keeping with Hawaiian tradition, they eat in silence. Silence allows space to pause and reflect on and be grateful for food, to contemplate where the food came from, and how human actions contribute to or disrupt the lifecycles that produce it.

I asked Kili how Pūnana Leo had been able to create a learning environment that did so much of what we know children need for healthy development, while empowering them to fully embrace their culture.

Kili smiled. "A school that centers on healthy Hawaiian ways will easily align with developmental science," she said. "Our ancestors raised people who navigated the open ocean in hand-built wooden canoes. They had no radar, no sonar. They had their senses and their deep understanding of the ways in which Earth works. Our ancestors raised people who could discover new lands because they had keen observational skills. They could read the patterns of ocean currents, changes in the wind and rain, and, of course, the night sky. Once here, they knew how to observe the patterns of the land and the seashore. They knew how to learn to live in harmony with their new home and how to pass that knowledge on to future generations. Their keen observational skills weren't just for observing the land and the sea. They observed how humans grow and develop. Our ancestors would never have made it to Hawai'i or survived here very long if they didn't know how to raise children."

What If All Schools Were Like Pūnana Leo?

Kili and I sat in silence. I pondered what I'd seen that morning. Why couldn't all people have culturally rich and respectful learning experiences like those at Pūnana Leo? What if all schools valued and supported teaching in the ways we know children learn? Imagine if it was just assumed that children's cultural knowledge is critically important to their understanding of the way the world works?

Kili broke my reverie. "Our parents are future ancestors," she said. "We see them as fellow educators. All our parents prioritize learning ʻŌlelo Hawaiʻi as a family. Parents take language classes each week, donate workdays, and contribute their talents wherever they can."

What if teachers everywhere saw families as future elders and ancestors, laying the foundation of the legacy they will leave in their children? What if parents were embraced as fellow educators, with parenting and teaching valued as collaborative roles in preparing future generations to live bravely and responsibly in an increasingly complex world? Imagine parents fully engaged in their children's education alongside teachers who welcome their partnership as vital and necessary.

What if all schools believed even very young children could understand the lunar cycles and the relationship of Earth's cycles to sustainable agriculture? How different would our relationship with food be if every school taught deep mindfulness about what we eat and, from the earliest ages, taught that each of us has the responsibility to generate food in ways that nurture the land, not just to fill our bellies?

What would our society be like if right from the beginning, even before kindergarten, young children understood and accepted their own agency as learners? Imagine children expecting to have their voices respected and adults expecting to learn from children. How would our world be different if people of all ages, races, genders, languages, and sexual identities expected to be seen and heard and valued, and to see and hear each other?

Creating Regenerative Schools: the What, Why, and How

Since you're reading this book, you probably hold similar longings. You might be a parent who yearns to see your child love learning, or an educator who wants nothing more than the freedom to create experiences that support each child's unique interests. I have lived a long time in both those roles. Maybe, like me, you hunger to revitalize humanity's deep connection with Earth, or ache for people to care so deeply for our planet and all beings who live here that they adopt sustainable ways of living. These longings arise from our deep human need to belong, to be safe, and to care for one another. I wonder how much of our daily stress comes from collectively living in ways that fail to nurture these basic human needs.

Longings, especially deep longings, point us to *what* could be. They're a mark on the horizon by which we can set our compass. When it comes to actually creating the types of schools (and society) we want, the *what*, the longing, is not enough. We also need the *why* and the *how*.

Why is it that even with so many people yearning for dramatically different educational systems, things stay the same? Why is it that most schools simply don't teach the way we know people learn? Why is achievement measured in ways that don't measure learning? How do schools perpetuate racism, even when teachers and administrators abhor it? Why do girls and children of color receive inferior math and science instruction and far fewer opportunities to lead than white male students, even when white male teachers, parents, and policymakers agree it's wrong? How do we deal with entrenched and seemingly unmovable education systems?

We come back. We restore that which has been almost lost. E ho'i mai 'oe.

If we want longings to shape reality, the *why* and the *how* matter very much. Human motivations and behaviors are rooted in purpose and process—the *why* and the *how*. *Why* and *how* are the

difference between great ideas gaining traction or floating away on the wind. I wrote this book because we urgently need a vastly different way to do school. And to get to that *what* we must organize ourselves around a collective understanding of the *why* and *how*. *Why* and *how* demand more from us than *what*. Imagining a different future together is necessary but relatively easy. The real effort comes when we organize around purposes and processes so intently that they take on a life of their own and transcend the limits of our imaginations.

Society and Schools Perpetuate Each Other

Keen awareness of Earth, its cycles, and relationships shows up in Pūnana Leo O Maui's children because for millennia, *Kanaka ʻŌiwi* (Indigenous Hawaiians) lived in close harmony with the sea and land. Pūnana Leo schools are not just language schools. The schools intentionally immerse children in both ʻŌlelo Hawaiʻi and *ka ʻike honua o Hawaiʻi*—a Hawaiian way of being in the world. How could it be otherwise? The way a society raises its young emerges from that society, from the values and assumptions that shape and structure the way people live together and define their culture. In Pūnana Leo schools, purpose sets conditions for process, and process emerges from purpose. The *why* and the *how* are inextricably connected.

The purpose and process that shape society don't flow in one direction. In an iterative cycle, education emerges from society, and society emerges from education. Raising young humans is the way societies replicate themselves. Whether carried out in institutions or in the everyday experiences of children in their homes and communities, education is how a society's ways of knowing, doing, and being are passed from generation to generation. If we want to understand a society, we must look at the educational systems that it shapes. If we want to understand an educational system, we must look at the society from which it emerges. They emulate each other.

The Mother System

For this reason, education is not merely one among many social institutions. Education is the Mother System. It is unique because of its nearly universal profound influence on the first years of life. Ensuring children learn the patterns of society early means those patterns become the deeply rooted, unquestioned "just the way things are." People learn what society expects about how to treat one another *at school*. People learn what society values *at school*. People learn what society says is vulgar or racist or mean (or not) *at school*.

Certainly, children learn values and expectations at home and in religious and other institutions. But the inherent purpose of education for the masses is for most of the population to internalize the assumptions and values of the society. We may all hold individual or family values, but at school, especially public school where nearly all North American residents are educated, students learn what is valued by society.

To care about schools is to care about society. Nearly every educator I know embraces their profession as noble. Teachers routinely push back against rules that constrain their freedom to teach well. If you are an educator, I ask you to push even further and join a vital group of people who sense the urgency of our time—people who value the Mother System as something more than a workforce pipeline. This book is about recognizing the vital role education plays in nurturing human capacity not only for individual success or corporate profit but for the benefit of all. A regenerative approach to learning takes the value of education to its rightful place: teaching the ways we, as a species, contribute to the continuation of life on Earth.

Education as We Know It Is Dangerously Frail

Education is not valued appropriately. The demoralizing status quo has taken its toll not only on children but on educators. The number of people choosing a career in education had

plummeted even before the COVID-19 pandemic. According to the Learning Policy Institute, in 2019, for the first time ever, the demand for K–12 teachers in the United States outpaced supply by more than one hundred thousand. In December 2019, the Center for American Progress reported there were approximately 340,000 fewer people enrolled in teacher preparation programs in the 2016–2017 academic year compared to eight years earlier. In many locales, the outlook is even worse. According to the US Department of Education, thirty states experienced a decline of over 35 percent in enrollments in teacher preparation programs between 2010 and 2018.

Oklahoma saw an 80 percent drop.

The reasons for the decline are many. Low compensation has been identified as the primary culprit. Education careers across the entire field from childcare through higher education faculty positions pay about as much as jobs in the fast-food industry. A 2020 California Federation of Teachers analysis found masters and doctoral level adjunct faculty made annualized wages just over $32,000, with no benefits. In 2021, Berkeley's Center for the Study of Child Care Employment reported childcare workers' average hourly wage as $13.43, while preschool teachers with college degrees make just under $17.00/hour.

But is compensation the root problem? By many indicators, education as we know it—and therefore those who teach—are wildly successful. Over 90 percent of US children ages five to eighteen attend a public school. That means more than 90 percent of US-born adults did too. US educators can claim some remarkable accomplishments. They educated people who landed humans on the moon when television was still black-and-white and eradicated polio without a sequenced human genome. People educated in Western schools created COVID-19 vaccines in record time and kept schools going under the most trying of circumstances. Despite these successes, not only are teachers inadequately compensated but they also rarely get

even a fraction of the credit they deserve for their contributions to society. Take the saying, "Those who can, do. Those who can't, teach." Woah. Why such contempt?

Undervaluing teachers is a symptom of something deeper. It's a part of the story nearly all of us have been trained to overlook—the *complexity* part of the story. Viewed through a complexity lens, what was once a robust envy-of-the-world institution is dangerously frail, but not because it has failed. Western education has exceeded all expectations at doing what it was intended to do: create a working class of people, educated just enough to make industrialized capitalism work.

Teachers are caught in the throes of this frail system that is teetering on the edge of collapse. For now, education as we know it continues, riding the coattails of its historic accomplishments, solidifying more and more around past success, growing increasingly rigid and perilously unable to adapt to the complex demands of our globally connected world. To most policymakers and pundits, fixing schools means shoring up funding, raising test scores, or reinventing teacher preparation. But to meet the complex challenges of our time, we don't need a fix. *We need an entirely different way of thinking about schools*.

Our way of thinking is *why* our schools remain unchanged. Changing our thinking is *how* we change them.

What if we thought about schools in an entirely new way? What if the word "school" didn't only mean a building down the street where kids go to learn? What if we redefine "school" to mean *any* place or time intentionally set aside for learning of *any* kind and for *any* age and collection of people?

With this definition, the Willow Bend Environmental Education Center in Flagstaff, Arizona, is a school. The Kōkua Learning Farm on Oahu, founded by Kim and Jack Johnson, is a school. An FFA or 4-H program is a school. The Exploratorium in San Francisco and a senior center offering Zumba are schools. A scout troop meeting in a leader's garage is a school. Our *lanai* on Maui where I homeschooled our kids and welcomed their neigh-

borhood friends to learn with us on early release Wednesdays was a school. The Elementary Institute of Science in San Diego is a school. The homestead and sustainable living demonstration site my husband and I are creating near the Grand Canyon will be a school. What if we crack open the definition of school and shift our thinking a teensy bit? What possibilities, what freedoms, might that new thinking reveal?

New Thinking Makes Us Squirm

I shifted my weight and lifted my gaze from my iPad to the fluffy blanket of pink clouds out my window. I was only forty-five minutes into the four-hour flight home from Pittsburgh to San Diego and it already felt like hours. I stretched my neck and squirmed. Two thoughts kept rolling around, front of mind, like a used-car-dealership jingle I couldn't shake.

Creators of technology, not just consumers.

Wage peace, not war.

I was serving my second year as board vice president of the National Association for the Education of Young Children. Flying home from our retreat in Pittsburgh, I wanted to jot down some notes so I would remember details about the community-based early learning programs we had visited.

But I was distracted.

I kept thinking about what it meant to wage peace, not war, and what it meant for children to be creators of technology, not merely consumers.

I blame Dr. Illah Nourbakhsh for the distraction. A world-renowned Carnegie Mellon University professor of robotics, Illah spoke at our retreat's opening dinner. He told us about an app his students had created. When I think of computer science majors studying under one of the world's top roboticists, I don't picture them perched on child-sized chairs observing all the minute goings-on among three-year-old kids, but that's exactly what Illah's students did. They weren't looking to create teaching tricks or ideas for how a software program could train children to

count or name colors. They were looking for ways preschoolers could use technology to support their own learning.

The app they created, *Message from Me*, fits the bill. When children want to share something they've seen or created at school, they use an iPad mini to take a video or pictures to text to loved ones. A child might text their mom pictures of their block creations, or show Nonna a worm in the school garden, or maybe introduce their brother to the class guinea pig. Teachers encourage children to narrate their pictures and video. Children love the app. Generating content that links home and school helps children focus on their experiences and practice language skills while creating opportunities for parents and teachers to support children's learning.

There was so much to love about *Message from Me*.

Still, I squirmed.

Children as creators, not merely consumers.

What a profound idea. I loved it. Well, I sort of loved it.

What did it mean for *my* work? At the time, I was the executive director of the Elementary Institute of Science in southeastern San Diego. I was passionate about the children in our predominantly working-class immigrant community getting their hands on the same technology as their affluent peers. We ran coding workshops, and I was working on starting a project to teach preschoolers beginning robotics. Still, I had to admit, when technology is in the hands of children, they are almost always responders, not creators. Most educational apps capture children's attention with intense animation, then drill for memorization of isolated facts. Kids might create an avatar from a short menu of options, but rarely does technology truly empower children to be agents of their own learning.

I was also a bit (admittedly self-righteously) annoyed. I was, after all, doing a heck of a lot more than what I saw others doing when it came to young children's equitable access to technology. Was it really my responsibility to ensure they were creators too?

I couldn't escape the notion that it was.

This dilemma alone would have kept me squirming all the way home, but I was even more nettled by the way Illah had started his presentation. It landed hard in my belly when he said it, and it still bugged me on the plane ride home.

"I use technology to wage peace, not war."

What in the world did that mean?

I had sometimes questioned the ethics of certain uses of military technology but hadn't given it deep consideration. I lived in San Diego. I was born there. San Diego is known for sunny beaches, surfers, and sailboats. But essentially, San Diego is a military town. My father, who was deployed from San Diego to the Pacific in WWII, wasted no time moving there from his hometown of Chicago after the war. He worked for and was laid off by nearly every defense contractor in the city. He's buried at Fort Rosecrans National Cemetery on the Point Loma peninsula, overlooking North Island Naval Air Station on Coronado. I grew up six miles south of Miramar—the military air base made famous by Tom Cruise in the movie *Top Gun*. I know all the best spots to watch the annual Blue Angels airshow.

I grew up assuming that keeping the peace is the morally justifiable purpose of superior military might—to so intimidate "bad actors" that they would never even consider picking a fight. But after 9/11 and with the wars in Iraq and Afghanistan dragging infinitely on, costing so many lives, traumatizing service personnel in ways that would never heal, ripping apart families, and devouring obscene amounts of money, I had begun to wonder if we had lost our way—or if insisting on military superiority was even ethical to begin with.

I couldn't shake Illah's remark. What does it even mean to *wage* peace? And what does technology have to do with it? These were new, uncomfortable questions for me.

I shifted my weight again, trying not to elbow the person in the middle seat, and looked back at my iPad. I decided to contemplate the whole waging peace thing later and opened an essay on paradigms written by the late biologist and systems thinker,

Dr. Donnella Meadows. I thought reading would distract me from my discomfort, but instead I squirmed even more. I read:

> The shared ideas in the minds of society, the great big unstated assumptions—unstated because they are unnecessary to state; everyone already knows them—constitute that society's paradigm, or deepest set of beliefs about how the world works. There is a difference between nouns and verbs. Money measures something real and has real meaning (therefore people who are paid less are literally worth less). Growth is good. Nature is a stock of resources to be converted to human purposes.... One can "own" land. Those are just a few of the paradigmatic assumptions of our current culture, all of which have utterly dumfounded other cultures, who thought them not the least bit obvious.

I stopped cold. No, *of course* nature isn't a stock of resources to be converted for human purposes; but *of course* you can own land. I *did* own land.

I had the paper to prove it.

I read the blog again. *Of course* money measures something and has real meaning. For one thing, it measures whether or not I can own land, right?

I wanted to argue more, but the Illah-sized lump in my gut tightened. I took a deep, focused breath. Maybe my own unquestioned assumptions were keeping me from seeing how peace and creativity were related. Maybe things I accepted as obvious truths, like the right to own land, were merely fabrications of the culture in which I was raised.

I felt caught in my own contradiction: Wasn't the belief that I could own land inextricably connected to seeing nature as a resource that I had a right to convert for my own purposes? Was there some connection between the right to own land and the necessity of military superiority? Might there be a connection between children consuming technology rather than being empowered by it and schools being so rigid they cannot adapt?

I sensed there was a bigger *why* that wove these threads together and that the *why* had a lot to do with *how* to move education to a better place. I also sensed the *why* and the *how* mattered very much. I spent the next nine years studying *why* and contemplating *how*. I share what I learned in this book.

No Easy Answers

This book is for people brave enough to squirm.

Since you're still reading, you're likely willing to remain buckled into discomfort long enough to candidly examine even the most taken-for-granted assumptions, not only about the way education works but the way the world works. This book is for people who, like me, are deeply disturbed that our schools remain entrenched in ways of teaching and learning that are obsolete and even inhumane. Grappling with the implications of these complex ideas demands courage. Whenever I consider the perils facing humanity and the planet on which we live, I want to look away.

No. That's not true. I want to *run* away.

Yet I know our times call for a critical mass of people to bravely contend with the connection between those dangers and education as we know it. Our society is at an inflection point. The machine paradigm has run its course. *Something will replace it*. This book is not only for people who want to change schools but also for people who want to shape the societal paradigm that emerges from the inflection point we're all living through, and who recognize that schools are a critical nexus for that change.

Biologist Dr. Donella Meadows, quoted above, had a lot to say about *how* to influence paradigms: "…you keep pointing at the anomalies and failures in the old paradigm, you keep coming yourself, and loudly and with assurance from the new one, you insert people with the new paradigm in places of public visibility and power. You don't waste time with reactionaries; rather you work with active change agents and with the vast middle ground of people who are open-minded."

This book is for active change agents and the vast middle ground of people who are open-minded about new ways of doing school. It is for people who want to create public and private options for learning that teach how to live in harmony with each other, with Earth, and all Earth holds. It is for people who want education systems to foster all learners' understanding of complex relationships, to prioritize mutual thriving, and to help learners create the conditions conducive to life. To get there, we need a movement of powerful changemakers who see clearly and act wisely under conditions of high complexity.

I've written this book to help you make sense of what you're experiencing, but I don't pretend to have easy or complete answers. Often there are no answers, only more questions. Hopefully better questions. There are rarely "solutions"—at least not in the way we typically define them. The ideas in this book are for people willing to be confused at times, perhaps even angry, and yet who stay buckled in and squirming. I've squirmed a lot as I've studied and written, not only because these ideas challenge my deeply held assumptions but because I know my insights run counter to many political and ideological positions, including my own. I can pretty much guarantee you'll find ideas you love and others you, well, don't.

Please know I'm in the same boat. I don't like some of the ideas I'm writing. I spent more than two decades building my career as an educational assessment expert. I've personally tested thousands of students. My doctorate in educational psychology is from one of the top-ranked programs in the country. My doctoral minor is in educational assessment. I've consulted with the National Governor's Association, helping states craft assessment policy. I've testified as a subject-matter expert in federal court about a mandated Arizona assessment that was revised based on my testimony. I've written articles on assessment published in peer-reviewed academic journals and for the UCLA Civil Rights project. I was clinical faculty at Penn State College of Medicine where I assessed children on the inpatient

psychiatric unit and outpatient rehab and neurodevelopmental clinics. I developed and taught educational assessment courses at the University of Arizona and Arizona State.

After all of that, what I know beyond a doubt is that nearly all educational assessment is so grotesquely invalid, it should be forever banned. I've come to believe the subject of my decades of expertise should be (mostly) tossed into the garbage bin.

Ouch.

Writing this book also makes me squirm because I know that how I think about much of what I've written will change over time. When it comes to complexity, there is so much to learn. My thinking will evolve, others will have new and challenging ideas, and new discoveries will be made. Even though I don't have this all figured out, and I can't point to anyone who does, this is no time to be silent. We need new questions. We need conversations that invite courageous consideration of the relationship between our educational systems and the harm routinely done to people and planet.

I also squirm because many people want to know how to "change the world." I question if we *can* change the world, and besides, I'm asking you to do something harder. I am asking you to reconsider how you *understand* the world. I am asking you to be open to considering that ways of thinking and being that you've taken for granted or taken as sacred might in fact be disturbingly incomplete and even harmful. I am asking you to trust that from such openness new understandings will emerge that will lead to profound and powerful changes in you, your life, and your work. I am asking you to trust that when enough people do that, our society will adapt and become compatible with how the world actually works.

As a fellow traveler, I can assure you this isn't a casual stroll. I echo science philosopher Dr. Mary Midgley who said, "This questioning of previously unnoticed assumptions can be painful, and many people resist it energetically. I sense I need the reader's goodwill in at least entertaining the idea of it." Still, I can

further assure you, if you read with an open mind and heart, by the end of this book you will have powerful new insights that will help you discern wise actions that you had never even thought about before. You'll see schools, their potential to shift society, and your role in the process in a whole new way.

Changing Society? Where to Begin?

In 1893, the United States was rapidly expanding its position as the primary engine driving the second wave of the industrial revolution. With the US hungry for sugar and cheap labor, and Hawai'i an ideal gateway for Asian immigration, the time had come for those who colonized the islands to overthrow its monarchy. Sanford B. Dole led the coup, unseating Queen Lili'uokalani and establishing a provincial government. US President Cleveland opposed annexing Hawai'i as a territory, but his successor, McKinley, saw Pearl Harbor as invaluable in the Spanish-American War, so he claimed the islands for the US. Shortly after congress approved annexation, Dole and his team set about Americanizing the islands in earnest. Overthrowing the monarchy was merely the first step. Colonizing the culture was the goal.

Where did they start? They started with schools.

At the time of the illegal annexation, over half a million people spoke 'Ōlelo Hawai'i and 90 percent of Hawaiians were literate. Three years after the coup, the provincial government outlawed teaching 'Ōlelo Hawai'i in schools. Eighty years later, only two thousand native speakers remained, a 99.6 percent decrease. Of those, only thirty-two were children.

In the 1970s, fearing the complete loss of his ancestral language, Larry Kimura, a young professor of linguistics and anthropology, rallied his students and other educators. They gathered on Friday nights, bumbling around the eloquent language their grandparents had spoken so melodically. Committing to speak only 'Ōlelo Hawai'i in their homes, within a few years their group included a handful of young children who were

the first native speakers in decades. With a group of committed parents and educators prepared to reclaim their culture and their language, it was time to scale up cultural revitalization.

Where did they start? They started with schools.

Teaching ʻŌlelo Hawaiʻi remained illegal. Hawaiian high school students could study German or French, but not their ancestral language. Larry and his students did what Donella Meadows recommended. They kept speaking loudly and with the full assurance of their position. In 1978, the Hawaiian government amended its constitution, making Hawaiʻi the only US state with two official languages. Four years later, Pūnana Leo schools opened, committing to a simple vision: *E Ola Ka* ʻŌlelo Hawaiʻi (the Hawaiian language shall live). Less than a generation later, Hawaiians, from toddlerhood through graduate school, can learn their ancestral language. At last count, the islands have no fewer than 18,400 native speakers of ʻŌlelo Hawaiʻi.

E hoʻi mai ʻoe (come back.)

Both Sanford B. Dole and Larry Kimura had more than an inkling of the role schools play in shaping society. To bring about the kind of educational change we need will take a substantial number of people with similar sophisticated understandings of *why* schools have such profound influence on society and *how* systems change. It will take a cadre of people who know that schools host and cultivate our "deepest…beliefs about how the world works" and replicate the way society collectively thinks generation after generation, no matter how obsolete that way of thinking has become or how inhumane it has always been. When my deep longing for *what* I know our schools could be rises within me, I feel tender and hopeful—like I did that morning at Pūnana Leo O Maui. But I also know that *why* and *how* we get to the *what* is much more akin to my squirmy flight home from Pittsburgh than it is to a perfect day in paradise.

Even so, I invite you to the journey. Buckle up.