



Improbable Probabilities: Education Cross Borders¹

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Statistically speaking, I shouldn't be doing what I'm doing right now. Not by a long shot. I was born in 1965 in a village so unremarkable that even the word “obscure” might be too generous. Xianggong Yuanzi, nestled in the mountains of Eastern Sichuan, was the kind of place maps ignored and governments pretended did not exist. If invisibility were an official status, we would have earned it without paperwork.

I was born into poverty—extreme, unapologetic poverty. Rumor had it that we were too poor to qualify for the government's “Poverty Village” designation. Apparently, achieving that status required a little financial grease for the bureaucratic wheels because such status came with government subsidies, and we were unable to muster the bribe. In a strange twist of logic, our poverty disqualified us from being officially poor. Bureaucracy, it seems, has its own version of irony.



Xianggong Yuanzi in 2025

Picture Yong Zhao being raised in this village 60 years ago — with no photography.



Life in the village involved living under the dual pressures of an unforgiving natural world and an even more erratic political one. My childhood unfolded in the shadows of the Great Proletarian Cultural Revolution (1966–1976), a decade-long political upheaval that swept away reason, trampled tradition, and left devastation in its wake. During that time, tens of millions in China perished from starvation, persecution, or the collateral damage of ideology run amok. I remember three villagers who starved to death, not because food was hoarded somewhere, but because the system had stopped producing it. The collectivized farming, mandated by ideology rather than agronomy, resulted in disastrously low yields. Central planning, exaggerated harvest reports, and food requisitioning meant that whatever meager crops were grown often vanished into government quotas or bureaucratic black holes.

¹ Some of my story is told in the book co-authored with Bill McDiarmid in 2022 (McDiarmid & Zhao, 2022).

And yet, here I am: a professor at a university in the United States. I have also held academic posts in the UK and Australia, worked with ministries of education, designed new curricula, founded research centers, written language-learning software, and even helped build schools. I have delivered keynote addresses at education conferences in more than 20 countries and written more than 40 books and 150 articles—in English, a language I first encountered in the person of a thickly accented rural teacher with more enthusiasm than fluency.

What explains this improbable journey? For me, the answer is questioning: rethinking traditions, challenging conventional policies, and interrogating practices that hurt more than help. I have never stopped asking: Why are some people left behind? And what can we do to change that?

In my research and writing, I have examined the unintended side effects of well-meaning policies (Zhao, 2017, 2018c; Zhao & Beghetto, 2024), critiqued test-driven systems that reduce students to numbers (Zhao, 2012, 2020), and exposed how even the most celebrated systems can be both the best and worst simultaneously (Zhao, 2014). I have explored the potential of new technologies—especially AI—not just to automate learning, but to reshape it entirely (Zhao, 2025). I have questioned the very foundations of meritocracy (Zhao & Zhong, 2025) and called for an education system that cultivates each student's uniqueness, passions, and potential (Zhao, 2018b, 2023). In a forthcoming book, I argue that repairing the past will not prepare us for the future. We need to invent the future, and that starts with personalizing education, so every individual can thrive, not in isolation, but through purposeful interdependence (Zhao, in press).

However, my commitment to challenging tradition is not just academic; it is personal. None of my childhood peers ever made it to college. Only three made it to high school. My

four siblings never made it past third grade. My parents were illiterate. Today, most of my childhood friends are migrant workers—laboring across Chinese cities, building the modern world while their own lives remain stubbornly stuck in survival mode.

So how did I escape the trajectory that seemed predestined for me? Not through brilliance or ambition. I was not an exceptional child. I was, in truth, quite average: average in ability, below average in physical strength, and often clueless about my future. But I was lucky. Lucky to have stumbled through a few open doors. Lucky that some people—teachers, mentors, even complete strangers—took the time to lift me, sometimes without knowing what they were doing. This story, then, is not a celebration of grit or genius. It is a story about absurdity, serendipity, and the stubborn hope that improbable things can happen.

“Why Don’t You Go to School?”

My formal education began more or less by accident, like most things in my life. Until 1972, there was no school in our “Big Team,” the rural brigade made up of six neighboring villages. Education, like electricity and paved roads, was a distant rumor. But history, in its strange, backhanded generosity, made room for a small shift.

During the Cultural Revolution (1966 – 1976), schools and universities in cities were shut down in the name of ideological purification. Chairman Mao had a different plan for the countryside. He wanted a new kind of education, one that would serve the peasants. So, in the late 1960s and early 1970s, the rural school movement was born. That is how, in 1972, a “school” was established in a neighboring village.

I was 7, about the right age to start school; and more importantly, I was not terribly useful on the farm. I was small, weak, and lacked the physical vigor required for plowing fields or hauling anything heavier than a

writing brush. My father, a man of pragmatic genius, looked at me one day and said, “Since you’re not very useful, why don’t you go to school?” And that was that. My path to becoming an educator started, because I was not cut out to be a farmer.

The school, to be generous, was a room. It had been confiscated from a local landlord and repurposed for learning—or something like it. There was one teacher, a local woman who had finished middle school before the Cultural Revolution interrupted her life. She gathered about 50 children, ages 6 to 15, and attempted to teach us all at once. There were no textbooks, no curriculum standards, no exams, no library, no musical instruments, no sports, no science labs, and certainly no cafeteria. We scarcely had walls. Still, learning happened. After two years, a more qualified teacher was sent to the school, a woman who had completed training at a normal school. The “higher” grades (3–5) were handed over to her, and so I moved up, if not exactly forward.

I must have been a good student—possibly the best. Not because I was smarter, but because I had few distractions. My peers could wrestle water buffaloes, climb trees, and help with planting. I could memorize characters and recite revolutionary slogans. The teachers liked me and gave me responsibilities, including helping classmates who were struggling, which I enjoyed—probably because it gave me a sense of purpose that I didn’t get tripping over rice paddies.

We also had extracurricular activities, of a sort. One major project involved making paper wreaths for the funerals of Chairman Mao, Premier Zhou Enlai, and General Zhu De, each of whom died in 1976. I didn’t know much about these men, but making flowers from colored paper and attaching mourning ribbons felt oddly ceremonial, even meaningful. It also gave me a glimpse into a world beyond my village, a world where

persons died with dignity, wrapped in paper chrysanthemums, unlike the unfortunate members of my village.

The curriculum, or lack thereof, never taught me science, history, geography, music, or art. But it did teach me the basics of arithmetic and, most importantly, how to read Chinese characters. That skill changed everything. Literacy, it turned out, was a superpower in a village based on oral tradition.

Reading gave me value—real, tangible value. In second grade, I discovered through reading that good water buffaloes for plowing could be found 300 miles away. I told my father, and he went there and bought some for our village and other villages. For a physically weak child, that was a triumph. I also read stories aloud to elderly villagers and other kids. Suddenly, I wasn’t just a liability to the family farm, I was entertainment. I became useful in my own peculiar way.

Most of my reading materials did not come from school. They came from my father, who as the village leader received a full set of Chairman Mao’s *Selected Works*. I devoured them, not so much for the ideology, but because Mao loved quoting Chinese classics and history—material I found captivating. I also had access to the village noodle shop, which my father managed. Dried noodles had to be wrapped in paper, and the paper came from discarded books and magazines. This meant I had a constantly rotating library, one that self-destructed after wrapping a few noodle bundles. I had to read fast. I became adept at reading incomplete texts and reconstructing missing pages in my head. My reading materials also included tombstone inscriptions, political slogans painted on walls and mountainsides, and newspapers repurposed to wrap goods. No genre was off-limits. If it had characters, I read it.

I finished elementary school in 1977, the year after Mao died and the Cultural

Revolution ended. That same year, Deng Xiaoping reinstated the *Gaokao*, China's suspended college entrance exam, and began to rebuild the formal education system. And so, quite by accident and entirely because of coincidences of history, I advanced to middle school.

Middle School: Barefoot Dreams and Big Ideas

My middle school was born, quite literally, as an afterthought. In 1977, with Deng Xiaoping's education reforms underway, someone in the commune decided that the central elementary school could sprout a few extra grades and call itself a middle school. Just like that, we had one. It was about two miles from my home, which meant a daily barefoot walk, an invigorating experience depending on the season. In summer, the roads were blistering hot, in winter painfully cold, and during the rainy season, they were a muddy obstacle course. Shoes, at the time, were aspirational.

The school was little more than a few overcrowded classrooms, hastily organized and minimally resourced. The teachers, until the year before, had been teaching elementary students. But now they were middle school educators, armed with newly printed textbooks and decades of chaos to undo. Despite the chaos, this was a step up.

I was 12, and for the first time, I encountered textbooks in Chinese, math (including geometry and trigonometry!), history, and even physics. There were no labs, of course, and our exposure to physical education consisted of watching other kids play on the basketball court. Art and music remained rumors, other than the occasional glimpse of a harmonium in the teachers' lounge.

Still, this was the first time education began to feel "formal." We had actual subjects and structured lessons, even if the instruction sometimes lagged behind the ambition of the

curriculum. I stayed focused partly because I wasn't good at anything else. While my classmates could escape into sports, mischief, or farming, I found satisfaction only in schoolwork. School was, for me, not a duty but a lifeline.

One memory that still makes me smile is the heated debate we middle schoolers once had: Is "foreign language" synonymous with English, or are there other foreign languages? None of us had ever met anyone who spoke another language, nor had we started learning one, but this did not stop us from arguing the point with all the righteous intensity of philosophers.

By the time I graduated middle school in 1979, China's education system had mostly resumed functioning, and the *Gaokao* was fully reinstated. This changed everything. Suddenly, going to college was no longer a vague possibility, it was the only legal way to escape rural life. The stakes were clear. If I failed the *Gaokao*, I would be stuck doing the kind of farm work I was never very good at. If I succeeded, I could go somewhere—anywhere—beyond my village. So, I did what seemed logical. I studied like my life depended on it, because in many ways, it did.

I passed the high school entrance exam and was admitted to a boarding school nine miles away. That may not sound far, but when you are walking it on weekends with a sack of sweet potatoes, a small bag of rice, and a tin of sautéed salt for seasoning, it feels like a journey worthy of epic novels. Every Saturday afternoon, I walked home. Every Sunday, I walked back to school with my weekly rations slung over my shoulder. This was not hardship. It was routine. I didn't question it.

It was in high school that I was formally introduced to English. I use the term "formally" loosely. Our English teacher had recently returned from farming during the Cultural Revolution and was thrust back into the classroom, probably with less preparation than he would have liked. But he was

passionate, and more importantly, he planted the seed that would eventually become my field.

That said, I soon discovered something troubling. I was terrible at math, not just below average, but spectacularly bad. I had not realized it before because, until high school, no one had bothered to test me in any serious way. But now, with college entrance exams looming, this weakness threatened to derail everything. Math was a core subject in the *Gaokao*, and I didn't stand a chance.

Luckily—and I write this with full awareness of how strange it sounds—China had a loophole. To compensate for the uneven education during the Cultural Revolution, the government created an exception: students applying to foreign language majors did not have to include their math scores in the total. This was probably intended for students like me, and I grabbed the opportunity with both hands. I was not particularly good at English either, but at least I wasn't scoring 3 points out of 100.

I graduated from high school in 1981 and took the *Gaokao*. I passed. Barely. But then came another setback. I was not admitted to any college. Not because of grades, but because I was physically unqualified. Years of malnutrition had left me small, thin, and apparently unfit for college life, at least by bureaucratic standards. No one in my high school class was admitted to college. I had to try again. I repeated one more year of high school, this time at another school, 20 miles away, with a close friend, Huaming Zhang, who also had been rejected. We crammed for the *Gaokao*, hoped, and reapplied. In 1982, we were both accepted into a two-year English teacher training program at Sichuan Foreign Language Institute (SFLI). We were part of the first—and as it turned out, nearly last—cohort. The program was an experiment born of the unusual times.

Then something even more improbable happened. After two years, the program was

extended to three. And then, even more improbably, we were offered the chance to stay for a fourth year and receive a full bachelor's degree if we passed an English exam. I took every opportunity and passed the exam. Why stop when the universe, for once, was saying "Yes"?

In the end, I graduated with a degree, top scores in English, and—because fate enjoys irony—a job offer to become a lecturer at the very institution where I had been a student. I had, somehow, become good at English. But I didn't learn it in the classroom. I learned it by reading, and not reading what the curriculum assigned, as I explain next.

What Is Learning?

When I started college, I had every reason to feel underqualified. I had scored 3 points out of 100 on the math section of the entrance exam and a less-than-glorious 36 out of 100 in English, my chosen major. But I was not discouraged. On the contrary, I was elated. I was in college. For someone like me—short, skinny, rural, and statistically improbable—this wasn't just a milestone, it was a parallel universe.

What did I do with this precious opportunity? I spent most of my first year in the college library... reading children's stories: Grimm's Fairy Tales, Hauff's Fairy Tales, Andersen's Fairy Tales. These books, translated into Chinese, transported me to enchanted forests and magical kingdoms, places that were, somehow, more real to me than the concrete campus. I wasn't escaping reality; I was learning to imagine it differently.

Eventually, I moved on from fairy tales to novels, photography books, and anything else that caught my eye. Unfortunately, none of these were on the English department syllabus. My grades reflected this misalignment. I nearly failed most of my English courses in that first year, not because I was not learning, but because I was not learning what the assigned curriculum. This

was the first major lesson college taught me: learning and schooling are not always the same thing. That realization only deepened when I discovered a mysterious side room in the library. Tucked away and seldom visited, it housed photocopied—read that as “pirated”—English magazines and journals. I walked in one day and never really left.

The shelves were filled with issues of *Time* and *Newsweek*, along with academic journals in fields I barely understood: linguistics, applied linguistics, anthropology, educational psychology. I could grasp perhaps 30% of the content, but I was hooked. These were not just language exercises. They were glimpses into the lives of other people, other systems, other ways of thinking. This room became my secret school.

At the same time, the institute hired foreign, mostly American and British, instructors. They were there to teach oral English, and many students saw them as walking dictionaries or pronunciation machines. Most conversations with them were limited to weather reports and mundane topics such as tourists, food, and shopping. But I had questions, actual questions, about the content I was reading. I would approach them after class to ask about an article on second language acquisition or a theory from anthropology. My curiosity surprised them. It also opened doors. I found that these teachers were more than native speakers, they were scholars. One was an anthropologist. Another had a background in educational psychology. They welcomed deeper conversations, and I began to engage in real intellectual dialogue, something that had been missing from my formal coursework. In many ways, this was the beginning of my true education.

Meanwhile, I began frequenting the largest bookstore in downtown Chongqing. Literally hidden behind a curtain was a section reserved for “internal distribution only,” where pirated copies of foreign books and magazines were sold. Foreigners were not

allowed inside. I found more original English content there: magazines, academic books, even entire journal volumes.

Hanging out there was not easy. My English was still developing, and much of the content was challenging. But reading difficult material in English had two major side effects: first, it improved my English far more than any textbook ever could; second, it expanded my worldview beyond anything the standard curriculum could offer. While my classmates memorized adapted versions of Shakespeare and Frost, I was devouring primary source materials in linguistics, psychology, and education. Not because I had to—because I wanted to.

This self-propelled reading began to shape my academic identity. I became interested not just in English as a language, but in how people learn languages, how they think, and how they develop. I wasn’t becoming a better English major; I was becoming a social scientist with a language lab in the form of bootleg journals and a supporting cast of curious Western teachers. Later, I realized that I was also becoming a systems thinker—someone who sees the parts and the whole, the technical and the human. But at the time, I just felt excited, insatiable, and, occasionally, guilty. I had this strange sense that I was cheating on my degree with another discipline.

In retrospect, this was one of the happiest and most intellectually alive periods of my life. I wasn’t chasing grades or credits. I was chasing understanding. I was learning without learning, at least in the traditional sense. I began to suspect something: that real learning often happens outside the curriculum, off the syllabus, and far from the eyes of formal assessment. If this sounds like the start of a pedagogical manifesto—it was. I just didn’t know it at the time.

Learning without Learning

There has always been something slightly misaligned between what I was supposed to

be interested in and what I actually found fascinating. While my classmates were dutifully trying to fulfill course requirements or get by with minimum effort, I kept wandering off the prescribed path, and finding much more interesting trails.

Take our teaching methods course, for example. As students in a teacher education program, we were all required to take it. But “required” is not the same as “desired.” Most of my peers viewed the class as a necessary annoyance. The professor, bless him, did not help. He was a kind man, but the course content felt dusty even by 1980s standards. Still, I found it utterly absorbing. Why? I can’t say for certain; perhaps because I was beginning to realize that teaching was not just about conveying information, but about shaping minds and futures.

Another fork in the road came when the dean, an unusually forward-thinking man, introduced a computer programming course in 1985. This was visionary at the time. No other foreign language institution in China was offering anything like it. The language? BASIC. The lab? Modest but magical. While most students viewed it as irrelevant, I saw it as a playground. I stayed long after class ended, tinkering with code, trying to build educational tools. I even began designing software to teach English vocabulary.

The instructor became a close friend and collaborator, which paid unexpected dividends. When a professor from the U.S. came to our institute to deliver lectures on computer-based statistics, I was asked to travel to Beijing and escort him back to Chongqing—not a typical job for an undergraduate. Why me? Because I was one of the few who could speak English well and had logged enough hours in the computer lab to seem competent. It was my first time on an airplane. It was also the first time I learned that reservation could also mean to reserve a table in a restaurant besides a doubt when the American professor asked me to do so for

Peking Duck in Beijing. I was also sent to Chengdu to pick up an IBM 486 personal computer from the provincial education commission. Professors typically handled such tasks. I was still a student. But again, my strange interests had built me a strange path.

In my senior year, Dr. Mary Blakely, an American professor, offered a course in educational psychology using a textbook by Thomas Good and Jere Brophy. Since we could not get the book in China, she photocopied chapters for us. I may have been one of the few who actually read them—voluntarily, repeatedly, enthusiastically. Dr. Blakely noticed. She lent me her copy of the real book, and I devoured it. Years later, when I met Jere Brophy at Michigan State University and told him I had read his book in China, he was stunned. We became good friends. Eventually, he introduced me to the International Academy of Education. But back then, I was just a curious student with a worn photocopy and a hunger for something deeper.

Dr. Blakely also introduced me to the world of Computer Assisted Language Learning (CALL) and shared newsletters from a CALL organization. When I pursued my doctoral studies later, CALL became part of my academic identity. Looking back, I see how serendipitous and formative those incidental conversations were.

My passion for educational technology, language learning, and social science did not just guide my reading, it pulled me into doing things that were not part of any assignment. When my methods professor was approached by a group of Japanese researchers in 1988, I was recruited to interpret. They were studying English learning behavior in East Asian countries. Their goal was to conduct surveys in Japan, China, South Korea, and Singapore. Their problem? They had no system to analyze the data. At the time, bubble scanning sheets were science fiction, and statistical software wasn’t available to us. And so, I—

someone who had actively avoided math and had never taken a statistics class—volunteered to build software to collect and analyze the data.

This was not courage. It was curiosity plus naiveté. I borrowed a basic statistics book from Chongqing Teachers College and got to work. For a year, I coded day and night. I taught myself statistics not because I wanted to become a data analyst, but because I wanted to analyze the data. Eventually, I built a working system and, in doing so, rewired my brain. I also scraped together enough savings to buy a personal computer in 1989, ownership being a rarity. Only four people at the entire institute owned one. Naturally, we formed an unofficial club. Those amateur programming skills and DIY statistics knowledge turned out to be crucial. Years later, they landed me both a teaching assistantship and a research assistantship at the University of Illinois at Urbana-Champaign (UIUC). These positions paid my way through graduate school. Even more surprisingly, they allowed me to waive several research methodology courses after I demonstrated proficiency to a panel of professors.

Entrepreneurial Side Trips

While I was deeply interested in academic ideas, I was also always drawn to doing something, anything, that might make a real-world difference. Sometimes these ventures made sense. Often, they didn't. But I was always chasing possibilities.

My earliest attempt at entrepreneurship was selling sugar water on the roadside near my village when I was in elementary school. The problem? No one passing by had money to buy it. Still, I stood there, hopeful. I also scavenged discarded household items—scraps, really—from our home and sold them to the local junk collector for a few pennies. I used the money to buy a novel, the first book I ever purchased with my own earnings. To this day, that remains one of my most

satisfying investments. In college, I was the first to volunteer to sweep the dormitory hallways in exchange for a small wage. Later, I took on freelance translation work, including translating a sewing machine manual from English to Chinese for a factory. The payment was enough to buy an English–Chinese dictionary. Glamorous? Not exactly. But these small gigs affirmed that my skills—especially my language skills—could actually open doors.

A bigger leap came in 1987. That year, the Chinese government launched a national campaign to send new college professors to remote areas to teach for a year. Each institution had quotas to fill, but enthusiasm among faculty was low. I, however, volunteered enthusiastically. I wanted to understand education in rural communities not just as someone who had come from one, but as someone returning with the eyes of an educator.

I was sent to a remote mountain city, reachable only by two nights on a motorboat and one long day on a bus. Today, it is about one hour by high-speed rail. Progress. I taught high school English and worked with distance learners enrolled in China's Radio and TV University. I liked it. I liked the small-town rhythm, the students, the sense that something meaningful was happening. But then December arrived. I traveled back to Chongqing to file my application for a master's program in comparative education at Beijing Normal University. That trip, intended to advance my academic career, took an unexpected turn.

In Chongqing, I ran into my roommate – two unmarried professors had to share one dorm room at that time – a writer from Shanghai, full of charm, persuasion, and ambitious schemes. He had one such scheme: “Let's go to Hainan Island.”

Now, Hainan was on the verge of becoming China's newest province and a special economic zone, just like Shenzhen had

before it transformed from a fishing village into a metropolis. Everyone was buzzing about the next big opportunity. My friend made it sound like destiny. I went. Just like that. No plan, no permission, no job waiting. I simply boarded a train and a ferry and rode 40 hours to Hainan.

When I arrived, I discovered the truth: there were no jobs. Or rather, there were more people looking for opportunities than actual opportunities. Haikou, the capital, was teeming with dreamers, wanderers, speculators, hopefuls. I joined a few of them, and together we started a translation company out of a hotel lobby. We biked around the city handing out business cards, offering translation services to whomever needed them. And somehow, it worked. We got clients. We translated documents. One of my proudest achievements during this period was translating a technical manual for a coconut juice extraction machine. That machine, I like to think, played a small part in what is now a thriving coconut juice industry in China.

But the translation business, while lucrative, quickly grew repetitive. I missed ideas. I missed books. I missed conversations that weren't about invoice templates or proper noun capitalization. I made another improbable move. I returned to SFLI.

The school had fired me, of course. I had left without notice, and they had moved on. But in the summer of 1988, I negotiated my way back on probation, with a reduced salary and resumed teaching.

I did not waste time. I jumped right back into academic work. I published my first academic article around 1989, arguing that English teacher education should include meaningful content such as educational psychology, teaching methodology, and a grounding in education theory. The article was based not on abstract theory, but on my own haphazard yet fruitful journey through learning. Soon after, I conducted a study of student learning behaviors following the

method of the Japanese professors. I wrote an article based on the study. The article was published in *Teaching and Research in Foreign Languages*, the most prestigious language teaching journal in China at the time. That article led to an invitation to a conference in Tianjin, hosted by Beijing Foreign Studies University, an unusual honor for a 25-year-old with a spotty résumé. Around the same time, I asked my department if I could offer a course called *Readings in Education*. I compiled its textbook myself. I included excerpts from John Dewey's *Democracy and Education* and Lee Shulman's "Those Who Understand: Knowledge Growth in Teaching," texts I had encountered not in class, but in my own off-hours reading.

Looking back, that period—from sweeping dorm halls to translating coconut juice manuals to publishing my first academic paper—may seem like a chaotic zigzag. But it was all connected by a simple thread. I was always looking for what I wasn't supposed to be looking for. And more often than not, that's where the learning was.

China's Renaissance or New Enlightenment

The 1980s in China felt like stepping into a sunrise after a long, cold night. The Cultural Revolution was over. Mao was gone, and a collective hunger for knowledge, long suppressed, came roaring back. It wasn't just a political thaw; it was a cultural renaissance, often referred to as the "New Enlightenment" or, more poetically, *wenhua re*, "culture fever." For the first time in decades, books that had been banned were being published and reprinted. Translations of Western classics appeared on shelves. Ideas – foreign, provocative, and exhilarating – were suddenly in the air. Intellectuals, long silenced or exiled to the margins, reemerged with passion. Novelists chronicled the scars of the Cultural Revolution. Poets experimented with new aesthetics. Thinkers debated the nature of beauty, truth, democracy, and human dignity.

Even Taiwan and Hong Kong pop music arrived, flooding radios with melodies that did not sound like marching orders. In 1986, China had its first rock concert. In the big universities, social clubs and salons emerged where students and faculty gathered to discuss philosophy, political theory, and the purpose of life. We were, quite literally, learning how to think freely again.

I was lucky. I had already read a great deal through pirated journals, discarded books, and the noodle wrapper lending library of my youth. And thanks to my English proficiency, I could access texts most others could not. This made me somewhat unusual. It also opened unexpected doors.

I began spending time with people who were, by all definitions, not my academic peers. They were older, wiser, and more accomplished: painters, sculptors, publishers, historians, novelists, futurists, experimental poets, and rogue philosophers. Somehow, I was adopted into their circles. We met in tea houses, tiny apartments, and art studios, where conversation was the main form of currency. We talked about everything: Heidegger, Sartre, Rousseau, Chomsky, Confucius, cybernetics, chaos theory, information theory, education theory. We debated, imagined, and occasionally despaired. I was young—often the youngest in the room—but I was listening, absorbing, questioning. I visited campuses outside my own, sneaking into lectures and salons, joining late-night reading groups where students pored over Plato's *Republic* and Rousseau's *Emile*. I read books on systems theory and complexity long before I understood them, underlining passages I hoped would make sense later. And many of them did. This period—brief, fragile, and electric—was my real graduate education. Not an education with grades and transcripts, but an education that taught me how to synthesize, how to imagine better systems, how to embrace paradox and complexity, and how to see education not as the transmission of

information, but as the transformation of individuals.

It all came to an end in 1989.

The student movement that culminated in the Tiananmen Square protests also marked the abrupt halt of the New Enlightenment. After the crackdown, the space for free intellectual exploration shrank rapidly. Many of the thinkers I admired went quiet. Others left the country. Some simply turned inward, into silence or safer topics.

I stayed. I got married. We had our first child.

But I never forgot what that brief interval of shining light felt like. It shaped how I think, how I read, and how I work to this day. The New Enlightenment wasn't just a moment in history, it was a moment in my soul. And it left me with a conviction that has never wavered: ideas matter. Even when systems collapse and regimes change, ideas, once awakened, do not go quietly back to sleep.

Coming to America

In September 1992, I arrived in Seattle, Washington. After a three-hour drive, I landed in Portland, Oregon, close to McMinnville, a small town with a big promise: Linfield College. I would spend more than half a year there, not as a student, but as a visiting scholar. It was my first time in America, and my first time experiencing the West beyond books, magazines, and pirated academic journals. I came for a variety of reasons, each rooted in a tangle of curiosity, disappointment, and cosmic coincidence. First, there was my growing sense nurtured by years of reading and my involvement in the New Enlightenment that the West was home to ideas I needed to encounter firsthand. America, in particular, felt like the epicenter of educational possibilities.

Second, there was disappointment. I had been working on a British Council project at

SFLI, helping to develop a language testing center. Because I knew statistics and could program, I was a natural candidate to be trained in the UK. The British Council supported the idea. But when the time came, the leadership of the college selected someone else, someone more politically connected.

Then came Dr. Keith Campbell, an American professor from Linfield College. We had met in China and begun collaborating on a book about second language acquisition. He returned to Oregon before we could finish the manuscript, but he extended an invitation: come to Linfield as a visiting scholar. Finish the book. Experience American higher education. I packed my bags, said goodbye to my young family, and came. What I found at Linfield astonished me.

First, there was the classroom. I attended numerous teacher education courses and gave a few guest lectures in educational psychology. The content was thoughtful and contemporary, but what really struck me was the atmosphere. In China, professors lectured, students listened, and the hierarchy was carved in stone. At Linfield, professors asked for students' opinions and genuinely listened to them. There were debates. Laughter. Students asked questions without fear. It was, to me, truly revolutionary.

And then there was me: a newly arrived academic from mainland China, suddenly seen as a kind of intellectual novelty. I was invited to faculty gatherings, dinners, and even board meetings. At one such dinner, a board member suggested I choose an English name. "You should be John," he said cheerfully. I smiled politely. I didn't become John.

The second surprise was in the Education Department office. There sat a large Macintosh computer, something I had never used before. Because of my past experiences tinkering with programming, I was quickly labeled the "tech guy." I fixed a few glitches, and suddenly I had complete access to the machine. More importantly, the Mac was

connected to a modem; and the modem was connected to something even more magical: the Internet.

It was 1992. The Internet was rudimentary, largely text-based and clunky, but it offered something I had never experienced before: the ability to chat in real time with people across the world. I used a program called Pine to send and receive emails; and I discovered discussion groups, forums, and strangers with fascinating ideas. It wasn't long before I realized that this technology was going to change education in ways no one could imagine.

My time at Linfield convinced me that I had to stay and pursue graduate studies in the USA. I took the TOEFL and GRE. My TOEFL score was strong, and I did well in the verbal part of the GRE, less so in math, of course. I applied to more than 10 graduate programs. One after another, the rejection letters arrived. Except for one.

The University of Illinois at Urbana-Champaign (UIUC) not only accepted me but offered assistantships. Ironically, it was the one program I had most wanted to attend. And so, once again, improbably, I found myself opening a new chapter. This time it was not just as a visitor or volunteer, but as a full-fledged graduate student in one of the world's top education research institutions. What I did not know then was that this next phase at UIUC would change not only how I thought about education, but how I thought about learning, technology, and the future itself.

Graduate Studies at UIUC

My first meeting with Dr. Gary Cziko at UIUC was, in hindsight, perfectly emblematic of the era. After we exchanged greetings in his office, he handed me a floppy disk and said, "You should check your email at least every day." The disk contained a copy of Eudora, an email program developed rather fittingly at UIUC.

Gary was not your average education professor. Though his formal field was second language acquisition and assessment, he was intellectually adventurous and deeply invested in learning theories, especially Perceptual Control Theory (PCT) and the evolutionary perspective on learning. His course, based on a draft of his book *Without Miracles: Universal Selection Theory and the Second Darwinian Revolution* (Cziko, 1995), completely upended my thinking. It wasn't just about learning. It was about why anything changes at all, and how we make sense of that change.

We explored philosophy, psychology, evolutionary biology, neuroscience, and the emerging digital world. Selection theory wasn't just a framework; it was a way of understanding everything, from natural evolution to language acquisition. For a former village boy who had once wrapped noodles with pages of discarded textbooks, it felt like stepping into a universe of ideas I had only glimpsed from afar.

Thanks to the programming and data skills I had developed earlier, I became the teaching assistant for Gary's statistics course despite my long-standing math aversion. The class was large with more than 60 students, and Gary managed to captivate them all. He even wrote and performed songs about statistical concepts accompanying with his guitar.

Gary's interest in PCT became mine too, and we eventually co-authored an article applying the theory to teachers' adoption of technology (Zhao & Cziko, 2001). But even more surprisingly, PCT played a key role in landing me my first faculty job. That story begins with email.

Gary led a PCT email discussion group, and once the Web became popular in 1993, he wondered aloud how to make the discussion archive publicly accessible. Given my background in coding and curiosity about all things digital, I created a tool using HyperCard that converted Eudora email files

into HTML pages. I called it—without much imagination—Eudora2HTML. I assumed it would be useful for Gary, but word spread. It turned out that many people wanted to move listserv discussions onto the Web. One of those persons was Dr. Mark Gillingham, who directed the new educational technology center at the College of Education of Michigan State University (MSU). When I applied for a faculty job there a couple years later, he strongly recommended me to the search committee. A graduate student's side project became a career catalyst.

Another professor who shaped my experience at UIUC was Dr. David Zola. He was, hands down in the opinion of the undergraduates, the most popular educational psychology professor. His lectures were part rock concert, part TED Talk, part theater. His teaching assistants, myself included—were regularly recruited for on-stage antics: wine tastings (to illustrate sensory memory), hallway motorcycle rides (to demonstrate attention), and reenactments of episodes of *Beavis and Butt-Head* or *The Simpsons*. I will never forget the lesson featuring Bart Simpson's school experience. Educational psychology had never been so... animated. Each week after his blockbuster lecture, I led a smaller discussion section of about 20 students. It was there that I got my first hands-on experience facilitating dialogue with undergraduates in American public universities. Their openness, their casual irreverence, and their confidence were endlessly fascinating and all very different from what I had known.

UIUC was a place where people dreamed in code and argued about theory. In the computer lab where I worked as a research assistant, the excitement was palpable. The timing of my arrival was perfect: just months after the official release of Mosaic 1.0, the world's first graphical Web browser, created at UIUC by a 22-year-old employee of the National Center for Supercomputing Applications named Marc Andreessen.

Everyone in the lab was buzzing. We built servers, experimented with early Web tools, and learned HTML from scratch. I even began teaching HTML on campus to earn a bit of extra money.

One of my most meaningful projects was a website called EXCHANGE, a platform for second language learners around the world to submit news stories from their communities. Native English speakers would revise their submissions and publish them online. The idea—built on distributed cognition theory—was to create a collaborative learning space where writing had an audience and meaning beyond the classroom. We presented the project at a conference at Indiana University; it was my first U.S. academic presentation. Later I published a paper on it (Zhao, 1996).

In just two years of full-time study, I completed both my master's and doctoral coursework. My master's thesis examined how allowing learners to control the speed of speech improved second-language listening comprehension. Traditional studies had shown inconsistent results. My study demonstrated why: listeners define "fast" and "slow" differently. The key is individual control, not researcher-imposed categories. The study was later published in *Applied Linguistics* (Zhao, 1997).

After coursework, I needed a job to support my family. I accepted a position at Willamette University as its language center coordinator. We were not a happy match. After six months, I moved on to work for Hamilton College and Colgate University in upstate New York, where I developed a Web-based learning system called eWeb to allow students at both institutions to co-enroll in shared online courses.

While working full-time, I also completed my dissertation on the effects of anonymity in peer feedback. I created an email anonymizer that allowed students to submit comments on each other's writing without revealing their identities. I found that anonymity encouraged

more critical and constructive feedback. The study became my dissertation and was later published (Zhao, 1998). I defended the dissertation in 1996 and started my job as a tenure-track assistant professor at Michigan State University. It felt improbable. But by now, I had learned that improbability is where most of the good stories begin.

Learning at MSU

In May 1996, I was offered a job as an assistant professor in educational technology at Michigan State University (MSU). It was my first tenure-track position. I had just begun working at Hamilton and Colgate Universities, but this opportunity was too appealing to pass up. So, after just a few months, I packed up again and moved to East Lansing, Michigan.

What I found at MSU was more than a job; it was a platform for exploration. Under the forward-thinking leadership of Dean Carole Ames, I was given the freedom to innovate, collaborate, and build. In the fourteen years that followed, I would develop much of the intellectual identity and practical experience that shaped my career.

The AERA Digital Submission and Review System

Almost immediately, I found myself in the middle of a challenge I had never anticipated. It began over breakfast at the home of Penelope Peterson and Patrick Dickson. Both of them were members of the search committee that had hired me. My colleague Patrick Dickson and I were talking about technology's future in education. Penelope was the president of the American Educational Research Association (AERA), and somehow the conversation shifted to the tedious, paper-based process of submitting and reviewing conference proposals for AERA.

At the time, submission of a proposal required mailing printed forms, hard copies of proposals, and self-addressed envelopes. Reviewers, scattered around the country, had

to wait weeks for materials to arrive. Due to the length of time it took for postal mails to arrive, the organization could not use scholars who lived outside North America as reviewers. I opened my mouth and said something like, “We could build an online system for this.” It was a spontaneous idea, probably meant more as musing than as a proposal. But Penelope liked it. She took it seriously, spoke with then-executive director Bill Russell, and somehow, just like that, I was leading a national digital infrastructure project ... while still figuring out how to locate the campus mailroom.

We called the system *Tiger*, my son’s nickname, and we began developing it in 1997. I assembled a team of graduate students, and we worked intensely to pilot the platform in 1998. That year, my daughter was born. The AERA proposal deadline was August 1. She was born in late July. I was extremely busy debugging code and answering phone calls to help the Beta users of the system. When the hospital staff asked for a name, I was too sleep-deprived to think clearly. I named her after the server that hosted the AERA platform: Athena, perhaps one of the first children named after a computer; perhaps not.

From 1998 to 2002, *Tiger* ran AERA’s proposal submission and review process. Eventually, the system was replaced by a commercial platform when Felice Levine became executive director, but the experience taught me more than any single academic article ever could.

First, it showed me how hard it is to change organizations, even with the right technology. Most of the barriers were not technical; they were cultural, political, and institutional. Second, it gave me a rare glimpse through a window into the inner workings of educational research as a field. I worked directly with senior scholars, helped them navigate the system, and saw firsthand both the brilliance and the messiness of peer

review. Third, the project became a source of research itself. Two of my doctoral students used it for their dissertation studies on technology implementation and the merits, or lack thereof, of scholarly review. Building *Tiger* was one of the boldest and most formative projects of my early career. But it wasn’t the only one.

KLICK!

In 1998, I received a \$4 million grant from the U.S. Department of Education to start something very different: a project called KLICK—Kids Learning in Computer Klubhouses. KLICK was jointly led by myself and Dr. Barbara Markle, who had deep ties to K–12 leaders in Michigan. KLICK was grounded in a simple but radical idea: give students agency. We established ten after-school “Klubhouses” in disadvantaged rural and urban communities. These were not traditional classrooms. Instead, they were spaces where middle school students used technology to serve their communities: making PowerPoint slides for teachers, taking photos for local businesses, creating digital yearbooks, or helping school tech staff keep computers running.

It was exhilarating, and deeply instructive. We saw students flourish when they had freedom. They became experts, helpers, creators. They weren’t completing assignments. They were solving real problems for real people. One of our most striking findings had little to do with technology itself. In sites where the adult coordinators tried to control and “teach” the students too much, the programs floundered. Where the adults stepped back and supported rather than directed, the students thrived. We documented these findings in several publications (Garner et al., 2002).

KLICK gave me something I hadn’t had before: a front-row seat to American K–12 education as it is lived, not theorized about. I visited schools on Drummond Island in rural northern Michigan and in Detroit’s inner city

as well as many other rural communities and small towns. I met parents, sat in local diners for breakfast meetings, and listened—really listened—to the challenges these families and schools faced. In one community, I was told that a local leader of the Ku Klux Klan lived nearby. That gave me pause. But I was never treated with hostility. On the contrary, I felt welcome. People saw me not as a foreigner, but as someone who cared about their kids.

For a Chinese scholar trying to understand American education through experience and not through books, *KLICK* was priceless. It deepened my sense of equity, voice, and what it means to learn when you are finally allowed to lead.

eLanguage

In 2001 one week after 9/11, I traveled to Washington, DC, to attend a meeting organized by the U.S. Department of Education. I had been invited as an expert in educational technology and language education. The timing was heavy, but the mood in the room was determined. The U.S. and China, in one of their warmer periods of bilateral relations, were seeking ways to collaborate. One of those ways was through education.

At this meeting, I learned about a new initiative: a jointly developed digital platform to help K–12 students in both countries learn each other’s languages—Chinese and English. The proposed plan was fairly traditional: build a textbook-like tool online and add some interactive features. I listened. I nodded. And then, I raised my hand. “Why not,” I asked, “build a game instead? Something immersive. Something like a Massively Multiplayer Online Role-Playing Game—or MMORPG—where students can learn by doing, by playing, by interacting?” It wasn’t a completely original idea. Education scholars had been experimenting with game-based learning for years; but for the government officials in the room, it was novel. Bold. Intriguing. They scrapped the original proposal. And, just like

that, I found myself at the center of a binational educational technology experiment. We called the project *eLanguage*.

It was the most ambitious initiative I had ever worked on. Both the U.S. Department of Education and China’s Ministry of Education appointed advisory teams made up of computer scientists, game designers, language educators, software engineers, and policy experts. We held biannual meetings, alternating between the U.S. and China. We brainstormed, built prototypes, debated, and piloted. And somehow, I became the bridge between it all.

Culturally, linguistically, and intellectually, I was fluent in both systems. I could explain American educational philosophy to Chinese officials and Chinese political considerations to American designers. I also translated between technologists and educators, two groups who frequently spoke past each other. In more than a few meetings, I found myself interpreting between people who did not realize they needed an interpreter.

The work was exhilarating and exhausting. I learned a lot, not just about language learning or technology design, but about diplomacy, bureaucracy, and the subtle art of cross-cultural negotiation. Technical innovation sometimes ran ahead of pedagogical readiness. And politics on both sides could shift overnight.

In the end, the project didn’t produce the fully developed product we had envisioned. Despite years of effort, substantial funding, and some excellent prototypes, the game never went into full-scale implementation. Nonetheless, I don’t consider the project a failure. In fact, it may have been one of the most educational experiences of my life. It helped me understand the friction points between innovation and institution, imagination and implementation, governments and private companies. And it led to several important spin-offs. One of them was a conference.

During the eLanguage years, both the USA and China were in a curious state of mutual admiration in education. The USA marveled at China's high PISA scores and discipline; China longed for America's creativity and innovation. Each side wanted the other's "secret sauce." This led to the idea of a multilateral conference on education reform.

Because both countries were members of APEC—the Asia-Pacific Economic Cooperation—and APEC's annual leaders' meeting was scheduled for Chile in 2004, the idea evolved into something official. China, Chile, and the U.S. would co-sponsor an APEC education reform summit in Beijing. Ministers and senior representatives from most member economies attended. I had the good fortune to participate and lead the discussions, and it launched me into a new phase of research and practice: one that extended beyond technology and into global education policy, comparative systems, and the deeper question of what education is for in a rapidly changing world. But at its heart, eLanguage taught me something simple and profound. Sometimes, the most valuable outcomes of a project are not the products, but the people you meet, the insights you gather, and the boundaries you learn to cross.

Going Global

The APEC conference in Beijing didn't change the world, but it changed my world. Like many conferences, it was filled with speeches, panels, photo ops, and diplomatic pleasantries. But something unexpected happened there. I began to see education not just through the lens of pedagogy or technology, but as part of a global ecosystem. Policies, cultures, values, aspirations are all woven together, all influencing what and how we teach.

The Beijing conference led to another meeting a year later in Santiago, timed to coincide with the APEC leaders' summit. I found myself in deep conversation with

leaders, scholars, and reformers. One of the most influential was Brian Caldwell, a well-known school reform leader and dean of the graduate school of education at University of Melbourne. Brian introduced me to people at the Specialist Schools Trust in the U.K., and that introduction took me to work for about six years in the U.K., Australia, New Zealand, and China on the topics of globalization and technology in education. I began asking different questions. Why do education systems admire each other from a distance, but resist change at home? Why do we celebrate test scores in one context and innovation in another? What do rankings really mean? Why are we still measuring success in the same ways we did a century ago? These questions would eventually become the basis for my book *Catching Up or Leading the Way: American Education in the Age of Globalization* (Zhao, 2009). But they also led to something more immediate: the creation of a research center.

During the planning for the APEC conference, we needed funding to support travel for delegates from low-resource countries. I approached the Sun Wah Education Foundation in Hong Kong, and they generously agreed. After the conference, I met with their president to thank them. As we talked, a new idea emerged. What if we created a permanent center for research, collaboration, and innovation in education? That conversation led to the founding of the US–China Center for Research on Educational Excellence in 2004, supported by a \$5 million donation from the foundation. It was one of the first centers of its kind, and its purpose was as ambitious as it was timely: to answer the question of how educational practices, policies, and technologies could cross borders, and what happens when they do.

Among the center's most innovative projects was the development of a bilingual, bicultural immersion curriculum for young children. The idea was simple. Let children

experience two languages, two cultures, and two pedagogical traditions—one from the West, one from the East—in separate classrooms every day, not as an add-on, but as a full immersion. We piloted the curriculum at a brand-new school in Beijing: 3e International Kindergarten. Today, 3e remains one of Beijing’s most popular early childhood programs. We also experimented with versions of the model in public schools in Michigan, planting seeds of global fluency early in students’ lives.

Another branch of this work led to the creation of the Confucius Institute at MSU. Unlike most Confucius Institutes, which were housed in language or international studies departments, ours was developed in the College of Education. Its mission wasn’t to offer Chinese language classes to college students; it was to support K–12 language learning across Michigan online. We developed online courses, teacher training programs, and even a multiplayer online game called ZONE, designed to immerse learners in Chinese language and culture. Yes, another game, but this time with better timing, more local control, and lessons learned from eLanguage. Some of these initiatives succeeded. Others faded. All of them stretched my understanding of education, not just as a researcher, but as a designer, a negotiator, a translator of values across systems.

These projects may have looked scattered from the outside: some focused on language, others on policy, others on technology or early childhood. But they were all part of a single question I kept asking: What is education for in a global, technological, uncertain world? That question still drives me. And it began here, on the other side of a conference name tag.

But I Did Not Neglect Research

From the outside, my career during those years may have looked like a whirlwind of side projects, international ventures, and

improbable experiments. And it was. But through all of that, I never let go of what had first drawn me into academia: research. I continued to conduct studies, publish papers, write books, and speak at conferences. I explored the effects and side effects of educational interventions, the integration of technology into classrooms, and the shifting nature of global education policy. I examined how systems change, and why so many of them resist change. Whether I was leading a multi-million-dollar initiative or tinkering with a research idea late at night, I remained, at my core, a scholar.

At the same time, I remained committed to teaching. I taught graduate courses on a regular basis, courses that drew directly from my experiences in schools, in labs, and in policy circles. My classrooms were not lectures; they were conversations. I wanted my students to think, question, and test ideas, not just memorize them.

Advising doctoral students became one of the most rewarding aspects of my work. Many of them have gone on to lead transformative work of their own in universities, school systems, and research institutes. I have learned as much from them as they may have learned from me.

I also took service seriously. At MSU, I served on the personnel committee in my department, helping to shape the direction and standards of faculty hiring and promotion. I directed the Educational Technology Center, where I worked with a group of undergraduates—our tech-savvy foot soldiers—to support faculty across the college. We provided training sessions, created tech resources, and helped make sense of the ever-evolving digital landscape. I also managed the laptop project for student interns in schools, ensuring that those preparing to become teachers had the tools and the mindsets they would need in classrooms increasingly shaped by technology.

These contributions did not go unnoticed. I was promoted and tenured two years ahead of schedule, became a full professor in 2004, and was named a University Distinguished Professor in 2005. Each milestone meant something to me, not as a title, but as a sign that my somewhat unorthodox path had not been a detour but had had a direction.

In 2010, I moved to the University of Oregon, where I was appointed the university's first Presidential Chair and took on several roles: associate dean of the College of Education, director of the Center for Online and Global Education, and professor in the Department of Educational Policy and Assessment. At Oregon, I had a mandate to experiment: to build global collaborations, to pioneer online learning communities, and to explore micro-credentials before they became buzzwords. But the work was not always easy. Rapid turnover in university and departmental leadership made long-term change difficult. Ideas need fertile ground to grow, and sometimes the climate just isn't right.

In 2016, I moved again—this time to the University of Kansas—as a Foundation Distinguished Professor. Wherever I have gone, I've carried the same commitments: to keep learning, to keep questioning, and to keep looking for ways to bridge research and reality. And none of it, none of this improbable, unpredictable journey, would have been possible without the people who helped shape it.

Other People Who Influenced Me

I have shared my story here largely through the lens of personal experience: how I stumbled into education, tripped over ideas, and somehow landed in rooms I never imagined entering. But none of it, absolutely none of it, would have been possible without the ideas and generosity of others. Some I worked with closely. Others I met only briefly. A few I never met at all.

David Berliner is one of those people whose influence is both intellectual and personal. I encountered his work long before I met him. His book, *The Manufactured Crisis: Myths, Fraud, and the Attack on America's Public Schools* (Berliner & Biddle, 1996), shook me. It forced me to confront how evidence is used, and misused, in education policy. Later, his powerful article, *Our Impoverished View of Educational Reform* (2006), gave me a vocabulary to articulate what I had long felt but couldn't quite name. These works shaped my own research on the side effects of education policies and interventions (Zhao, 2017, 2018c; Zhao & Beghetto, 2024). Years later, when we met in person, David bought me lunch. I don't know if he realized just how much he had already given me.

Denis C. Phillips of Stanford nudged me in a new direction during a single walk through the streets of Mexico City. It was at an International Academy of Education meeting. I asked him a question about the role of government mandated curriculum. Instead of answering, he pointed me to the 19th-century essay "What Knowledge Is of Most Worth?" by Herbert Spencer. That suggestion led me down a rabbit hole of epistemology, curriculum theory, and educational purpose, ultimately informing much of my later work, including *Catching Up or Leading the Way* and *World Class Learners* (Zhao, 2009, 2012). I never saw Phillips again. I wish I had told him what that moment meant to me.

Diane Ravitch and I met only a few times, but her intellectual courage left a lasting impression on me. Her willingness to publicly revise her views—especially on testing and school choice—taught me something vital: changing your mind isn't weakness; it's integrity. Her book *The Death and Life of the Great American School System* (2010) gave me both reassurance and data, confirming what I had observed and believed about the dangers of high-stakes accountability.

Ken Frank, my colleague at MSU, influenced me in more grounded ways. A social network analysis expert with a keen eye for complexity, Ken expanded my perspective about technology in schools. I had approached it largely from a psychological perspective. He brought in the organizational lens, the network effects, the social capital that shapes implementation. We collaborated on several publications (Frank et al., 2004; Zhao & Frank, 2002). Every conversation with Ken was both intellectually rich and personally energizing. He made data dance and made me want to dance with it.

And of course, there are the people I didn't name in this narrative, the mentors who quietly nudged, the graduate assistants who helped me conduct research as well as develop the digital platforms and online courses, the students who challenged my thinking, the colleagues who offered encouragement when I doubted myself, and the friends who reminded me that life is larger than any theory or model.

Conclusion

My story is not one of solitary genius or unstoppable ambition. It is a story of improbable probabilities, of accidents that became turning points, and of people who chose to help for reasons I still can't fully explain. I began my journey in a village too poor to be officially recognized as poor. I knew little, had even less, and had no roadmap. But somehow through a string of mismatched odds, strange twists, and the kindness of many, I have had the extraordinary privilege of spending a life thinking, writing, and working on education. It is not a success story in the traditional sense. It is a gratitude story. And if there is one lesson in it, it is this: Never underestimate the power of curiosity. Or generosity. Or the strange beauty of being not quite prepared, not quite qualified, and not quite ready, but doing it.

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