How i apply the scientific method in different aspects of my life

Business, Management



I chose to teach the scientific method for the last Spread Science lesson of the year, mostly because it offered an opportunity to fulfill repeated requests to make slime and ice cream. Unfortunately, I had not guite calculated the mess factor of shaving cream that puffs from a can in squishable clouds and freeze time of ice cream shaken in a bag by small, sticky, sweaty hands. We taught the kids a simple order to the scientific method: come up with a question, make a guess (hypothesis), do an experiment, figure out what happened (conclusion), and share what you learned. I have realized that I approach many parts of my life in this way. I love art, partly for the wonderful but frustrating process I go through with each painting, where the image in my head is never what ends up on canvas. Art is many things to me-an outlet, a reprieve, a place for expression, a tangle of the creative and intellectual, but it is also a puzzle. Each block of guilt fabric arranged to achieve color balance, every drop of ink in a swirling abstract watercolor, is an experiment. Reflecting on how I apply the scientific method in different aspects of my life has helped me see how I approach problems, test ideas, try again and again. It is an unconscious process, something innate, whether I am taste testing triple chip coconut blondies, fixing stage lighting in tech crew, troubleshooting school website code, or planning my latest board game strategy. When I was little, I struggled against my dad each night in cards, Othello and anagrams, mind whirling to recombine " grab" to " rutabaga." Later, the board game world expanded for me, with cooperative, deck building, role playing games, and eventually to designing my own. I love the strategy, the way games are never the same, each night a chance to try a new way to build your railroad across the nation, a new path to the

two-for-one brick trader. Family game night (every night) is a chance to plot a new strategy (hypothesize), test it in action (experiment), lose (conclusion), and share how to better play with friends (kept secret from my father, the top competition, of course). But games have never been about winning for me: they are about experimenting, testing a strategy, having fun, and ultimately spending time with people I love, just as the last Spread Science lesson was for the kids to go home smiling and loving science, understanding that experimenting, failing, learning, is okay, not for making Master Chef-worthy gelato.

I sit outside the main schoolhouse, the equator sun wrapping my crossed legs in quiet warmth. The grass depresses softly beneath Rhoda, Nsiko, and other kids beside me, and the air bubbles with laughter as we lean in, deciphering wordless origami instructions together, surrounded by bright, untouched squares of colored paper scattered amidst crumpled creations. I glance up at the half-built walls of the dormitory across the field, a few rocks abandoned nearby, leftover from this morning when we carried them there. Over recent summers, I have returned to Uganda to volunteer at a rural primary school in Seeta Nazigo teaching English, science, art, and helping build a dormitory I raised money for that would help students whose distance to school prevented their access to education. Having lived in Uganda and later Kenya for the first half of my life, these precious summer weeks let me reconnect with my first home. Moments like this, working with others to solve a problem, to build something, maybe laughing at my inexplicable love of posho, make me love science, and, perhaps more, love collaboration. My education means everything to me. It has made me who I am, and I believe

with everything in me that it should be available to everyone. Through my experiences as a student and a teacher, I have seen that education involves people who play both sides, in each interaction. I am learning from and teaching people around the world, and they have shown me I will always be both a student and a teacher, together. I want to change the world, to problem solve, experiment, but I want the world to change me too. I have great gratitude and respect for the people and experiences, all of them, that make up who I am. The values I have gained from my multicultural education, of deep respect for others, empathy, and hard work, have shaped me. They have taught me that my life will always be more than something individual.

We teach the kids that the last step of the scientific method, sharing your discoveries, is the most important. My curiosity and desire to learn, to share that knowledge, to help others, to contribute to society in a meaningful way, to give back to the world that has given to me, drives me. That last step of the scientific method is so important because it is not about making a scientific connection; it is about making a human connection. I want to contribute to the communities that support and inspire me, whether it be the scientific community, the female community, the queer community, the global community-these are all places I have and will learn from, and places where I hope I can continue to put my thoughts, feelings, discoveries, failures, my life into. No matter where I end up in the professional world, as an artist, biomedical engineer, high school math teacher or mom (or all/none of the above), I will continue to be a scientist, a teacher, and a student, to experiment, discover, learn, and share with the world. Maybe not by microwaving marshmallows or squishing slime, but bits of those experiences, bits of home in Uganda, in Kenya, in Atlanta, bits of the people I have loved and learned from all over, form a collective pool that makes me who I am, and has formed someone ready to tackle global questions. Despite my simplified version, the scientific method is an iterative process, not something linear. I know that I want to work with others to help improve education around the world, to teach, and to learn, but that solutions will take shaking again and again as my hands grow numb against the Ziplock filled with cream and rock salt.