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I asked a fifth grade class, "What is science?"

A chorus of eager voices volunteered the answer I was looking for:

"Science is knowledge, *Anna*."

"*Any* knowledge?" I prodded. The crowd of blue-and-green uniformed children, who addressed me by the Kannada word for *brother-Anna*, immediately responded:

"No, Science is knowledge gained from experiment¸ *Anna*!"

I was in Bangalore, India, conducting a workshop on the scientific method for underprivileged kids at the Parikrma Center for Learning. I had before me any teacher's dream: a class of students who were beyond eager to learn, falling over each other to answer my questions and hear what I had to say. But the relationship was mutual, and one of the things I learned from the students at Parikrma is that any definition of "science" must necessarily be an incomplete approximation.

When I found out about the APNA ambassador program opportunity, I knew from the start that I wanted to do a workshop in science. Previous, APNA ambassadors had all done workshops in spelling and vocabulary, but I wanted my APNA workshop to be something I had a special interest in, so that hopefully, I would be able to pass some of my passion for science on to the students. When I asked my father, whose educational experience had been similar to these children, what he would have desired as an aspiring scientist, he replied that, above all, he would have benefited from the holistic, hands-on experience that children in the US get to enjoy when learning about the fundamentals of science. In essence, do hands on experiments. So that's what I strove to bring to the students at Parikrma.

I set out devising a curriculum that I could use to impart to these students as a solid foundation in science.

During my time at the school, we discussed, questioned, and experimented. It feels impossible that it could have only been a week, and I could not recount the full experience in this short reflection. But a few moments stick out to me.

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A sea of confused faces stared back at me when I first spoke of terms like hypothesis, procedure etc. How to explain the concept of *procedure*? I knew they were more than bright enough to understand it, but there was an obvious language barrier stymying us. But a solution soon presented itself to me – what is *science* but a fancy word for *knowledge*? What is *hypothesis* but a fancy word for *guess*? Of course, the "fancy" terms have nuances the simpler ones don't, but at their core, these words each share a fundamental concept. So I set out explaining *procedure* as a fancy word for *recipe*.

"Do any of you cook food?"

Everyone raised their hands, as usual. I called on a girl named Ramya.

"Anna, I cook *mosaru anna* [curd/yogurt rice]."

"Ah, and when you make *mosaru anna*, what do you do?"

She began to detail out how, once she had all the ingredients, she would follow a set of steps to make the dish.

I asked: "What if you don't do it that way? What will happen if you put *mosaru* [curd/yogurt] in *akki* [uncooked rice]?"

She made a grossed-out face and said, "Anna, it will taste very bad, Anna."

I brought the analogy full-circle, "Class, science is the same way. If you don't do the steps in the right way, then you will end up with something very bad – something you didn't plan for." Most of the students understood the concept of *procedure* after this exercise.

We gathered around the stairwell, armed with paper helicopters. Our task: Determine whether mass added to the helicopter affects the time it spends in the air. As we got ready to drop the first batch of one-paperclip helicopters, the buzz among the children was hardly quantifiable. I wish I could explain it, but it was as if that stairwell reverberated with and reflected the alacrity of the students. I felt like I had been successful in imparting an eagerness for science; though I could not take credit for all of it. The students were naturally passionate about learning. When we dropped the helicopters, it was nothing like I expected. The children started yelling with glee as their creations mesmerizingly descended. I started the timer late. A few of the helicopters were swept sideways by wind. Some didn't even reach the ground. Perfect. We spent the rest of class learning about scientific error – how it is both ubiquitous and natural. It was a counter intuitive conclusion for the students, but one they all inevitably embraced like scientists.

Finally, it came time for the last class. I had only worked with the children for one week, but of course it didn't feel that way. I was to give a final presentation to the class before handing out the certificates.

We all crammed into a room where the one hundred or so students chattered amongst themselves. I began my presentation, and as I continued, we reviewed each of the concepts we discussed. Finally, as promised, I gave them some time to ask the questions. They were excited:

"Anna, when will you come again?"

"Do you do science in America?"

And one question from a quiet student named Mishra that I found especially profound:

"Are we scientists?"

At first, I didn't know how to answer this last question. But I thought about what I wanted the kids to take away from my visit, and it seemed pretty clear. Really, what we had worked on over the past few days was dispelling the idea that science was not limited to beakers and test tubes, though it included those things. Science is a process, and so I told the kids what I think they already knew: "We are all scientists. Each and every one of you can do science whether at school, at home, or anywhere else."

It was always clear that these children had not been dealt the fairest hand at life. Growing up in such a situation, they would never have the opportunities we immigrant Indians enjoy in America. But they never let this aspect define them. In Parikrma, the children were students and scientists first, and in this regard they were a pleasure to work with. I honestly think that I gained more from these individuals than I could ever have taught them in the classroom.

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