

Notes from a Life Scientist

Children have to be educated, but they have also to be left to educate themselves.

—Abbé Dimnet, *Art of Thinking*, 1928

Middle school is a wacky, unpredictable, invigorating place.

Some days I wonder how to make sense of it. For all of my planning and predicting, it's a mystery what will unfold on any day in my room. If it's the day of a school dance, anything can happen. Was I like this? Try a little experiment with me: list a few moments seared into your brain from those years. Who could forget 11, 12, or 13?

Go ahead. Make your list. I'll wait.

Here are a few of mine: dancing (badly) to "Crocodile Rock" in the school talent show; applying make-up during English class as we listened to Richard Nixon resign the Presidency; watching six black students arrive by bus to my K-8 all-white school; smoking those first stolen cigarettes. I can still taste the gritty bits of tobacco when we tried Camels. I can feel the bumpy bedspread beneath my fingers as I lay listening to Elton John, thinking, "This is the best music I'll ever hear in my life." I remember how impossibly mixed-up and immature I was. Memories from middle school feel a bit like a teeth cleaning when I haven't been flossing: wincing moments of pain.

I think of science class and can almost smell fire. I'd rather pretend it never happened, but it seems to capture the middle school brain so completely that I'm going to tell you. Then you'll forget about it and not use it against me, deal? You see I was never very graceful with boys—or men, for that matter. And in that parachute plunge of

puberty, one boy held me captive. I truly couldn't think of anything else. It made me stupid. I close my eyes and see it all unfold before me, like notes in my lab book.

The setting: A second-floor classroom with dozens of kids seated at Formica-topped tables; brown peg-board lab stations propped up to form cubicles. We picked up lab materials each day when we entered: a glass alcohol burner with a wick, matches, various beakers and chemicals.

The characters:

Teacher: He had a tremor in his hand when he held the chalk and couldn't focus on those of us who sat in the last row. He never spoke loud enough to distract us from our own conversations. He never noticed the flames or questioned all those times I refilled my glass bottle-burner with alcohol. I could see his mouth moving up there at the front of the class, but I'd long ago stopped trying to hear.

Me: Long, scraggly blonde hair, chewed nails, growing taller by the week, and always playing something: tennis, basketball, football, my parents. Two seventh-grade accomplishments: I discovered the correct velocity to launch vegetables into the ceiling tiles in the cafeteria, and I played hard enough to keep up with the boys' basketball team, since they didn't have a girls' one. The principal knew me. And my mother.

Cynthia: Dark hair, sweet smile, rich parents—no one ever suspected her. My best friend, eager for mischief; the first to try anything dangerous.

Bobby: Big sigh. Shaggy blonde hair, blue eyes, Levi's, white t-shirt, killer smile. Completely, totally, absolutely cool. The object of my intense concentration every single day that year. (Evi-

dence: I once found a locking journal I'd kept in eighth grade. Each day for months began with the same four words: *I love Bobby Ventrella.*)

Today's Lesson: It is all about guessing and data gathering. Science rests upon the creativity of the hypothesis and the tenacity of the scientist. Hmmmmmmm.

My objective: Make Bobby notice me, love me, marry me.

Plot summary: The usual stunts bored me just ten minutes into class. Cynthia and I had covered the entire surface of our desk with alcohol and lit it on fire. We'd developed a hypothesis and done a little data gathering.

Height of flame = attention of teacher? (Answer: only if it leapt above the pegboard)

Width of flame = attention of Bobby? (Answer: no)

Height of flame + width of flame + squeals = attention of Bobby? (Answer: yes!)

Next we discovered an accidental hypothesis. If you lit the wick and dropped the glass bottle on its side, the alcohol would drip out onto the table, creating a little flaming pool on our desktop. Even better: if you rolled the bottle, the flame would burn in a snake-like path from fuse to target. Cool. Back and forth across our desk we experimented. Then we lit upon a truly brilliant idea.

The Mistake: "Hey Bobby, watch this!" I sent the flaming bottle in a diagonal trajectory bouncing along from my desk to his as Cynthia ceremoniously moved the pegboard out of the way. This didn't seem like such a bad idea at the time. My mother might have said, "Why didn't you think this through?" but I did think it through, at least in the perfect sense I could construct at 13: I

couldn't go another minute without this boy's attention.

Now freeze that bottle mid-flight and consider two unexpected, pesky variables. One: I spun it too fast trying to cover the distance between us—that marvelous combination of adrenalin and strength that comes from feverish excitement. Two: my voice was only a whispered squeak; after all, I was addressing Mr. Wonderful himself.

I had perfect aim and the bottle and the flame were moving, but Bobby hadn't heard me. By the time I barked, "Bobby!" and he looked up, it was only to see the glass bottle of burning alcohol zip across his desk and into his lap. He paused only a moment before leaping to his feet, a large wet spot unfortunately covering the front of his jeans. He flashed me a look of shock in the second before his crotch caught on fire.

There were shouts and hands reaching out to help, swatted away with remarkable quickness. There were apologies and regrettably a few giggles. There were stern warnings about the danger of fire, and the tired sigh of a teacher who couldn't imagine how this work could get any worse. And I tucked my hair behind my ears, put on my most innocent, wide-eyed look, and volunteered to stay after to clean up the classroom.

I discovered all kinds of equations that day.

Teacher who never left the front of the classroom + smart, bored girls + fire = DANGER

Boys + Girls + middle school = awkward learning
Bobby + Penny = never going to happen

Ah, another day in my middle school education.

Let me never forget how hard it was to be 13. Never.