

Everything I Know About Lean

I Learned in First Grade



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First Day of First Grade

Every day is a good day, but some are better than others. I sense this will be one of those days—a day like no other.

“Wake up, honey. It’s time to get up for your first day of school,” I say to my daughter Abbey. As long as I live, I’ll never forget the look on Abbey’s face as she rubs her eyes and smiles up at me knowing that today is the big day—her first day of first grade. Not only that, but her dad has been granted permission to go with her to school for the whole day.

Over breakfast, Abbey’s big sister, Emilee, and her mom, Corinne, coach her on the ins and outs of going to school full time. Neither Abbey nor I really listen; we smile at each other knowing that together we can get through anything. Heck, how hard can it be to go to first grade? Sometimes not knowing all the rules can be an adventure. Sometimes you just have to go with the flow and see what the day brings.

For me personally, today is a day to stop thinking about work and to spend some time with my daughter. As I watch my two daughters at the breakfast table, I can’t help but think about the last ten years. Over a decade ago, my wife and I made the momentous decision to move from Canada to the United States. I was given the opportunity to participate in a start-up of a green field Toyota Motor Manufacturing facility. As a supply chain professional, this opportunity was too good to be true. The Toyota experience is where my lean journey began and it influenced my professional and personal lives in many ways. Since then, I have not looked back as my interest in lean continues to grow.

In fact, I've been accused of taking lean principles a little too seriously and a little too far into my household. "Don't you ever stop thinking about lean?" are words that I hear many times from family members. Today is not about lean, today is a day to clear my mind of work and to spend time with Abbey.



Even though I am driving to Abbey's school, her mother and I want her to experience the school bus ride with her sister. I promise to follow the bus and to meet them both at the front door of the school. Kneeling down in front of Abbey, Corinne pins a cardboard bumblebee on her shirt that says "First Day of First Grade."

"Ah!" I say to Corinne, "I like the sign. Are those new? I don't remember Emilee having one when she started first grade."

"The school started using them last year," answers Corinne. "They make it easier for everyone in the school—students, teachers, and support staff—to tell which kids are first graders and may need extra help." She pulls something else from a bag and hands it to me. "This is for you to wear."

It is a strap to go around my neck with a card that says "Parent Visitor" on it. "What's this?" I ask.

"You need to wear that at the school," Corinne answers. "Same idea as Abbey's bumblebee—this is used to identify visiting parents."

I am about to comment on the excellent use of visual management when I hear my daughters in the front hall. “C’mon, Dad, we’ll be late!” yells Abbey, who is already halfway out the door.

Her mother and I follow Abbey out the door, and I turn to Corinne to ask what time the bus is scheduled to arrive, hoping I don’t sound like the out-of-touch father I sometimes resemble.

“Eight twenty-two,” she responds. “It’s posted in the local newspaper, remember? I showed it to you last night.” She punctuates her remark with an elbow to my ribs.

“Can they really be that precise?” I ask.

“I think they’ve studied how much time it takes based on the number of kids on the route,” says Corinne. “That is tight timing, but I guess they have to plan it that way considering all the stops and kids they have to pick up.”

We reach the bus stop along with other parents and neighborhood kids. There are several groups of students, some going to the high school, others going to the middle school, and then there are the children heading to Williams Elementary. Thinking out loud I say, “I hope Abbey and Emilee get on the right bus.”

A bright yellow school bus arrives and Abbey, excited as she is, heads for the bus door. The driver quickly notes



her bumblebee identification card and says, “Your bus is on its way, young lady. This bus is headed to Daniel County High School.”

Abbey runs back to me, students file onto the bus, and it moves on. Soon the right bus appears and the students for Williams Elementary School get on. It is reassuring to see that the identification plan prevented Abbey from getting on the wrong bus. While cameras click, our precious cargo boards the bus, and so begins Abbey’s first full day of school.

Three Lessons on Visual Management

- *Make your work and the status of that work as visual as possible*
- *Design simple and inexpensive techniques to error-proof processes*
- *Catch mistakes and errors before they turn into customer defects*

Orlo the Wise Old Owl on Visual Management

If a visitor were to walk into your workplace—be it an office or a factory floor—could they identify the steps in your work process just by looking around? If your boss came by, could he or she tell the status of the things you’re working on just by looking?

The ability to tell at a *glance* what the work is and the status of each work step is called “visual management.” Making work visible is the first step toward being able to understand and improve it.

That’s why a lean enterprise focuses on making the work place a visual environment. You need to design systems and processes filled with visual cues to let you know what the plan is, how much work is “in process” at any given moment, and what the status of that work is.



Visuals allow you to see and instantly know when you have a problem or abnormal condition. Visual management will help you to *error-proof* your processes by visually showing when something is not right. This is known by the Japanese term **poka yoke** (pronounced POH-ka YO-keh). Ideally, poka yoke is a simple and inexpensive system or visual cue that will highlight errors before or as they happen.

For example, in Abbey's case, a simple card provided the bus driver with a visual cue that she was about to get on the wrong bus. Because of the poka yoke, that error was prevented and Abbey got on the right bus.

Creating a situation where errors are prevented (or immediately caught before being passed on) is known in the lean environment as **quality at the source**. This is in sharp contrast to old-fashioned "quality control" or "quality assurance" measures that focus on catching errors *after* they are produced and passed on to the next step in the process.

Quality at the source teaches us that there is a big difference between a mistake and a defect. Mistakes are just mistakes. A defect is when a mistake is handed on to the next process or to the end customer. We know that if human beings are involved, mistakes will certainly happen. However, if we use visual cues to help error-proof our processes, we can detect *potential mistakes* before they occur and prevent *actual mistakes* from being passed on to the customer.