



SAFETY LEADERSHIP

Lateral Thinking for Safety

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[Terry Mathis](#) | Aug 07, 2019

In our attempts to improve safety, we have moved toward trying to understand the precursors of accidental injuries. This exploration has led us to think deeper in causal chains as we attempt to do in root-cause analysis, and more broadly as we do in Ishikawa diagramming. We have long relied on lagging indicators and are now searching for leading indicators. All these and more are attempts

to make safety efforts proactive rather than reactive. We try to get ahead of the curve and not rely on failure to improve. But are we looking in the right direction?

Let's face the facts: Many of us are too busy with our traditional daily routines to truly innovate safety, and the rest of us are waiting for the safety muse to come enlighten us. At the root of our problem is the fact that most of us are vertical thinkers. We move from one logical step to the next, towards what we hope will be the correct solution to our problems. We were not educated to be creative, but to be logical. It is often this logical arrogance that makes creative thinking unlikely. But there is another kind of logic that has proven to produce breakthrough thinking in many instances—lateral thinking.

The recent debunking of Heinrich's postulates is a good example of how we trapped ourselves in the cause-and-effect squirrel cage. Heinrich was looking for what caused accidental injuries and he took the word of many untrained or undertrained supervisors who performed accident investigations and assigned causation and corrective actions. He decided most accidents were caused by human error and did not look beyond or beside that. When cause=human error, solution=fix humans. Underlying this was another assumption that what caused minor accidents also caused serious accidents and fatalities, and that fixing human behavior would fix both. Decades later, we can see this is not true.

But Heinrich was not just a victim of poor data; he was a victim of simplistic and vertical thinking. Like Heinrich, we want to be right in our thinking about what causes accidents. Vertical thinking is selective; lateral thinking is generative. Vertical thinking assumes there is only one pathway to the desired destination and that that path leads to root cause. Lateral thinking begins with the end in mind. The goal of safety should not be simply to identify and analyze the causes of accidents. The goal should be to prevent them. However, if you are locked into vertical thinking, it is logical to assume the best prevention is addressing the root cause. This mindset keeps you on the one vertical path.

Lateral thinking is a way to move across vertical paths to find alternatives. It is really more intuitive than you might expect. A great example of lateral thinking is a joke. Many jokes simply take you down a line of thinking and suddenly move laterally across to another

one that, ironically, makes a funny kind of logic. The traditional line of thinking is broken and replaced by an alternate, and steps leading up to the junction point may have been skipped in the alternate line, i.e., Q: Why is basketball such a messy sport? A: Because you dribble on the floor! You jump from one linear thinking about bouncing a ball to another.

How does this apply to safety? Lateral thinking has the potential to get us out of the vertical search for root cause and into the broad world of other potential solutions. The critical element is getting one's thinking to make a 45-degree turn and to look further than the next step. A warehouse in the Rocky Mountains had a problem with snow melting and refreezing in front of the main door. It resulted in people and forklifts ice skating, causing several accidents that were luckily not too severe. The problem-solving team discussed several strategies, all designed to eliminate either the ice or the water flow that fed it.

When challenged to think outside the box, they started to re-define the problem. Ice would be ok if it were not in front of the door. So someone spoke out and asked which was easier to move, the ice or the door? The ultimate solution was to close off the old door and make a new door 30 feet down the face of the building where there was no melt-off or ice. Interestingly, most innovations come from lateral versus vertical thinking. Vertical produces Kaizen, lateral produces innovation.

In my corporate career, I taught lateral thinking to our engineers and charged them to innovatively solve some of our most challenging safety problems. At first, it was difficult for them to move to a step that did not logically follow the last. The analogy that resonated with them best was to compare the process to building a bridge. Each piece of the bridge did not have to be self-supporting but the whole bridge ultimately did. Thinking about how to build a bridge from the middle out never materialized into practical approaches, but it created a multitude of original thoughts about alternate paths to our traditional model.

Safety has become stagnant. We make little gains and discover better ways to do what we have always done, but true innovation is not the goal of most or reality of almost any. Even our technologies, which are blossoming now, largely enhance existing performance, and only a few are radical deviations from standard practice.

We can do better. Deming challenged us that if we cannot describe what we are doing in a process, that we don't know what we are doing. Edward DeBono, who developed lateral thinking and so many more methods for creative thinking, never really got around to directly addressing workplace safety. Maybe we can take his methodology there ourselves and take our efforts to a new level.