

# Effective Leadership in Times of Change: Understanding and Leveraging the Brain's Response

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**T**he transportation industry is changing briskly as autonomous vehicles, connected vehicles, big data, bike/car sharing, and more force rethinking of business models, investments, and workforce skills. Additionally, the workforce itself is changing as Millennials occupy more jobs. And, change is close to home as ITE welcomes a new Executive Director.

Whether it's in ITE or your organization, change can be tricky. But why is change so hard, and what can a leader do to be effective during times of change? Advances in neuroscience provide clues to why the brain struggles with change and what strategies will ease the transformation.

First, let's understand brain basics behind change. There is a part of the brain, the anterior cingulate cortex (ACC), which is like a 911 call center for your brain. The ACC is constantly alert for errors. "Errors" are anything that does not sync up with either your past experience or your expectations. Like a 911 center, when an error is detected, the ACC calls in other brain functions to respond. In this case, it consults the amygdala. The amygdala decides if the error is a threat to your physical or emotional well-being. Your amygdala is hyper-sensitive to threats. A boss's tone of voice, or an expression on a colleagues' face, or even a sharp remark may register as a threat. If so, the amygdala initiates a reaction. You feel uncomfortable, stressed, worried, or fearful.<sup>1</sup>

Here are three other reasons change is difficult from your brain's perspective:

**Your brain craves certainty.** The brain uses your memories and experiences to make predictions. Errors are anything that do not fit the predicted pattern.<sup>2</sup> Whether change is organizational, procedural, attitudinal, or when new roles and responsibilities are expected,

the ACC interprets the difference between the old and new way as uncertainty, and the amygdala may view that uncertainty as a threat.

**Fear is easily remembered.** If the amygdala views change as a threat (to your job security, self-esteem, power, respect, or position), it generates a negative emotional response. (The amygdala reacts whether the threat is real or imagined.) Research shows that an emotional reaction, particularly a negative one, is more easily remembered.<sup>3</sup> Change, poorly handled, will stick in employees' minds.

**Change is exhausting.** Intellectually you understand that you must adapt to change so you consciously make an effort to do so. Inside your brain, that effort means the cognitive part of the brain strives to convince the amygdala. "It's going to be fine" you rationalize. This mental effort takes energy. As you (and your brain) tire, it is harder to control feelings and reactivity. A workplace undergoing change is more likely to experience edginess, short fuses, and in-fighting.

Since the brain is programmed to work against change, how does a leader effectively manage and lead a team through change?

- 1. Be realistic.** Every person, whether they realize it or not, has expectations derived from learned experience of past events and the present context.<sup>4</sup> Memory from the old ways creates associated expectations. An unmet expectation registers as an error in the brain and launches a negative narrative: *I'm not good enough. The boss doesn't like me. I can't do this job.*



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Once launched, the negative narrative is hard to stop and can torpedo confidence and future performance. In the fervor for change, a leader can over-estimate what can be accomplished. But ambitious new expectations may set people up to fail. While positioning people for failure through unrealistic expectations is never a good idea, the failure is particularly harmful if the leader wishes to foster new behaviors. It is better to have realistic expectations and create a track record of success.

2. **Set and reward new goals.** The brain reacts negatively to unmet expectations, but it reacts positively to an exciting new goal. The act of setting a goal releases dopamine—the feel-good neurotransmitter.<sup>5</sup> Achieving a goal (or a step toward the goal) and being rewarded for it also creates positive feelings (because of the dopamine) and grows confidence. A leader can help over-write old patterns by setting and rewarding goals consistently over time.
3. **Provide choices.** In an environment where procedures change, new approaches oust old ones, and expectations shift; staff may feel a loss of control. Unfortunately, research shows that loss of the prefrontal function (the thinking part of the brain) occurs when you feel out of control—you simply do not think as well. But, even the illusion of control preserves cognitive functions.<sup>6</sup> A wise leader gives employees choices and options throughout the change process. Staff can be engaged to help set new goals and develop new procedures. Choice provides a sense of control that can enable everyone to think at their best.
4. **Acknowledge the stress of change.** Change, because it departs from the past, is likely to create stress, which can escalate to STRESS. No matter the intensity, a surprising amount of energy is needed to suppress it: *There's really nothing to worry about. We needed this change anyway. I'll come through this just fine.* Yet research shows that suppression doesn't work. In fact, it saps the resources needed for cognitive processing and memory.<sup>7</sup> What is the alternative? Research also demonstrates that acknowledging emotional reactions – stress, dissatisfaction, concern, discomfort—calms the amygdala.<sup>8</sup> As a leader, pay attention to how change impacts staff emotionally. If someone seems worried, acknowledge it out loud. “It seems like something is bugging you. Can we talk about it?” Simple acknowledgment of feelings calms the brain so that it can move on to productive thinking.
5. **Foster a pleasant workplace.** Research shows that mood is tied to performance. People with good moods perform better, set higher goals, and persist at them.<sup>9</sup> Conversely, misperception brought on by worry, rumination, exaggeration, and imagination activate the amygdala. If an employee worries (appropriately so or not) about change, his or her threat response is launched.<sup>10</sup> Mark Twain observed, “I have experienced many terrible things in my life some of which actually happened.” Research also consistently shows that the amygdala responds

more strongly to fearful or untrustworthy facial expressions than pleasant ones. Body language, tone of voice, and the manner of a leader can create a sense of calm during times of change.<sup>11</sup> Make room for downtime, have frequent reward celebrations, say “thank you,” and smile.

Change, although challenging, is part of our future in transportation. By understanding how brain processes change, leaders and professionals at all levels may tap into this insight to make the journey productive and rewarding. And, everyone can smile along the way. **itej**

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