



## Emotionally Intelligent Teaching to Empower and Engage: Insights From Neuroscience

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The following article on emotionally intelligent teaching stems from the happy wedding of my 40 years of teaching and leading experience with current research on motivation, learning, and empowerment. My teaching and leadership roles as a professor, head college basketball coach, and executive-level college administrator have taught me that I must first and foremost positively connect with the students I am hoping to mentor and empower to reach their greatest potential.

Since a positive connection is a prerequisite to effective learning, it is helpful to keep in mind that neuroscience is clear on the fundamental orientation of human beings. We process, filter, and understand the world through our emotions first. Then we develop our understanding cognitively, ascribe meaning, and respond behaviorally. As instructors, our ability to appreciate the impact of emotions on cognition, motivation, persistence, resilience, and inclusion is essential to our practice.

We have a profound effect on the emotional states of the students we engage with each day. Consider this: How we treat people affects their emotional state; their emotional state impacts their brain chemistry; and their brain chemistry impacts their ability to think clearly, solve problems, persist, trust, feel safe, feel confident, and be their best, most generous selves. I believe education is about empowering others, and empowering others requires the ability to cultivate affirming relationships. But how can instructors apply this knowledge in the classroom? By developing the skills to build relationships that put students in a positive emotional state that supports their most productive contributions and generous engagement.

When we look at someone's emotional state, the primary, most primitive from an evolutionary perspective, and least nuanced response is the stress, fear, or threat response. By any name, it is well designed to maximize our ability to survive by launching an immediate response to perceived danger (response suggests reaction, not thought). Our adrenaline and cortisol levels soar; our heart rate climbs; our blood pressure rises; our respiration increases; and we are poised to fight, flee, or freeze.

The chemical cousins of the stress response maximize our ability to quickly and physically react by hijacking the cognition that would otherwise come from the activation of the prefrontal cortex. Put another way, the stress response makes it difficult for students to be thoughtful as opposed to reactive. It is vital that we appreciate the fact that when human beings do not feel safe, secure, included, respected, cared about, or affirmed, they are likely to be in some degree of stress. This is not a moral statement about a person. All of us, when feeling threatened and unsafe, are subject to this response and the behavioral offspring it produces.

For instructors, this insight creates an obvious imperative: To build relationships with those we are leading that ameliorate the stress response and create feelings of connection, safety, and caring. In the face of a global pandemic, the reckoning around social justice and systemic racism, and the myriad forms "othering" can take, this insight becomes even more critical. Possessing the emotional intelligence to nurture relationships that mitigate the stress response is the prerequisite to creating a sense of inclusion, connection, and equity within the communities we are privileged to teach.

The great news is that we have an antidote to the damaging effects of the stress response and its chemical cousins, adrenaline and cortisol. Our secret sauce is to ignite the reward pathway in the brains of the people we are teaching. The reward pathway is connected to areas of the brain that control behavior and memory. Whenever human beings engage in behavior that dramatically improves their chances of survival, the reward pathway is ignited. The brain begins to make connections between the critical, survival-enhancing activity and the release of a set of chemical hormones that are extremely pleasurable, thus ensuring that we will repeat the behavior.

We have most likely heard of these chemical cousins, sometimes dubbed the "happy hormones," that are released when we ignite the reward pathway in our brains, and we have certainly basked in the warmth of their uplifting effect. Dopamine creates a sense of joy, excitement, and pleasure. It plays a role in motivation and is your brain's signal that a reward is at hand, meeting a basic need (e.g., chocolate). Serotonin stabilizes our mood, feelings of well-being, and happiness (e.g., a great night's sleep). Oxytocin promotes

bonding, generosity, and trust (e.g., physical affection). It is a neurotransmitter that helps regulate stress responses and calms the nervous system. Endorphins trigger a positive feeling in the body, similar to what morphine does (e.g., exercise and laughter).

What's most remarkable about igniting the brain's reward pathway and flooding our systems with these happy hormones is that it dramatically enhances our ability to think clearly; solve problems; be creative; persist in the face of challenge; and behave cooperatively, generously, and magnanimously. Our sense of efficacy, confidence, and motivation improves. In short, we are operating far closer to our full potential and the learning centers of our brain are opened instead of being hijacked.

A critical question for instructors is, "What activities and behaviors ignite the brain's reward pathway and engender the release of stress-inhibiting happy hormones?" These kinds of activities must be built into a consistent, everyday teaching practice. They cannot be occasional practices that we pull out when things aren't going well, or they will rightly be perceived by students as disingenuous.

There are three major conditions that are so critical to human survival and well-being that the brain's reward pathway is ignited to reinforce the behaviors that create these conditions. Our goal is to develop skills that help create these conditions within our learning environments.

### **Caring Relationships**

When someone is in the presence of another person who they perceive as caring about them, respecting them, wanting to help them, and seeing them as important, that person feels safe and valued. The happy hormones are released, and the individual is empowered to be their best self. What if every day in our teaching practice we prioritized building trust and leading with empathy, and each interaction – be it text, email, Zoom, or face-to-face – communicated our desire to be helpful and supportive? Unbelievable as it sounds, our very presence can ameliorate the stress response and ignite the reward pathway. We can alter the brain chemistry of the people we teach to their great benefit.

### **Sense of Belonging**

The brain's reward pathway is ignited when people feel a powerful sense of belonging, acceptance, and inclusion within a group. Our very survival and success evolutionarily can be traced back to our social and communal roots. We thrived physiologically, emotionally, and spiritually within the context of a caring group that was invested in our success and wellbeing, and in return, we were invested in the success and wellbeing of the group. This powerful symbiotic synergy exponentially improves our chances of survival and thereby ignites the reward pathway. What if through our teaching practice we developed

learning environments designed to create a sense of belonging, acceptance, and interdependence? What if, by design, the work our students did became opportunities for connection and cooperation?

### **Pattern-Finding and Problem-Solving**

The third conditions that trigger the ignition of the reward pathway are pattern-finding and problem-solving. When people are in safe, caring relationships and part of supportive teams, they love to solve problems that move them and their group forward. The pattern-finding behavior is so primal that it has an addictive element that can be seen in many popular video games. The key for instructors is to deliver manageable, solvable challenges, along with the resources, training, and emotional support students need to succeed. No one wants to play a video game where there is no sense of progress or success.

My teaching, coaching, and leadership experience has reaffirmed these principles of neuroscience. I believe the emotional state and morale of the people we teach, lead, and mentor is the single greatest factor in helping them reach their fullest potential individually and as team members. My goal is to help educators develop practical skills that enable them to use these principles of neuroscience in everyday teaching.

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To learn more about this topic, check out David's workshop offered through NISOD: "Emotional Intelligence, Student Efficacy, and the Growth Mindset." Please email [ed@nisod.org](mailto:ed@nisod.org) if you would like to bring this workshop to your campus.