Digging Into Dissonance: Distress, Eustress, and the Student Experience

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Abstract:

Teachers often strive to create an ideal state of dissonance in their classrooms; too much stress is harmful as is too little engagement. This paper will discuss not only the crucial role of dissonance in a 21st century environment, but also the difference between positive and negative dissonance. Building on neurological and psychological foundations of learning, it is shown that through an understanding of the difference between Selye’s constructs of “eustress” and “distress”, teachers will be more adequately set up to manage and manipulate emotional and intellectual dissonance in the classroom. This ability can aid in student engagement, student success, academic rigor, and classroom dynamics. Ultimately, the ability to deal with dissonance will be helpful in students’ ability to navigate 21st century realities, and their capacity to be resilient. Keywords: Dissonance; student engagement; eustress; distress; stress; resilience; 21st century education.

Introduction

We are living in a time of dissonance. One perusal of the media maelstrom inspired by any given issue on any given day is enough to remind us of the fact that disequilibrium is among the only constants in our 21st century environment. Uncertainty, shifting political ‘truths’, competing scientific ‘facts’, a plurality of voices raising questions about the legitimacy of our nations, cultures of fear replacing cultures of freedom; these are the nebulous realities of our world. Helping students deal with this disequilibrium must be seen as tantamount to a successful pedagogical practice; indeed, as educators, we should not only help them deal with it, but can actually replicate dissonance in our classrooms and allow students to dig in to discomfort. We must explore questions such as, how can dissonance be used to increase student learning and student engagement? How can
discomfort lead to greater self-awareness? Should stress be used as a tool for learning, and if so, how much and when? Placed in context, bringing dissonance into pedagogical practice becomes in some ways an ethical imperative. Educational research has not ignored the power of dissonance in critical thinking, though it is necessary to also bear in mind the simultaneous perils and benefits to stress and dissonance in education.

**The Importance of Dissonance**

Today’s classroom must encourage students to think beyond their comfort zones, to problematize their own paradigms and the world around them. They must be placed in situations where there may be no clear outcome, or that may challenge them. That said, this can produce discomfort, dissonance, and even distress. To understand the nature, role, and power of dissonance, it is first necessary to peruse some of the basic neurology and psychology of learning.

“We learn by attaching the new to the old. This modifies the old, sometimes beyond recognition, but we are always building on what has gone before. Sometimes these old networks are so powerful that they become a barrier to new knowledge. Thus, we often carry childhood beliefs with us for a lifetime, even when we know that they are technically incorrect.” (Zull, 2002)

Zull (2002, 2004) has done some influential work around the brain’s role in effective teaching and learning. He interestingly states that “learning should feel good” (p. 68, 2004); but what happens when it does not? Is that learning invalidated? Cognitive dissonance theory is helpful in this regard. Learning, as a process of attaching the old to the new, necessarily entails some degree of change. Inspired by Festinger (1957), Walton (2011) states that “cognitive dissonance [is] an uncomfortable psychological state resulting from
perceived discrepancies or contradictions between related cognitions, or cognitions and behaviors” (p.775). Zull (2002) eludes to the fact that maturation often involves an amending, or sometimes replacement, of old worldviews for new ones. School so often brings these new and old paradigms into confrontation, and it does not always feel “good”.

The Spectrum of Stress

Stress can be “physical, mental, or social challenges” that overwhelm, or could potentially overwhelm, the body’s systems (Gookin, 2011, p.23). However, we must also note that, as proposed by Selye (1976), there is also a spectrum of stress that runs from distress- ‘bad’ or excessive anxiety- to eustress- ‘good’ or productive tension. This latter tension is productive, and can spark creativity, hope, and new solutions to problems; just the kind of skills twenty-first century students need to thrive. It is possible to see this spectrum as also existing in the states of cognitive dissonance; there is a point at which dissonance becomes counterproductive to learning. As a high school Social Studies teacher at a privileged independent school outside of Calgary, I have to say that I have witnessed both distress and eustress in my students in the classroom. The moments of eustress certainly remind me why I do my job, and I am intent on reducing or negating distress. One interesting place I have seen this come out, for example, is on challenging their privilege. The theme for Grade 10 Social Studies, for example, is globalization; while this might seem banal, it is nearly impossible to teach the course without reference to global inequality, the creation and maintenance of privilege, and the looming divide between the haves and have-nots.

It is a teacher’s duty to have students explore alternative worldviews; this process can also result in a state of anger and frustration. “Why should we even believe in human
rights? This is just something lefties have invented to get hand-outs from the government," one student exclaimed in righteous protest to the aforementioned curricular content; he was, in fact, visibly agitated. Walton (2011) notes that "students that have traditionally benefited from privileged cultural arrangements are often the ones least likely positioned to problematize, or for that matter, recognize their participation within inherently oppressive social systems" (p. 774). He goes on to cite the symptoms of this resistance as "emotional outbursts, denial of responsibility, absenteeism, teacher criticism, personal frustration, insensitivity, and defensiveness" (p. 770). Interestingly, these are consonant with some common neurological responses to environmental stressors. If my students are put into a state of irritation or aggression to these ideas, it is difficult to have them fully explore the topics presented and to come to expanded visions of the world around them or themselves. Thus, it is important that we as teachers understand how to manage distress and eustress, and come to a place of productive dissonance in the classroom.

**Distress and Eustress in the Classroom**

Although a teacher must explore alternative perspectives and allow for a plurality of voices into the classroom, it is possible for intellectual dissonance to turn into emotional stress, as alluded to above. Neurologist Bruce Perry states:

"The fear response is deeply ingrained in the human brain. Under threat of any kind--hunger, thirst, pain, shame, confusion, or too much, too new, or too fast--we respond in ways to keep us safe...Fear kills curiosity and inhibits exploration.”

(Perry, 2000, p. 35)

Stress responses are these “ways to keep us safe”: we can see the fight, flight, or freeze instincts in our classrooms on a daily basis, to differing degrees. The reaction
may stem from the subject matter, the teacher, a peer group, or a bad mark on a test. Whether the class has students who are labeled “at-risk” or not, the importance of reducing stressors cannot be underestimated, for both the student’s health and his/her ability to learn. Symptoms to watch out for when a student’s stress level may be too high include:

- Irritability
- Inability to concentrate
- Poor judgment
- Constant worrying
- Moodiness
- Panic, anxiety
- Acting out
- Nervous habits
- Uncharacteristically non-verbal
- Withdrawal from others and activity

Distress is not the only reaction to novelty, however. “Fortunately,” says Perry (2000), “there is another deeply ingrained feature of the human brain--curiosity. We are fascinated by and drawn to the unknown--to new things. Humans are explorers…When a child feels safe, curiosity lives.” (p.36) It is essential, thus, that the teacher facilitate the creation of eustress in children. Eustress, according to Estrellas (1996), “helps to facilitate coping abilities and efforts, [may] ease social interaction” (p.7) and can produce “feelings of mastery and control” (p. 7). Estrellas (1996) works from a wilderness education context, though she posits some conditions that could be helpful in our context as well. In order for eustress to be produced from a challenge, she puts forth nine conditions that must be present. Among them are self-awareness on the behalf of the student, the teacher’s valuing of the student’s subjective experience, and the student’s valuing of the activity and the process. Indeed, “effective education requires a balance between cognitive dissonance
and emotional safety” (Houser, 1996, p. 294). Some signs that a state of eustress has been attained might be:

- Intellectual engagement
- Curiosity and questioning
- Self-regulation
- Enjoyment
- Attentiveness
- Healthy collaboration with peers
- Consistent moods
- Openness to feedback
- Caring for others
- Receptivity to alternate viewpoints

**The Stress Barometer**

Good teachers will always have one hand on the ‘stress barometer’ of the classroom, protecting against distress. Is anyone anxious? Disregulated? Frustrated? Agitated? Good teachers should also be looking simultaneously to promote “eustress”, and/or healthy cognitive dissonance. Whether the class is working on emotional regulation and healthy behavior and interactions, a difficult math problem, or discussing a controversial political topic, the teacher must remain attentive to stress levels, looking for both distress and eustress. As Perry (2000) notes, “the most important learning "tool" is the teacher” (p.36). The teacher’s ability to manipulate stress levels and dissonance is key in this regard. Too little stress or dissonance and the students’ sense of curiosity may not be piqued; indeed, as we learned earlier, learning is about attaching the new to the old. Without novelty and change, there would be no learning, and no possibility of a eustress-driven learning situation that creates feelings of mastery and growth. That said, too much novelty or dissonance, and some students may fall into a state of distress or resistance. Some techniques that can help adjust the “stress barometer” in either way could be:

- The environment: Structure and routine
• Group sizes (small vs. large/ student created vs. teacher created)
• Peer groupings (who is where in the classroom)
• Question types and frequency (essential vs. closed-ended/ complex vs. simple)
• Assessment style and type (formative/ summative)
• Teacher involvement (hands on/ hands off)
• Discussion style (teacher-led/ small group/ large group)
• Opportunities for student engagement (discussion/ online forum/ journaling/ think-pair-share/ popcorn-style/ seminar)

An ultimate goal of working with dissonance is to increase a student’s resilience. Resilience, as “one’s ability to respond and adapt to challenging, adverse, or stressful circumstances” (Wagnild and Young, 1993), is such a crucial aptitude for young people in their academic, social, or career pursuits; anything we do in the classroom to increase it is imperative, for the twenty-first century and beyond. The creation of eustress is not useful for its own sake; the safety, growth, and resilience of our students must be seen as the reason we dig in to dissonance.

References


