TRANSFORMATIVE LEARNING

Helping Students Fail Better – Part 1

The psychological research conducted for decades by Carol Dweck and those who work with her concepts in their own research has been informative for college faculty in a number of ways. Dweck posits that students can hold either of two views of intelligence — that it is relatively fixed or that it is malleable. Dweck refers to these as the "fixed mindset" and the "growth mindset."

(See Dweck's *Mindset: The New Psychology of Success – How We Can Learn to Fulfill Our Potential* [2007] for an accessible overview.)

Now, researchers Moser, Schroder, Heeter, Moran, and Lee (2011) have found neurophysiological correlates to substantiate Dweck's work. (A good overview is Lehrer, 2011). For faculty who might have been waiting for even more than the convincing results Dweck and her collaborators have produced in their research (e.g., Mueller & Dweck, 1988), this new finding is a quite compelling reason to accept Dweck's thesis as we work with students.

Perhaps the biggest transformative learning event in a student's life that a college instructor can prompt is the transformation from a fixed mindset to a growth mindset.

Do you have students who want only to know what questions are going to be on the test as the singular preparation for said test? Do you have students hesitant to venture a public declaration in class about something under discussion because they fear that their assertion will be wrong?

These are two examples of how a fixed mindset manifests itself.

A key contributing factor to, "Just tell us what's going to be on the test!" is that doing so helps students operate within their fixed mindset comfort zones. If they know exactly what's going to be asked on the test, and then they study exactly that material, the chances are significantly minimized that they will discover they are "dumb about _____." (Fill in the blank with the topics that will be covered on the test.)

For fixed mindset students, it's *very* important not to discover they are dumb because being dumb about something is immutable — they will always be dumb about that thing no matter how much they work to be smart about it.

(No, this is not logical, but it is the fallacy under which fixed mindset students operate. Hence, it's critically important never to find out you're dumb.)

Similarly, If a fixed mindset student ventures a conjecture about something as part of class discussion, and her conjecture turns out to be shot down by other students after a spirited debate, what you as the teacher may have surmised to be a positive leaning

experience — and it *should* have been exactly that — might have been for the student proposing the rejected thesis a confirmation that she should never again test whether she's right.

The stakes are too high. She might discover she's wrong.

Now, here's the thing: Dweck is not proposing that faculty mollycoddle students in an effort to prevent the poor darlings from ever discovering they're wrong. No! Her approach says that the best thing to do for students who don't want to risk failure because they possess a fixed mindset is help them change that mindset to one in which they accept that their own effortful diligence will result in their understanding and learning the material.

And here's the thing about the thing: "Effortful diligence" is another way of saying, "hard work." But please understand that for a student who believes in her own inability to learn because she's "dumb in _____," even if she knows she can work hard, she still won't be motivated to do that work.

This is the transformative learning opportunity of magnificent proportions for a college instructor. It's almost a meta-level transformation concerning the rest of the students' college careers as well as the rest of their lives. If you are able to move students from a fixed mindset to a growth mindset, you change their perception of the possible.

In the growth mindset, students accept as truth the fact that they *can* learn the material, even if it's difficult, by expending effort to accomplish the learning. These students believe that, while learning some things may take more work than others, learning whatever needs to be learned is ultimately possible.

Contrast that viewpoint with a fixed mindset belief which will prevent the expenditure of energy to learn anything which at first blush is confusing or unclear.

Dweck and others have found ways to trigger the acceptance of either a fixed or a growth mindset. As college faculty, we obviously want to inculcate the latter. Modeling and self-revelation are two powerful means of doing so, and we'll discuss those next month.

But it is exciting to consider that, no matter what your discipline, you can help change a student's belief from "doomed to failure" as a learner to "able to learn anything.

Dweck, C. S. (2007). *Mindset: The new psychology of success – How we can learn to fulfill our potential*. New York: Ballantine.

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Moser, J. S., Schroder, H. S., Heeter, C., Moran, T. P., & Lee, Yu-Hao. (2011). Mind your errors: Evidence for a neural mechanism linking growth mind-set to adaptive posterror adjustments. *Psychological Science, 22*(12), 1484-1489. Available: http://cpl.psy.msu.edu/wp-content/uploads/2011/12/Moser_Schroder_Moran_et-al_Mind-your-errors-2011.pdf

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