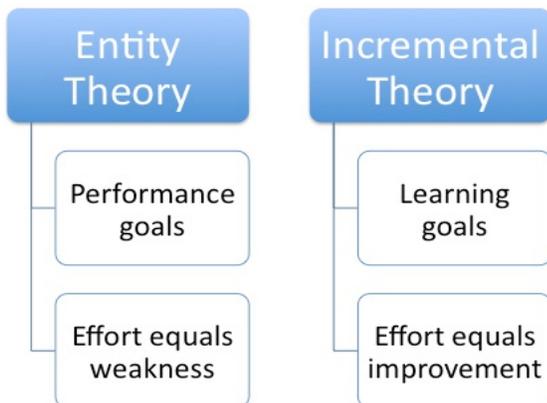




## Teaching InSITEs: Mastery

According to the authors of *How Learning Works*, “to develop mastery, students must acquire component skills, practice integrating them, and know when to apply what they have learned “ (Ambrose, et. al, pg. 95). While that is true, if we look beyond that principle, we can also take into account our beliefs about ourselves to see how we set boundaries on our accomplishments. In his book, *Drive*, Daniel Pink delves into mastery through the lens of three laws.

The first law, *mastery is a mindset*, is explained through the seminal work of psychologist Carol Dweck. According to Dweck, some people believe that intelligence is an entity (it is fixed) and that we cannot increase it while others believe intelligence may vary from person to person and with effort can be increased (it can grow). These two opposing theories suggest that the road to mastery is followed based on our mindsets.



People with a fixed mindset (entity theory) think that hard work means you aren't very good and are bound to choose easy tasks. Thus mastery is next to impossible.

People with a growth mindset (incremental theory) believe that ability is malleable and will work harder to get better. They realize that setbacks are part of the learning process and for them, mastery is a mindset.

*Mastery is a pain* is the second law. Intense practice requires more than diligence for it often requires difficult, painful, and consuming effort. Getting to mastery requires “grit” and it is that “grittiness” rather than IQ that is a predictor of college grades. Dweck enlightens why we pursue when the going gets tough, “Effort is one of the things that gives meaning to life. Effort means you care about something, that something is important to you and you are willing to work for it.”

The final law, *mastery is asymptote*, is perhaps the most confounding one. You have to accept that no matter what you do, you will get close, but you won't ever fully realize mastery. As Pink aptly describes, “The mastery asymptote is a source of frustration. Why reach for something you can never fully attain? But it's also a source of allure. Why not reach for it? The joy is in the pursuit more than the realization.”

What can you, as an educator, take from these three laws as you point your students on the road to mastery? Although Pink's message is mostly directed at those in business, we, too, can listen to it. He advocates that the path to mastery is marked by purpose, “...our deep-seated desire to direct our own lives, to extend and expand our abilities, and to make a contribution.” Given that mastery is more than just skills and practice, we need to be aware of the

mental approaches that can contribute or derail our students as they strive to master course content. By helping our students to adopt a mindset that attributes learning to effort, challenge, and the knowledge that perfection is illusive, they will not only be more successful in our classes, but they will be far better equipped for lifelong learning.

Another consideration is that students are not locked into either a mastery or performance orientation. As pointed out by Lang (2013) , “the design of the learning enviromnet can nudge students toward mastery or performance orientations.” By giving your students control and choices, they are prone to work towards mastery. When students see classwork, assignments, and assessments as opportunities to demonstrate learning and to make corrections, they are more likely to adopt a mastery mindset. Also, if they see evidence of success while learning, it will increase their perserverance. Keep in mind that the instructional decisions you make have influence over the students’ mindsets.

**What if...?** If you think it is too much to ask for us to teach students not only the subject, but how to be motivated and persistent. For some inspiration watch Carol Dweck briefly describe a growth mindset at: <http://www.youtube.com/watch?v=ICILzbB1Obg> Or if you want to hear Daniel Pink’s perspective go to: <http://www.youtube.com/watch?v=rrkrvAUbU9Y>

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