

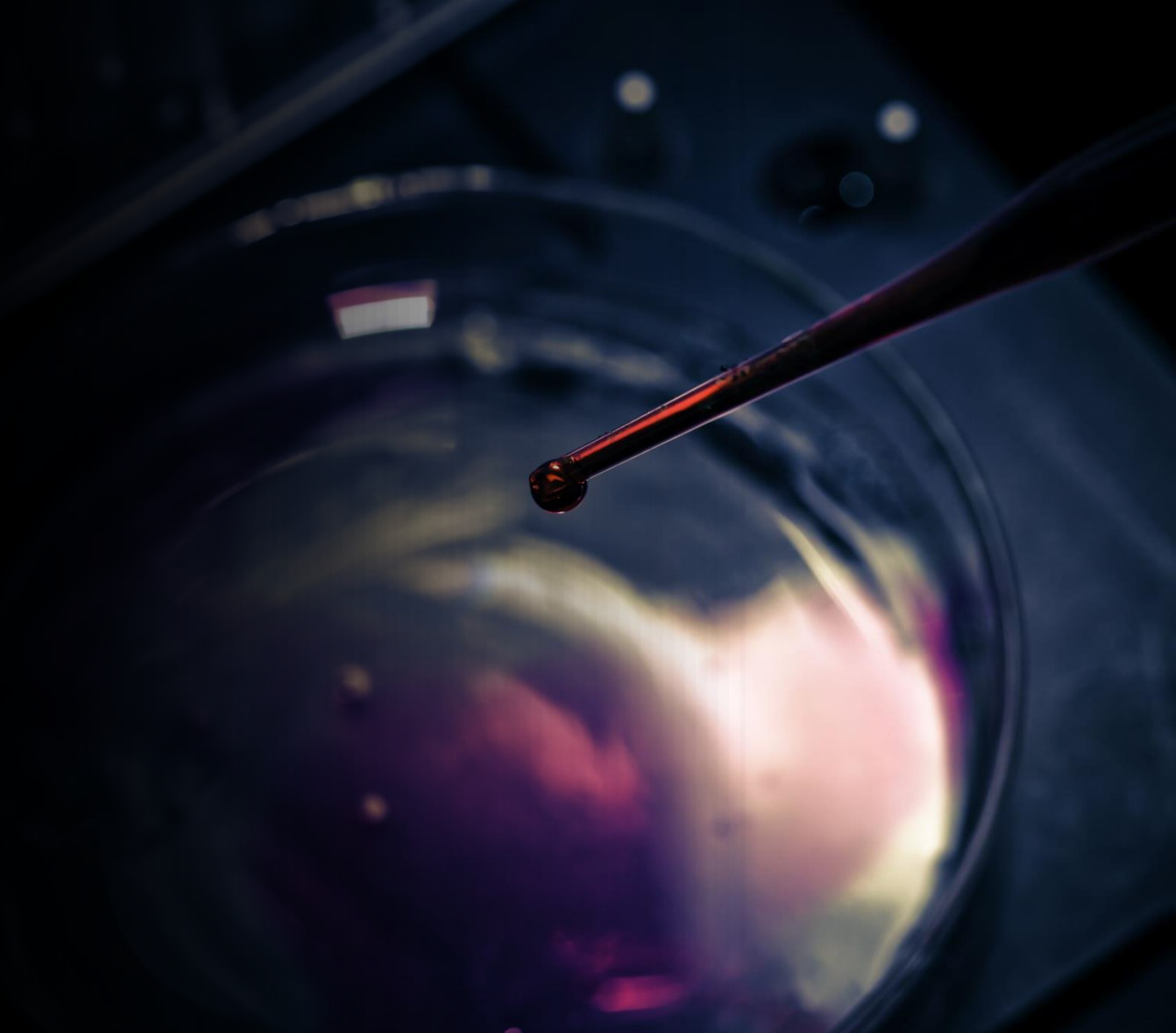



# Assisting the ~~Struggling~~ ~~Learner-Learner~~ who Struggles

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January 9<sup>th</sup>, 2025  
University of Colorado



“What is the  
Secret Sauce?”





*“...remediation is a high-touch enterprise...take[s] time and cannot be scaled”*

- Gurpreet Dhaliwal

Remediation in  
Medical Education, 2023



# Overview -- A call for reflection



1) Consider educational psychology research and its applications

2) Reflect on on how to change your own behavior and what it means for those you teach

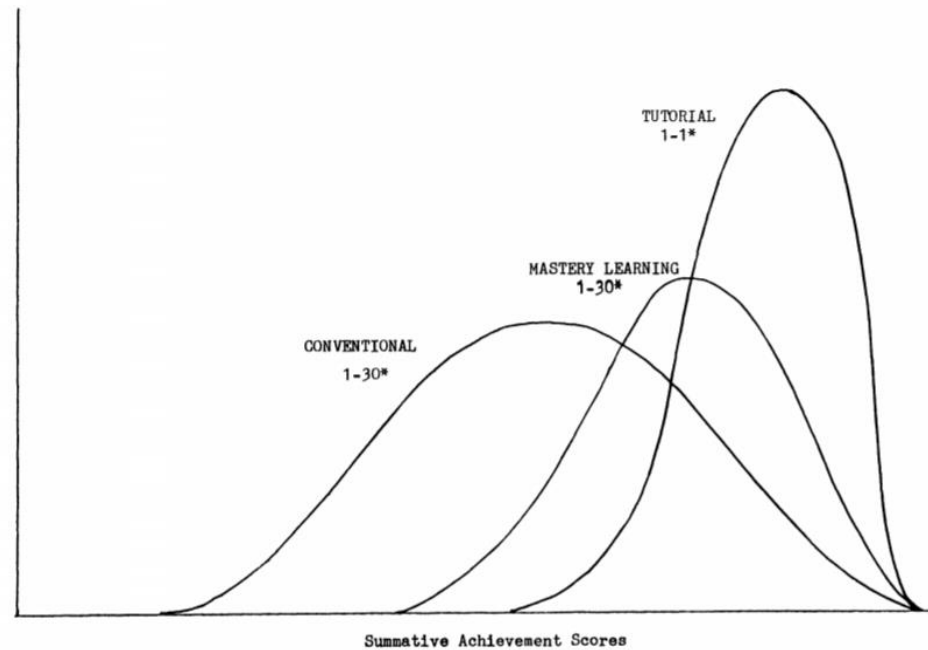
# Nature vs. Nurture

- Rosenthal experiment (1968)
- Harvard Test of Inflected Acquisition
- *“This child has unusual potential for individual growth”*
- Results:
  - 2-3x greater increase in IQ over controls
  - curious, happier, better adjusted, more likely to achieve success

Teacher Observation: Warmth, Input,  
Opportunity, Feedback

# Bloom's 2 sigma problem (Bloom 1984)

FIGURE 1. Achievement distribution for students under conventional, mastery learning, and tutorial instruction.

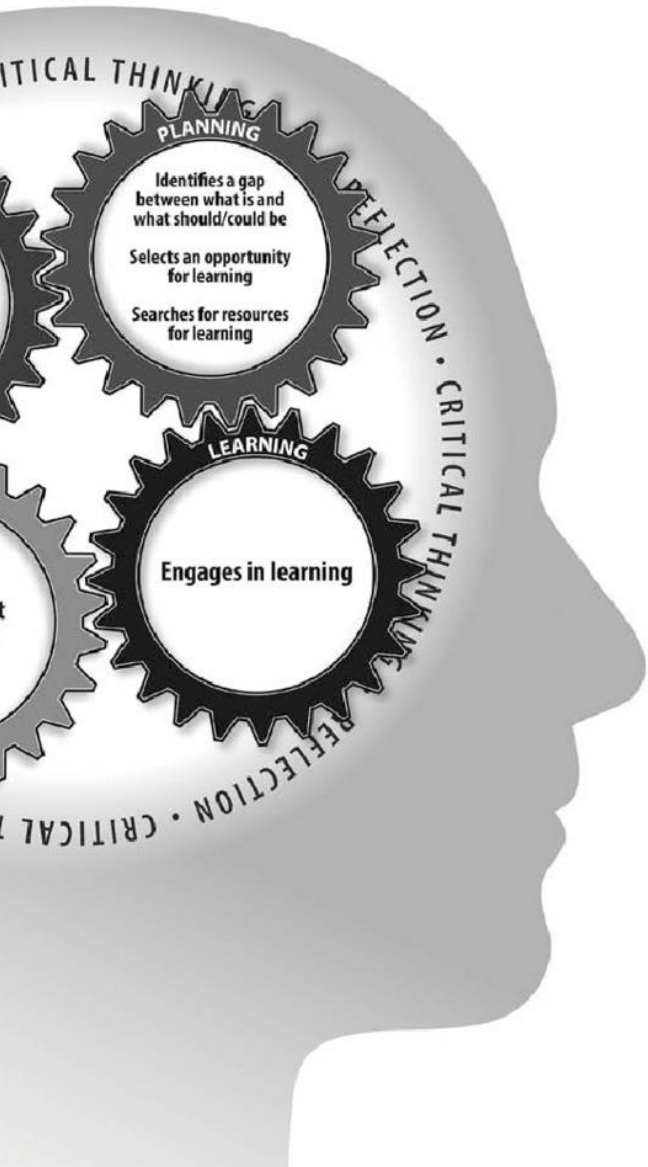


\*Teacher-student ratio

June/July 1984

5


# What is the Master Adaptive Learner?



LEARNING  
ENVIRONMENT



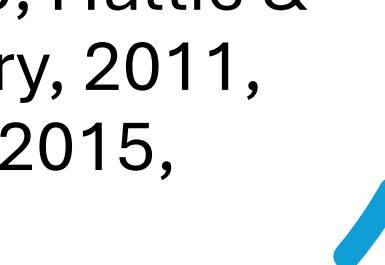
Adapted from Cutrer & Pusic 2019



*“The importance of a robust feedback culture is one of the best-documented aspects of effective education”*

-- Tran & Chou 2023

Research continually confirms the power of feedback on student motivation and performance (Moore & Kyal 2005, Hattie & Timperley 2007, Orsmond & Merry, 2011, Stone & Heed 2015, Lefroy et al, 2015, Watling & Ginsberg 2019)





The single biggest problem in communication is the illusion that it has taken place.

- George Bernard Shaw



***“Feedback is an emotional business.”***

Forsythe 2019

# The Emotional Terrain of Feedback

- Personal disposition influences what is encoded, consolidated, and eventually retrieved → behavior change (Forsythe, 2019)
- Mindset – growth vs fixed (Dweck, 2008)
- Defensive behavior -- Self-Determination Theory and Self-Worth Theory (Deci & Ryan, 1985, Valle et al 2005)

# The Power of Praise (Dweck, 2007)

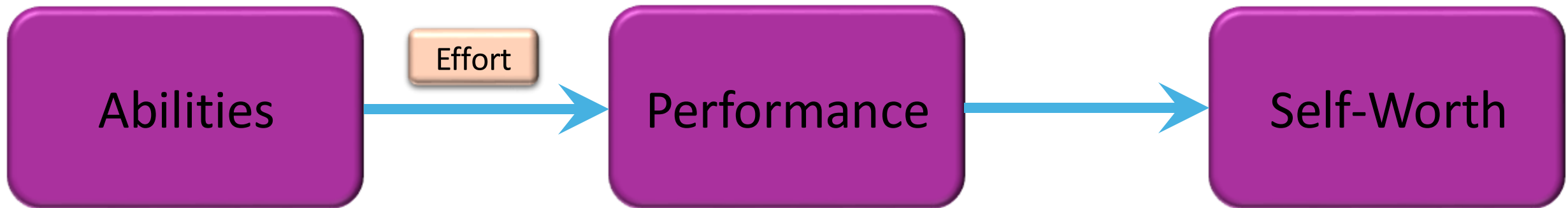
Group 1: Praised for Intelligence

Group 2: Praised for Effort

- Test 1: Easy Puzzles, everyone did well
- Test 2: Choice between difficult and easy
- 90% Group 2 chose difficult, majority Group 1 chose easy
- Test 3: Difficult, everyone did poorly
- Group 2 dove in, enjoyed task, Group 1 disliked
- Test 4: Easy Puzzles
- Group 2 30% increase in score, Group 1 20% decrease
- ***"Look smart, don't risk making mistakes"***

# Self-Worth Theory

Self-worth is a critical dimension of human functioning and identity



*Cano et al. High Edu 2018*

*Covington, Elem School Journal 1984*

*Covington, Ann Rev Psychology, 2000*

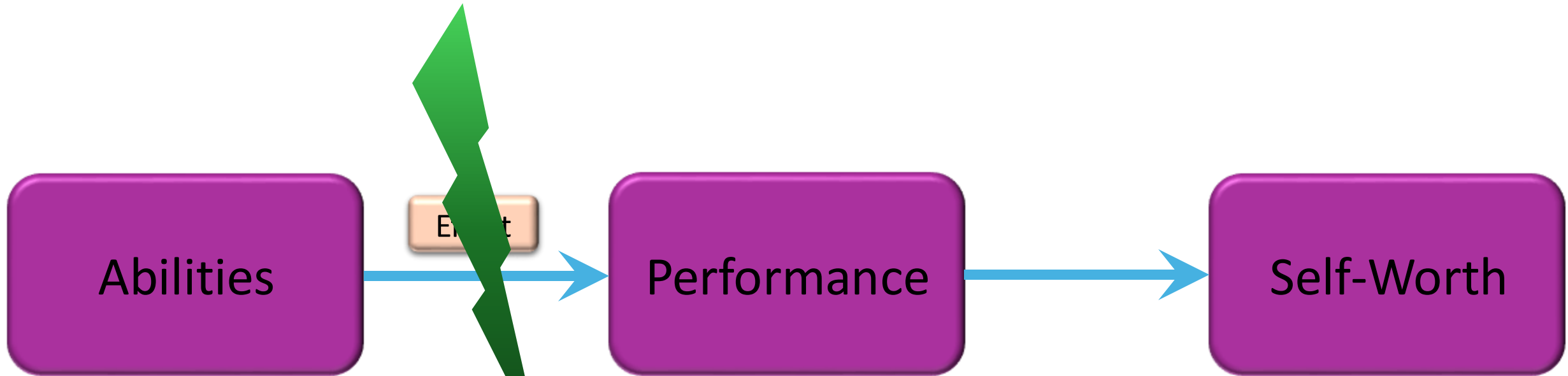
*Adapted from Nic Vogue, Self-Worth Theory, TEDx Princeton University 2017*



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# Self-Worth Theory

Self-worth is a critical dimension of human functioning



## Self-Worth Protection (SWP) Strategies

1. Self-sabotage – Withholding effort
2. Defensive pessimism – Set the bar low
3. External Attribution

*Cano et al. High Edu 2018*

*Covington, Elem School Journal 1984*

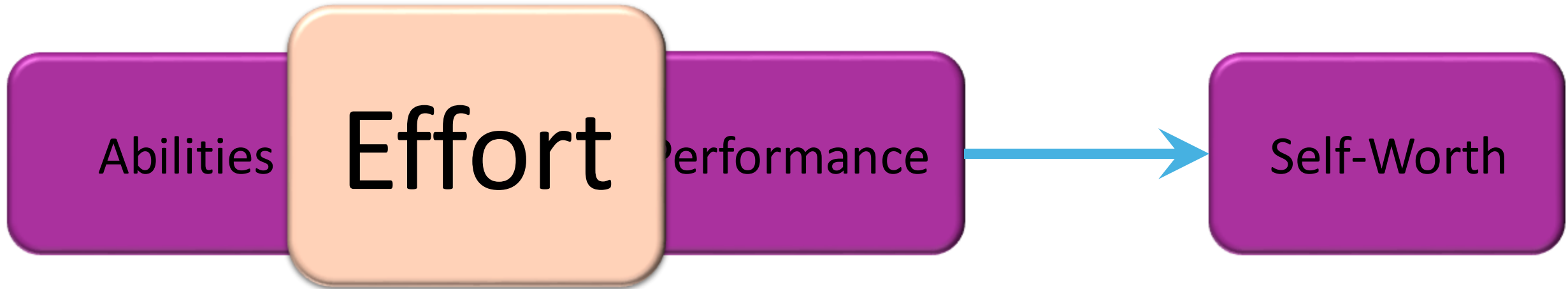
*Covington, Ann Rev Psychology, 2000*

*Adapted from Nic Vogue, Self-Worth Theory, TEDx Princeton University 2017*



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# Avoid over-work



*Cano et al. High Edu 2018*

*Covington, Elem School Journal 1984*

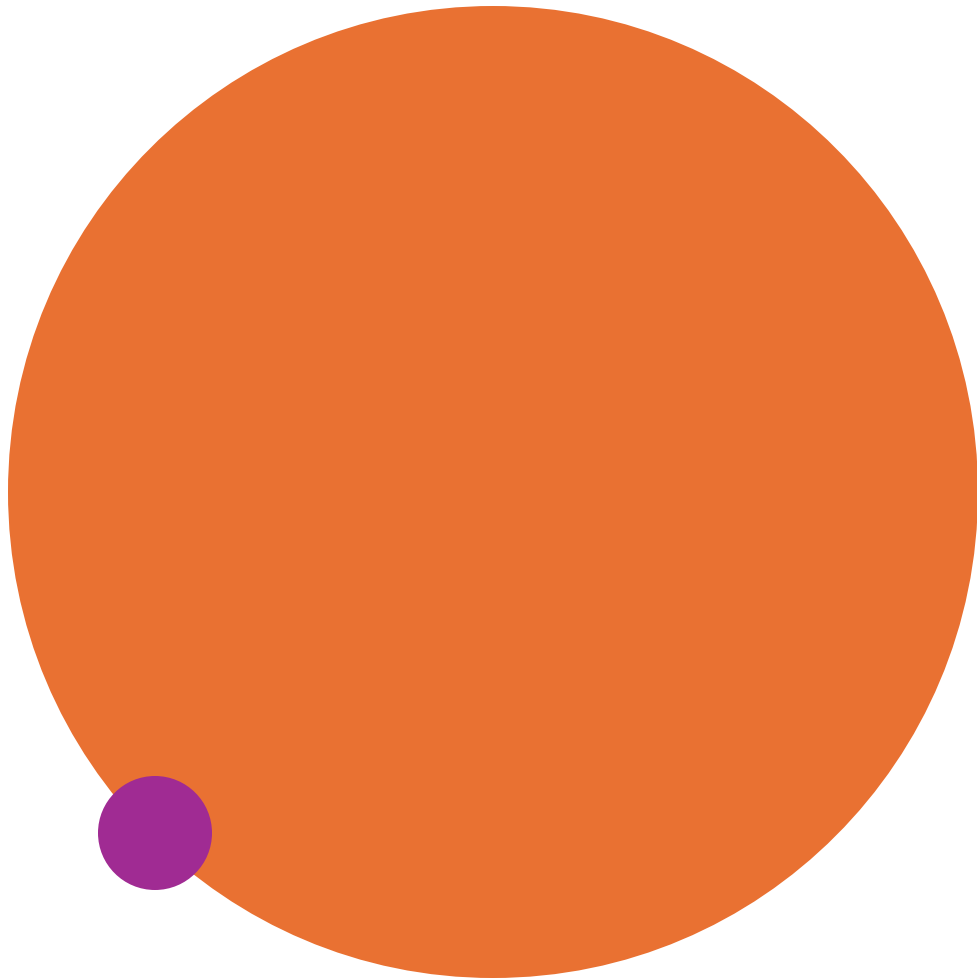
*Covington, Ann Rev Psychology, 2000*

*Adapted from Nic Vogue, Self-Worth Theory, TEDx Princeton University 2017*

# Forsythe et al 2019

- The majority of college students lean more towards the fixed mindset
- Psychology will play an important role in exploring the underlying factors that influence how students avoid the emotional pain that is part of human experience, and in highlighting ways in which academics can support students in the development of their self-esteem.
- A negative reaction to performance feedback is normal, it is unavoidable, but it is also transient.
- Assessments are our most critical form of feedback, but be respectful of their power
- Use action-orientated interventions, such as coaching, mentoring and tutoring, which are designed to challenge maladaptive behaviors and dispositions





*'The task of the excellent teacher is to stimulate "apparently ordinary" people to unusual effect. The problem is not identifying the winners: it is in making winners out of ordinary people'*

-- Cross 1984






Between stimulus and response  
there is a space. In that space is our  
power to choose our response. In  
our response lies our growth and  
our freedom.

— *Viktor E. Frankl* —

AZ QUOTES

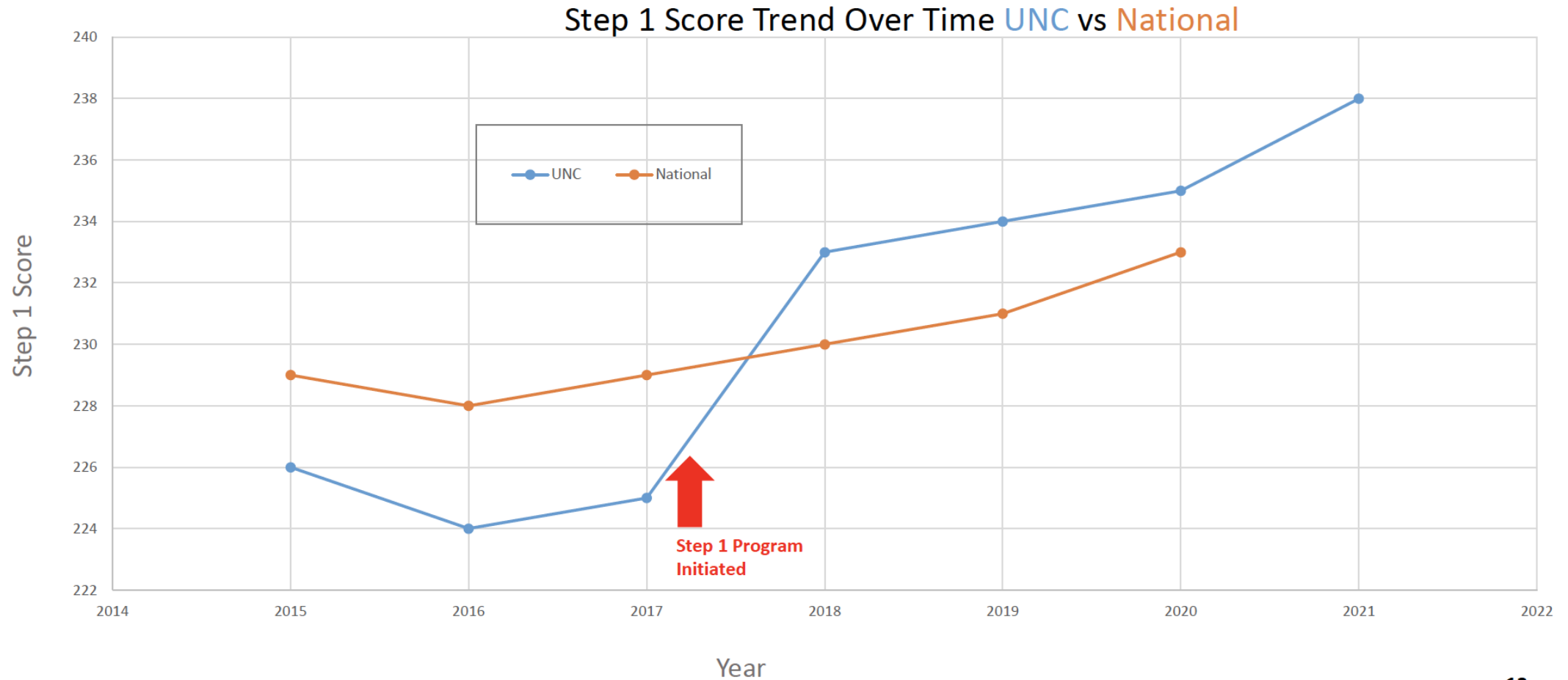


*“Everything happens for you, not to you.*

*You don’t have to like it, it’s just easier if you do”*

- Byron Katie
- 

# Impact of Step 1 Program Design (Score)



# Recommendations for self reflection/Tips

- Become acquainted with your own tendencies, defenses and capacity for behavioral change
- Notice your thoughts and feelings when you get feedback
- Work on your unconscious bias
- Create relationships wherever you go
- Become a social scientist
- Consider supporting serious coursework in psychology for medical students
- Look into qualitative research and always consider a mixed-methods approach.
- Take a growth mindset approach to your work

**Warning:  
You may feel worse  
at first.**



The image shows three large, red, ribbed hot air balloons floating in the sky. They are positioned in the foreground and middle ground, with one balloon on the left, one in the center, and one on the right. The balloons are illuminated from below, giving them a warm, glowing appearance. Below the balloons, a dense, green forest covers the landscape. In the distance, a city with numerous golden pagodas and stupas is visible, set against a backdrop of a large body of water under a clear sky. The overall scene is peaceful and scenic.

Do not trip over what is behind you. -  
Seneca

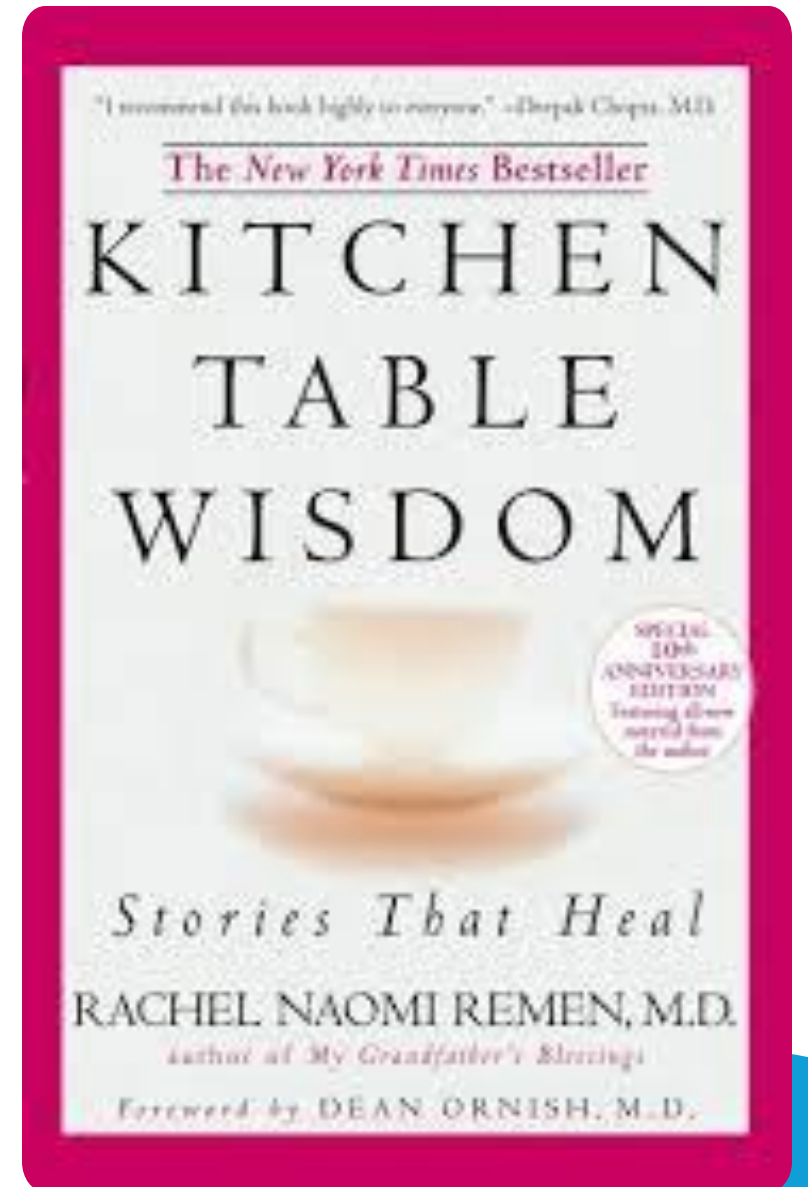
A close-up photograph of a pink flower bud, likely a carnation, with a green sepal and stem. The flower is positioned in the upper center of the frame against a solid black background. The petals are a vibrant pink color, and the sepal is a bright green. The stem is dark green and extends downwards from the flower.

Radically self-forgive



# Rachel Naomi Remen's Kitchen Table Wisdom

*The Healer's Art*



*“We are all failures. At least the best of us are”*

-- James M Barrie, Scottish Novelist and Playwright, Creator of Peter Pan, suffered from Psychosocial Dwarfism or Kaspar Hauser Syndrome



# From Remediation in Medical Education, *2<sup>nd</sup> Edition,* 2023

“We are all flawed and sometimes we stumble. What happens next says everything about who we are and who we aspire to be.”

*Rachel Ellaway*

“The...process recognizes the struggle, planning, growth, and adaptation that we believe is the root of success not only in learning the health professions, but in *being* a health professional. This process is not limited to “remediation” but rather applies to all learning, celebrating the struggle as core to how all human learning evolves.”

*Neva Howard & Martin Pusic*

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