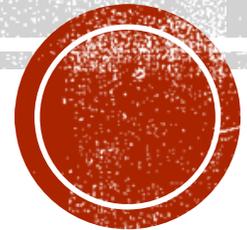


# **CREATING A CULTURE THAT ENGAGES STUDENTS**

**AMATYC – San Diego, CA**  
**Annette Cook, NADE**



# WHAT I BELIEVE

- I believe that all educators should be on a lifelong journey of learning so that in turn, we can inspire students to join us on the journey.
- I believe that students have the right to succeed.
- I believe that all students can learn given the support and direction needed, and that the level of support needed is as diverse as our students.
- I believe that in order to reach each new generation, educators must continually strive to learn more about how to engage and relate to students.



# WHAT I BRING TO THE TABLE

- My truth based on my experience, studies, networking, and learning from others in the field.
- If you've heard me present before...
- Remember that what we do as educators is not about me and it's not about you. It's about students.



# WHEN FACED WITH UNCERTAINTY

**Ask**

Is this what's best for students?

**Ask**

Why are we doing this? Does research back it up? (baseline of 3 years)

**Ask**

What experience do you have in working 1-on-1 with underprepared students?

**Ask**

for clarity. Don't accept data if you do not fully understand it.



# **HIGHER EDUCATION IS**

- a comprehensive process based on social, cognitive and adult learning theory
- that focuses on the intellectual, social, and emotional growth and development of all students
- and includes, but is not limited to, tutoring, personal/career counseling, academic advisement, and alternative delivery of coursework to meet each student's individual goals.

**Isn't this what all higher education should be?**



# NADE

- Motto: “Helping underprepared students prepare, prepared students advance, and advanced student excel”





Prepare

Advance

Excel

**NADE MOTTO...WHAT WE DO!**



**“Every student deserves a champion – an adult who will never give up on them, who understands the power of connection, and insists they become the best they can be.”**

**--Rita F. Pierson**

- **NADE**

- February 21-24, 2018; National Harbor, MD
- 2019 – Atlanta
- 2020 – Nashville

- **AMATYC 2018 -- Orlando**

## **PROFESSIONAL DEVELOPMENT**

**Critical to helping  
us become the  
best we can be**



"The most valuable  
resource that all  
teachers have is  
each other. Without  
collaboration our  
growth is limited to  
our own  
perspectives"

--Robert John Meehan



# NADE'S WORK IN TODAY'S ENVIRONMENT

- “Ask the educator, not the legislator.”
- “Good teaching is good teaching.”
- “Every educator is a developmental educator.”
- **Consistent message to include the expertise of practitioners in making policy, making decisions, and making changes.**



# EXAMPLES

- Welcome activity responses



# WHAT DO OUR STUDENTS HAVE IN COMMON?

- **They breathe!**
- Virtually everything else is different.
  - Socio-economic status
  - Ethnicities
  - Skill level
  - Motivation
  - Background
- There is no “one size fits all” approach.



# OBJECTIVES

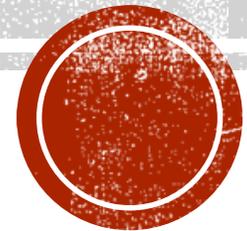
- Mindset
- Habits of Mind
- Math Anxiety
- Classroom Culture

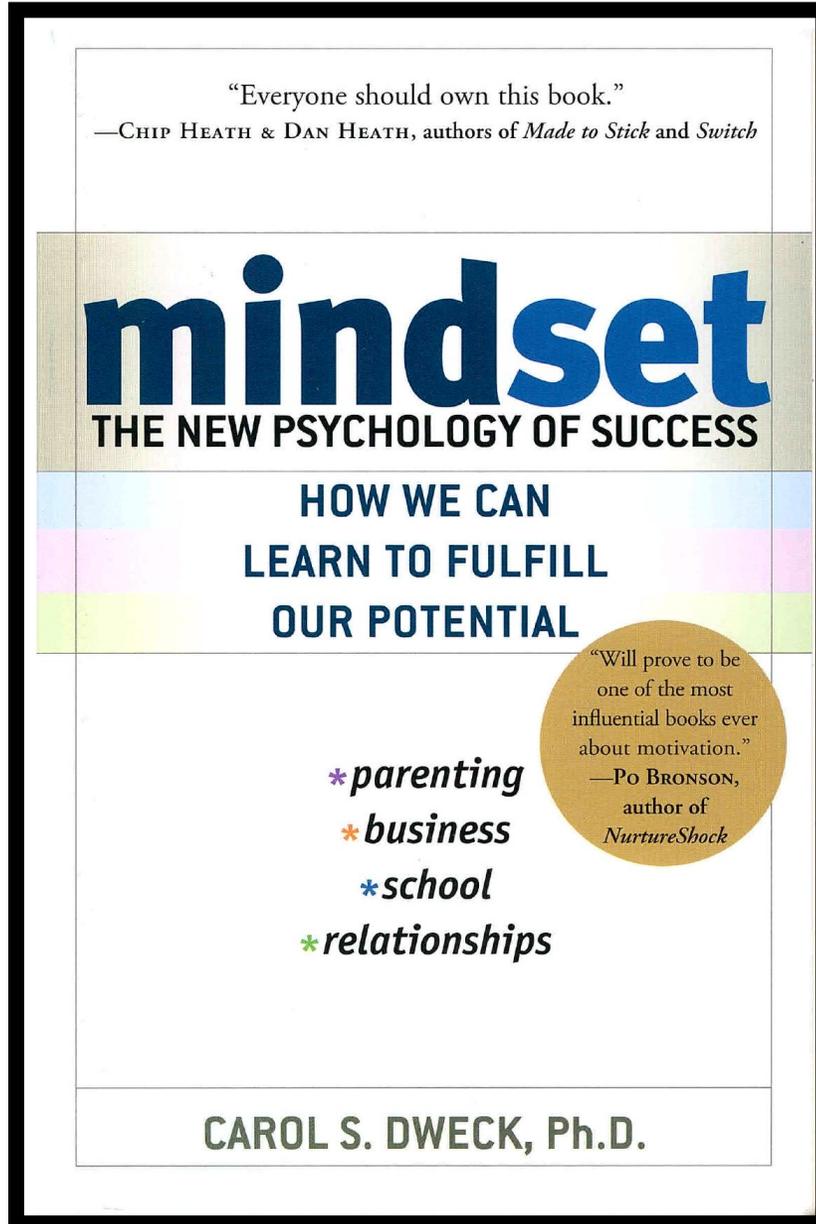
***No matter what level of math you teach or what your role, this information applies to you.***



# MINDSET

**Definition:** the established set of attitudes held by someone





- Fixed or Growth mindset
- Integral factor in making changes of processes and procedures
- Important for educators and students

# **FIXED MINDSET**

- “The fixed mindset limits achievement. It fills people’s minds with interfering thoughts, it makes efforts disagreeable, and it leads to inferior learning strategies.”
- Example: Students assume if they were not successful in past, they won’t be successful now.
- Example: Teachers who assume students know what they need to know to be successful in a class.

# FIXED MINDSET

THE BELIEF THAT YOUR POTENTIAL WAS DETERMINED AT BIRTH.

I ignore constructive criticism.

I don't want to look like a failure.

I have a negative internal dialogue, 'I'm an idiot'.

I feel threatened by other people's success.

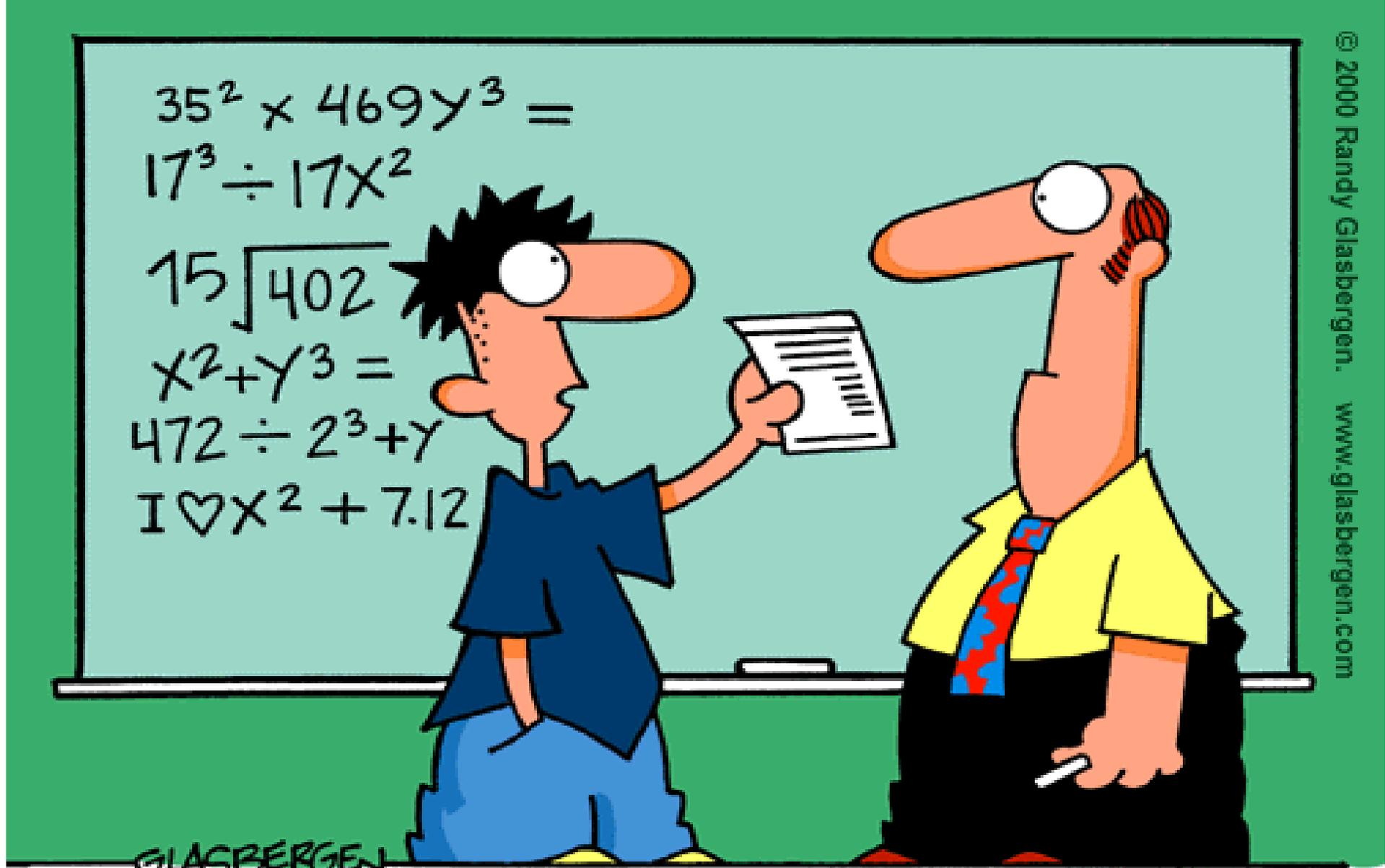
I don't like to ask questions in case I sound stupid.

I avoid challenges.

I give up quickly.

I say 'I can't'.





"I HAD MY DOCTOR DO A D.N.A. BLOOD ANALYSIS.  
AS I SUSPECTED, I'M MISSING THE MATH GENE."



# EVER HEARD THESE?

- “That’s not my job.”
- “This is college. Students should know what to expect.”
- “Nobody helped me make it through College; why should I go above and beyond to help my students.”



# GROWTH MINDSET

- Believes in change, embraces challenge, struggle, criticism, and setbacks
- Cultivates abilities

*People with a growth mindset:*

- Love what they do, even in the face of difficulties and
- Value what they do regardless of the outcome.

# GROWTH MINDSET

THE BELIEF THAT WE CAN WORK HARD AND IMPROVE.

I want to learn from criticism.

I am comfortable making mistakes.

I find lessons and inspiration in other people's success.

I have a positive internal dialogue eg. 'I am getting better!'

I say 'I can't do it yet!'

# CONSIDER...

- Do you have a “right to fail” or “right to succeed” mentality with our students?
- Do you model a growth mindset with your students?
- Will you help your students have a growth mindset?





The accident  
of where students live  
should not limit their  
access to an excellent education  
or their ability to  
pursue their **dreams**.

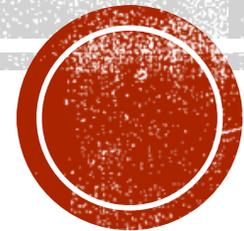
**URI TREISMAN**

EXECUTIVE DIRECTOR, CHARLES A. DANA CENTER  
AT THE UNIVERSITY OF TEXAS AT AUSTIN

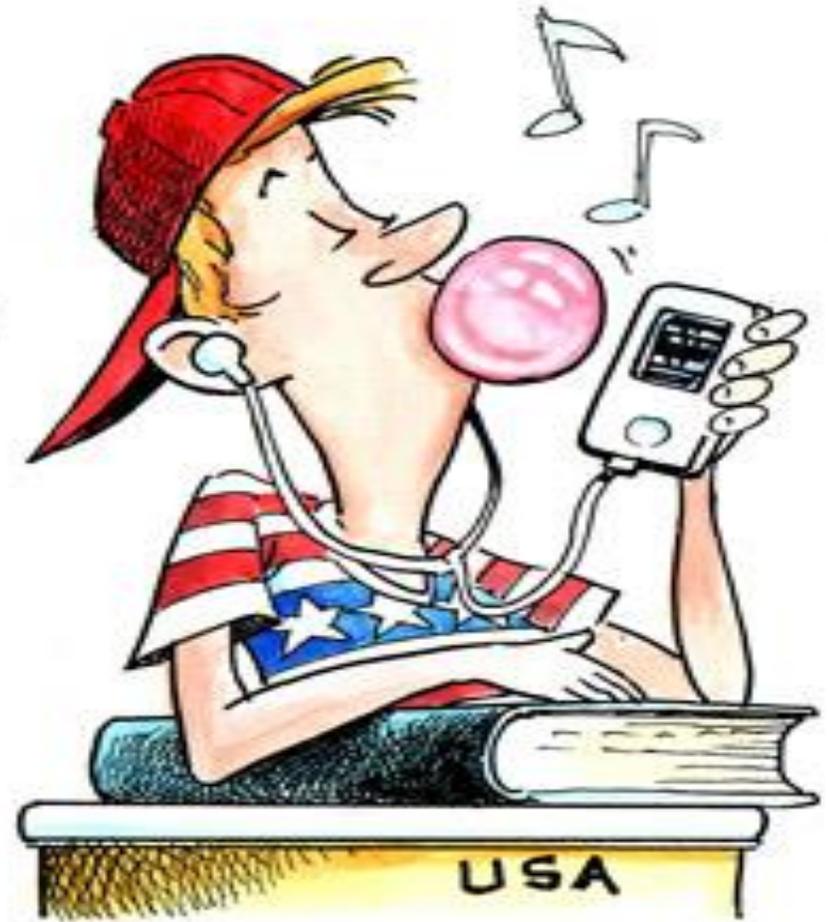
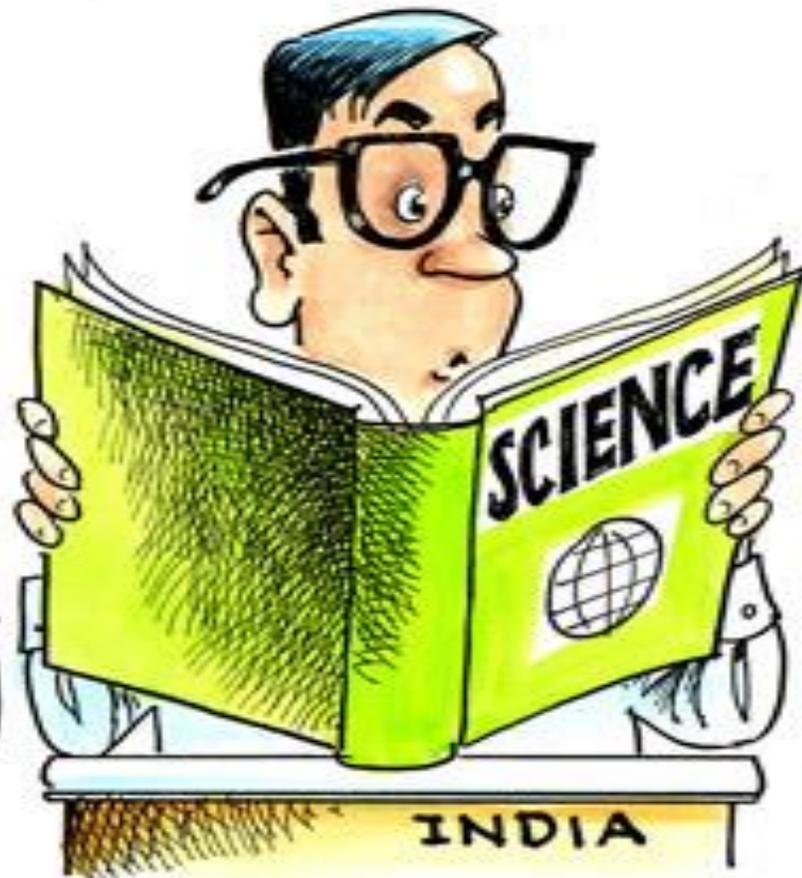
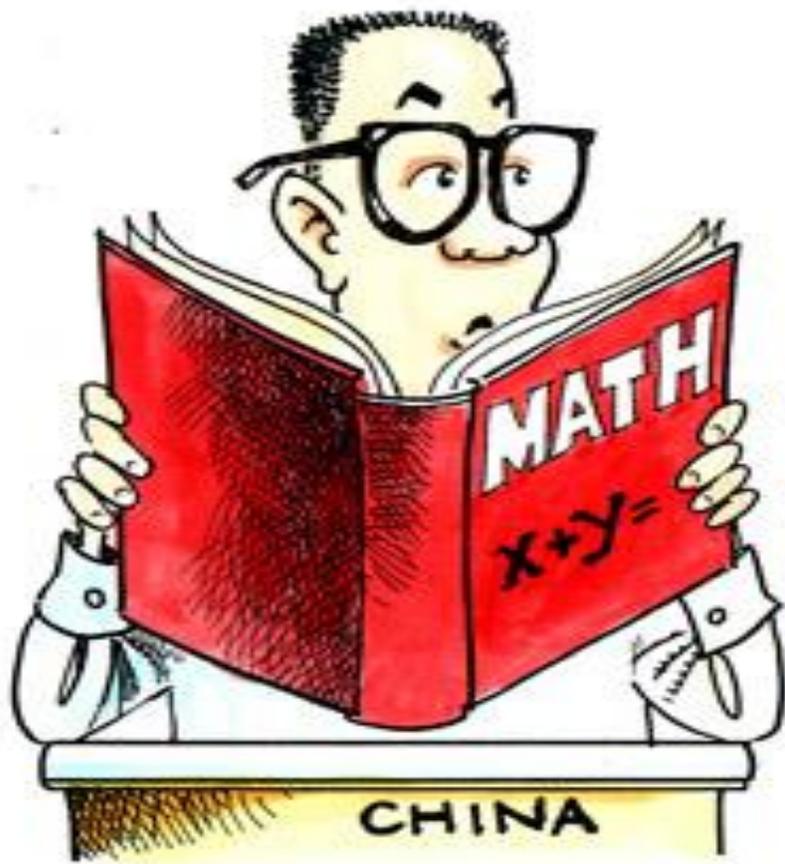


# HABITS OF MIND

knowing how to behave intelligently when you DON'T know the answer.



# Study habits...



# OUR CHALLENGE

- To make invisible practices, visible
- To make them discussable, coachable, available for students to reflect upon and access
- To show how they contribute to deep and transferable learning
- Critical for first year students



PERSISTENCE  
MOTIVATION  
PLEASANTTY  
ENGAGEMENT  
RISKE  
OPENESS  
CURIOSITY

# Fostering Habits of Mind in Today's Students

A NEW APPROACH TO  
DEVELOPMENTAL  
EDUCATION

EDITED BY

Jennifer Fletcher, Adela Najarro  
and Hetty Yelland

FOREWORD BY EMILY LARDNER



# HABITS OF MIND

- “a fundamental set of behaviors for thoughtful teaching and learning”
- “ways of approaching learning that are both intellectual and practical”
- “an internalized set of practices essential to critical thinking”



# **HABITS OF MIND**

- **Curiosity**
- **Openness**
- **Engagement**
- **Creativity**
- **Persistence**
- **Motivation**
- **Confidence**
- **Responsibility**
- **Flexibility**
- **Metacognition**



# HABITS OF MIND

“Many of our students have math or writing anxiety. Most are surprised by the amount of studying required outside of class. Few have regular routines or dedicated spaces for academic work. These are not ‘deficits’ our students bring to college; they are data for making instructional decisions.”

*Fostering Habits of Mind in Today’s Students  
page 3 (emphasis added)*



# HABITS OF MIND

“For students in developmental classes, these habits of mind are critical; without a sense of intellectual curiosity, motivation, and confidence many learners disengage from academic culture before they have even started their college-level course work.”

*Fostering Habits of Mind in Today's Students*

*page 2*



# TEACHING HABITS OF MIND

---

A deep respect and regard for students is necessary.



Research found that individual people can have a profound impact on students.



We need to make these habits an explicit part of our approach.



Students need to see habits of mind in practice.



# HABITS OF MIND

“By showing our students how qualities of mind such as persistence and flexibility aid us in our disciplinary work, we make visible the link between intellectual process and academic product.”

*Fostering Habits of Mind in Today's Students*  
*page 8*



# HABITS OF MIND

“The fact that even academically proficient students have trouble continuing in college suggests that college readiness encompasses more than just academic skills. College success is not only about academic preparation but is also dependent upon a host of equally important skills habits, and behaviors.”

*Fostering Habits of Mind in Today's Students*  
*page 11*



# RECOMMENDED APPROACH

Focus	Focus on student assets, not deficits.
Create	Create a community.
Engage	Engage students.
Build	Build confidence.
Develop	Develop students' self-efficacy.
Promote	Promote transfer of learning.



# EXAMPLES

- Syllabus Quest
- Autobiography
- Pre/Post Surveys
- *Unlearn* – activity to stop bad habits
- Graphic Organizers
- Addressing, not avoiding, math/test anxiety
- Test Corrections



# **SAMPLE QUESTIONS FROM PRE-SURVEY**

- Number of credit hours you are currently taking (including this class)
- Work hours per week (on average)
- Other time commitments/week
- Last math/writing/etc. class; when taken; where taken
- Grade received; Hours per week outside of class you spent on class
- Did your grade reflect the time you invested in the course?
- What one thing would you change in your approach to the last class?



# **SAMPLE QUESTIONS FROM POST-SURVEY**

- Based on the work you've completed so far, what is the approximate grade you're receiving in this course?
- What is the average hours per week outside of class spent on this course?
- Does your current grade reflect the time you invested in the course?
- What one thing would you change in your approach to this class if you were starting over?
- Has the integration of writing in this course benefited your learning?



# CONSIDER...

- Students today are not the students most of us were.
- We cannot assume they know anything about being in college or these habits of mind.
- Instructors must go beyond teaching only subject matter.
- If we want to have more students be successful in our classes, we cannot teach using only the same methods used when we were in college.



# **TWO MINUTE ACTIVITY**

Discuss with those around you:

- What are your thoughts?
- Do you already intentionally teach/practice/explain habits of mind with your students?
- If so, share examples of how you do this.





#SibmeShares

**"One looks back with appreciation to the brilliant teachers, but with gratitude to those who touched our human feelings.**

**The curriculum is so much necessary raw material, but warmth is the vital element for the growing plant and for the soul of the child."**

**Carl Jung**



# **MATH ANXIETY**

- Sheila Tobias, author of two books on topic
- Hundreds of studies performed
- Hundreds of interviews with students
- Specific strategies



Sheila  
Tobias

# OVERCOMING MATH ANXIETY

Revised  
and  
Expanded

"If you ever said 'I'm no good at numbers,' this book can change your life." —Gloria Steinem



*Banishing*  
**Math Anxiety**

Sheila Tobias with Victor I. Piercey

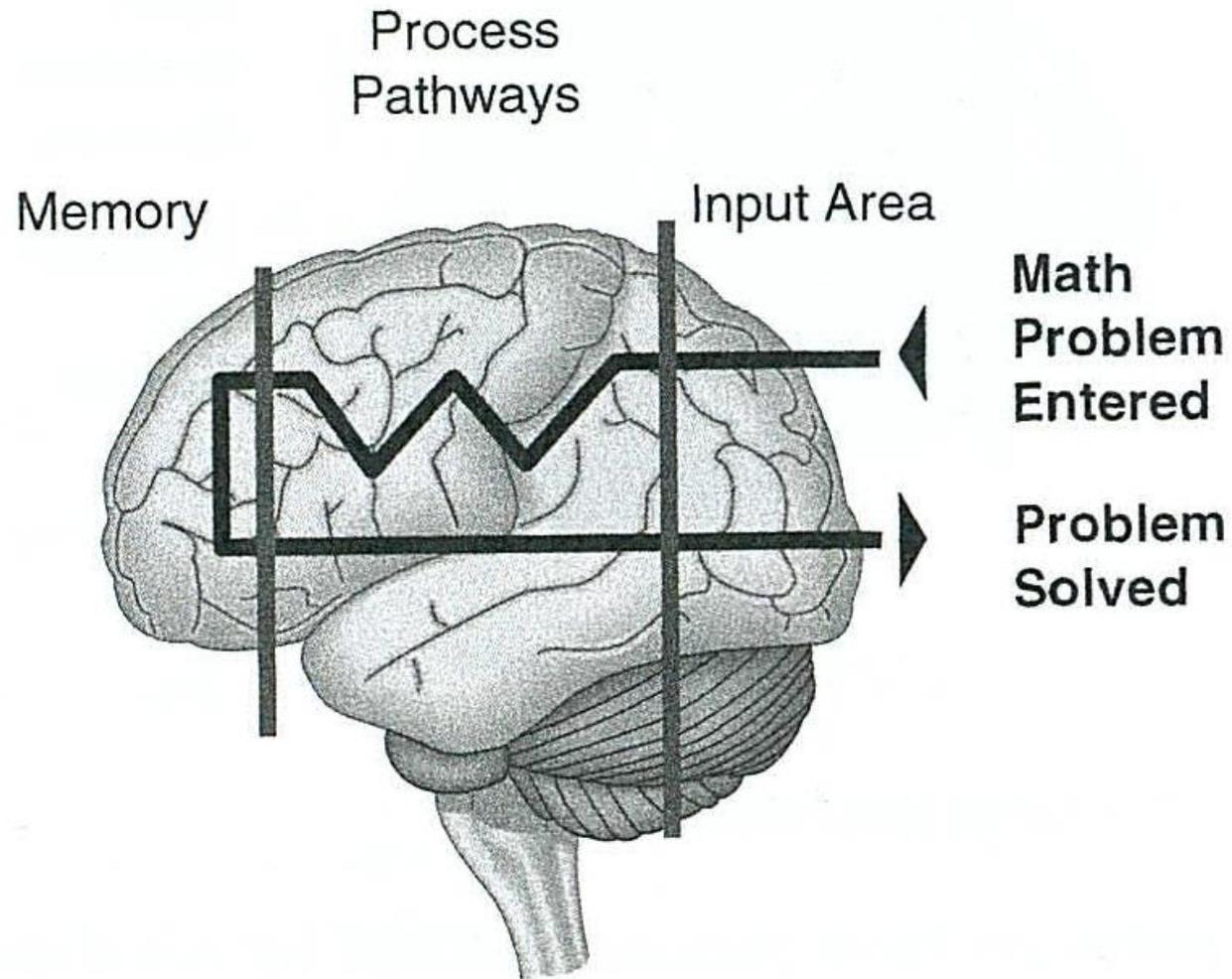


# **TWO IMPORTANT MESSAGES**

- **Students can take charge of learning math.**
- **Math continues to be needed outside the classroom.**



# BRAIN DIAGRAM W/O ANXIETY

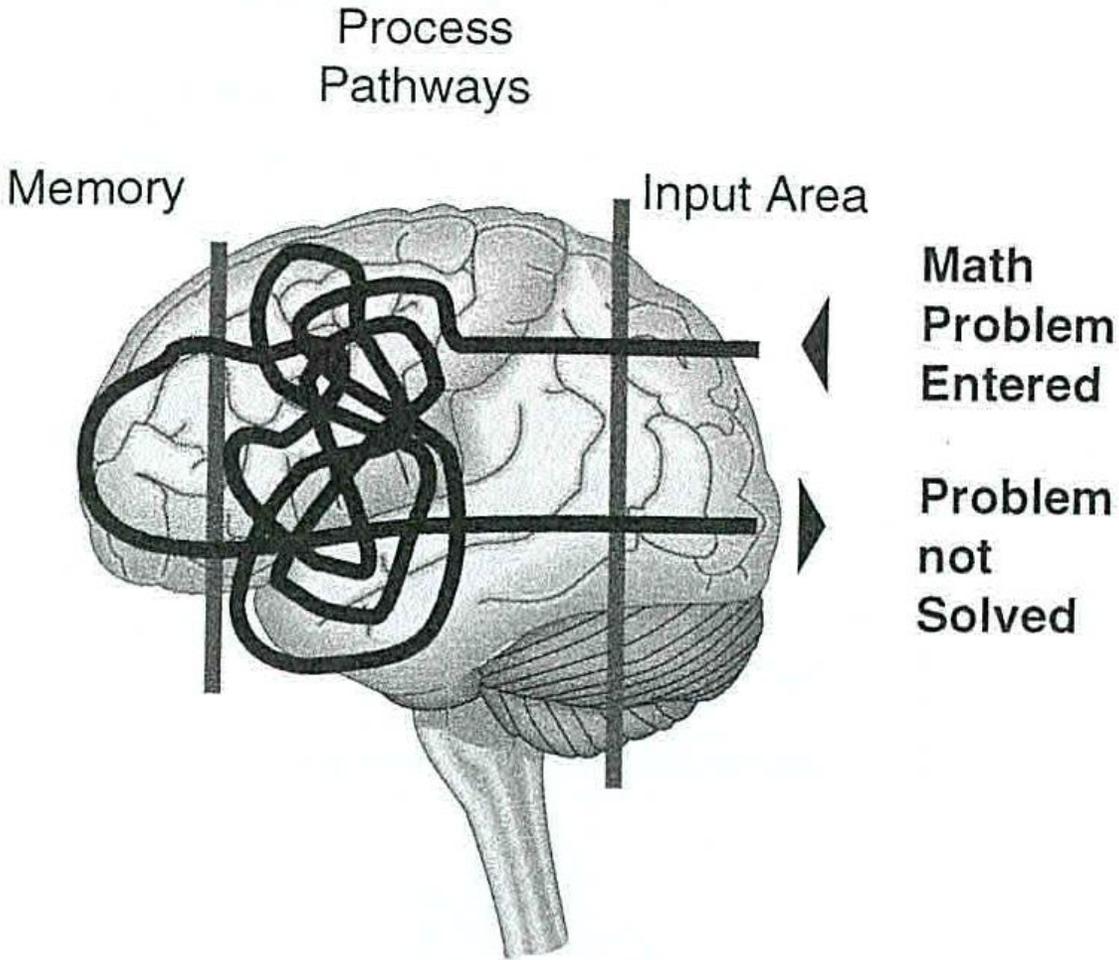


# **ROADBLOCK TO SUCCESS**

Math anxiety allows emotions to get in the way and interrupt the pathways.



# BRAIN DIAGRAM W/O ANXIETY



# **FOR STUDENTS: MANAGING MATH ANXIETY**

- Take charge of math learning.
- Talk about math. (heart of treatment)
- Stop being intimidated by lack of confidence.
- Stop being intimidated by those who don't have to work so hard at succeeding in math.
- Handout -- Math Anxiety Help Sheet



# **FOR STUDENTS: THE SECRET**

- **The essence of doing math is not to stop but to keep going.**
- **The essence of math anxiety therapy is self-monitoring.**
  - Recognize when panic starts.
  - Know what form it takes.
  - Un-panic systematically.



# BOTTOM LINE

- No book or help session can transform anxiety.
- Our students' main goal should be to have the willingness to learn the math needed when needed.
- Does one have to *think* like a mathematician in order to *do* math? NO!
- Be willing to ask for help from instructors, classmates, and/or tutors.

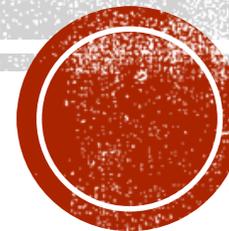


# **SO WHERE DOES ALL OF THIS LEAD?**

- Staying current with the profession by attending conferences, reading professional literature, etc.
- Teaching and practicing a Growth Mindset
- Teaching and practicing Habits of Mind
- Acknowledging and working through anxiety



**CULTURE**





**“I want you to find a bold and innovative way to do everything exactly the same way it’s been done for 25 years.”**

# **FACULTY & STAFF**

- **Professional but approachable**
- **Partner in learning experience**
- **On time, present, and prepared**
- **Creates learning centered environment**
- **Clearly states that students are held to high, attainable, and transparent standards**



# **FACULTY & STAFF**

- **Knowledgeable of campus resources (and willing to help find answers if not known)**
- **Available**
- **Flexible**
- **Supportive of students and makes support known to students often**
- **Never degrading to students**



# **STUDENTS**

- **Respectful**
- **Partner in learning experience**
- **On time, present, and prepared to stay entire time**
- **Ready to learn and willing to ask questions**
- **Good attitude**
- **Open to assistance**
- **Involved and participating**



# **WE MUST HELP STUDENTS UNDERSTAND...**

- **That knowledge is vital to good grades.**
- **That a good attitude and motivation to succeed is essential.**
- **That past failures and past challenges are not necessarily indicative of student success.**
- **That failure is part of learning.**
- **That they must be willing to go outside comfort zone to learn.**



# **CLASSROOM**

- **Warm and conducive to learning**
- **Engagement oriented**
- **Student centered**
- **Open to learning from peers but not easy to cheat**
- **Expectations shared clearly and repeatedly**
- **Intrusive but nurturing environment**



# **CLASSROOM**

- **Provides multiples means of learning**
  - **Lecture-response**
  - **Individual practice**
  - **Group problems/activities**
  - **Use of interactive software (even if not in computer lab)**
- **“Good” noise**



# **ASSESSMENTS**

- **Learning opportunities (okay to fail)**
- **Varied and meaningful; formative and summative**
- **Multiple low risk assessments prior to major assessments**
- **Low risk assessments reflective of content tested on major assessments**
- **Quick feedback with diagnostic details**



# IN SUMMARY

<b>Stay</b>	Stay involved in professional organizations.
<b>Maintain</b>	Maintain a growth mindset.
<b>Teach</b>	Intentionally teach habits of mind.
<b>Be</b>	Be aware of your institutional culture.



THE BEAUTIFUL THING  
ABOUT LEARNING  
IS THAT  
NO ONE CAN TAKE IT AWAY  
FROM YOU.

-- BB KING

# CONTACT INFORMATION

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