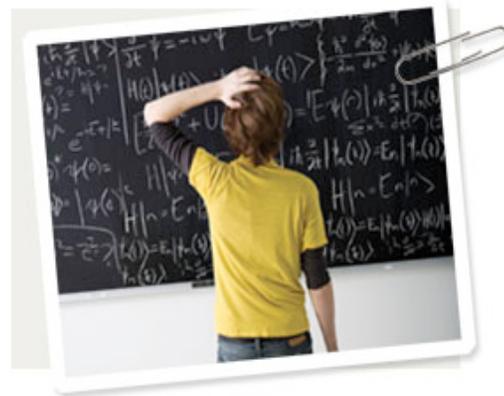


# Struggling Learners: Four Causes and Five *Potential* Cures



## Help Needed

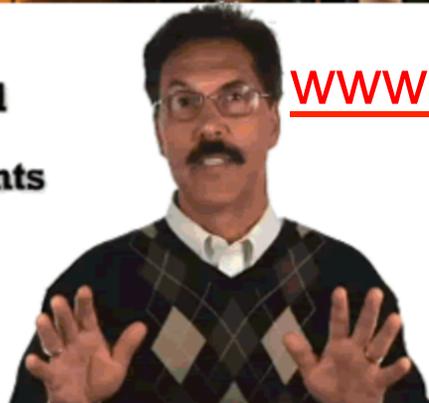
Dr. Bobb Darnell [bobbdarnell@mac.com](mailto:bobbdarnell@mac.com)  
[www.achievementstrategies.org](http://www.achievementstrategies.org)

# ACHIEVEMENT STRATEGIES, INC.

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**Successful  
Learning  
Environments**



[www.achievementstrategies.org](http://www.achievementstrategies.org)

or  
ASCD Handout site

# Session Goals . . .

## I will be able to . . .

---

1. Describe the causes and effects of student failure/and underachievement.
2. Explain what we are doing to prevent and address student failure/underachievement (e.g., practices, strategies, interventions).
3. Be familiar with additional instructional and assessment practices.

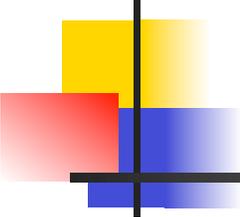
# Every school in America wants to . . .

- increase achievement



- reduce achievement gaps





# Changes in the Educational Environment Call for Thoughtful and Inspiring Leadership

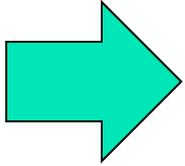
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We can see changes related to . . .

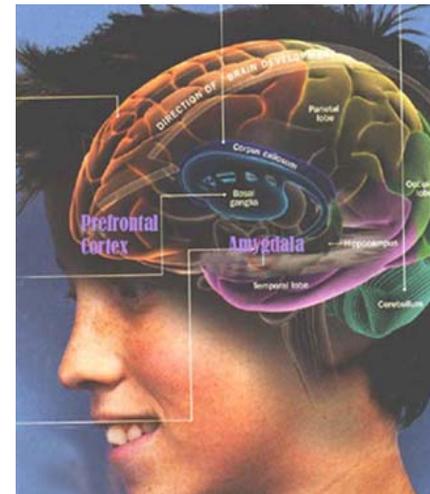
1. Students
2. Teachers
3. Accountability for equitable high levels of learning
4. The science of teaching and learning
5. Professional development
6. Educational tools and resources
7. The skills and knowledge needed for the twenty-first century

**Students**

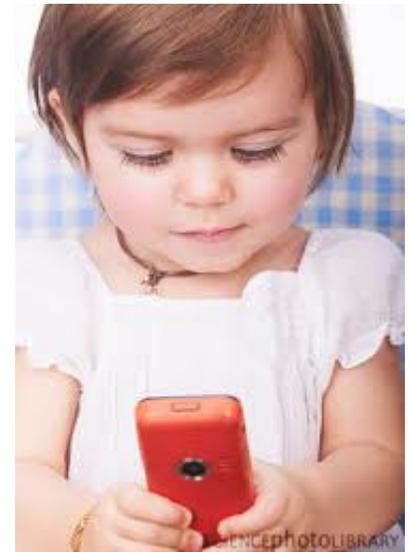
**Accountability**



**The Art and Science of Teaching and Learning**

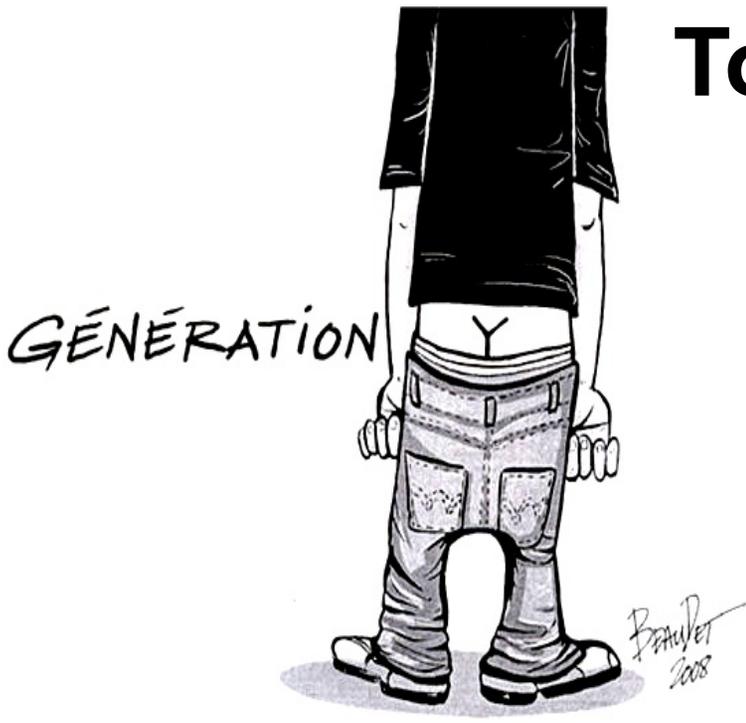


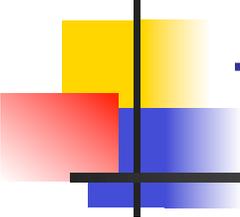
# Students have gone from . . .



To . . .

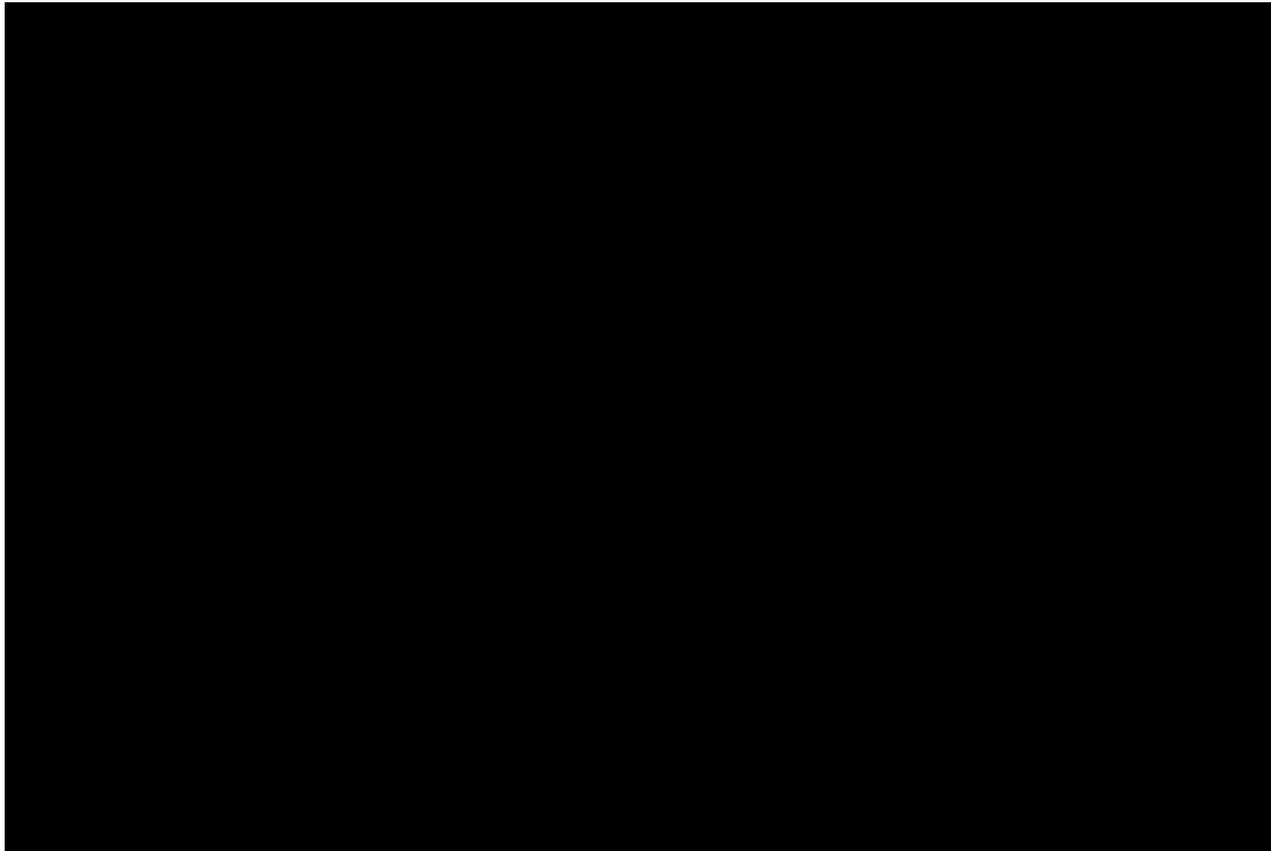
To . . .





Their brains are being wired  
for a certain kind of learning.

---



[http://www.thq.com/us/spongebob-squigglepants/udraw\\_wii](http://www.thq.com/us/spongebob-squigglepants/udraw_wii)

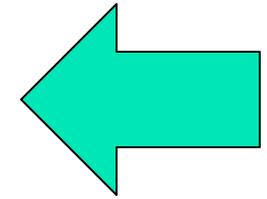


<p>1. Short attention spans and hate to be bored.</p>	<p><del>Boredom</del> <span style="border: 1px solid black; padding: 2px;">8-12 minutes</span></p>
<p>2. Visually preferred</p>	<p>DVD High Definition </p>
<p>3. Want immediate gratification</p>	<p>“I want it now!” “Is it done yet?”</p>
<p>4. Choose to be interactive and hands-on</p>	<p> </p>
<p>5. Love challenge and are curious</p>	
<p>6. Want to succeed (win) using strategies, practice, and do-overs</p>	<p> </p>

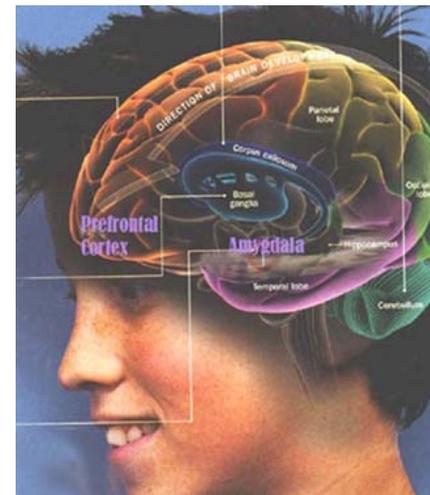
**What have you or your colleagues done to adapt to generation Z?**

**Students**

**Accountability**



**The Art and Science of Teaching and Learning**

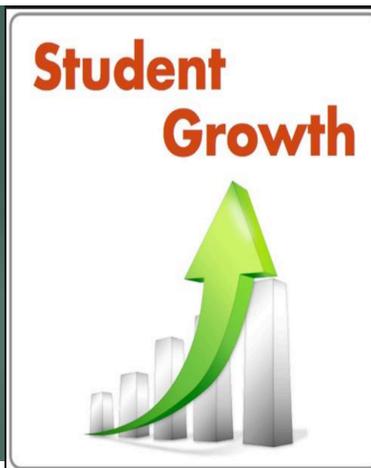


# Trends Coming Together and Overlapping

# NCLB

Common Core  
Standards

TEACHER  
EVALUATIONS



# ESSA

Education is involved in school improvements in every decade. Why are we surprised about change?



**Sputnik**

- New Math
- New Science
- Teacher Traits

**Age of Aquarius**

- Values Clarification
- Open Classrooms
- Have kids feel good about themselves.
- Clinical Supervision

**Back to Basics**

- Behavioral Objectives
- Hunter Model
- Learning Styles
- Clinical Supervision

**SD Du jour**

- Effective Schools
- Cooperative Learning
- Discipline Models
- Mastery Learning
- More Clinical Supervision

**Brain Research and Assessment**

- Critical Thinking
- Alternative Assessments
- Constructivism
- Engaged Teaching and Learning
- Multiple Intelligences
- Learning Styles
- More Clinical Supervision

**NCLB and Age of Research, Assessments, and Reports**

- High-Stakes Testing
- Technology
- Data-driven decision making
- Restructuring
- More Engagement
- Teaching for Understanding

Education is involved in school improvements about every decade. Why are we surprised?

2010

Today



**Common Core and NCLB**

- Technology Integration
- Data-driven
- Research-based
- Instructional Quality
- High-Stakes Testing
- Value-Added and Other Teacher Evaluation

**ESSA**

**And, the beat goes on.**

# Every school in America wants to . . .

- increase achievement



- reduce achievement gaps

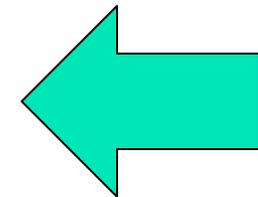
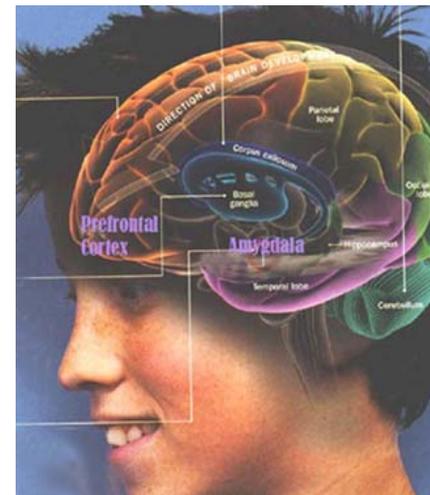


**Students**

**Accountability**

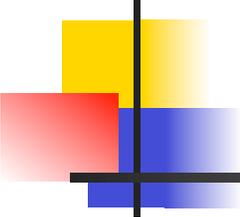


**The Art and Science of Teaching and Learning**



# Staff Development in the Past

- LYNT                      **Last year' s new thing**
- TYNT                      **This year' s new**
- NYNT                      **Next year' s new thing**



# Hot Topics-SD Du Jour

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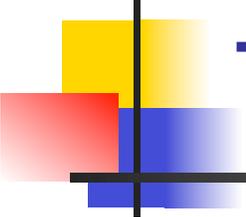
- Multiple Intelligences
- Performance Assessment
- Cooperative Learning
- Whole Language
- ESL
- Block Scheduling
- Back to Phonics
- Differentiated Instruction
- Technology Integration
- Differentiation
- Curriculum Mapping
- Concept Mapping
- Assertive Discipline
- Madeleine Hunter
- OBE
- Standards-based Learning
- Discipline with Dignity
- Brain-based Learning
- Learning Styles
- Content-Specific
- Brain-based Learning
- Understanding by Design

# Categories of Instructional Strategies That Affect Student Achievement

<b>Category</b>	<b>Percentile Gain</b>
■ <b>Identifying Similarities and Differences</b>	<b>45</b>
■ <b>Summarizing and note taking</b>	<b>34</b>
■ <b>Reinforcing effort and providing recognition</b>	<b>29</b>
■ <b>Homework and practice</b>	<b>28</b>
■ <b>Non-linguistic representations</b>	<b>27</b>
■ <b>Cooperative Learning</b>	<b>27</b>
■ <b>Setting objectives and feedback</b>	<b>23</b>
■ <b>Generating and testing hypotheses</b>	<b>23</b>
■ <b>Question, cues, and advanced organizers</b>	<b>22</b>

Below is Hattie's table of effect sizes.

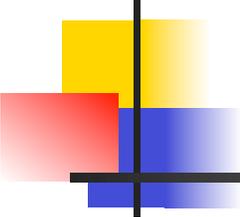
Influence	Effect Size	Source of Influence
<b>Feedback</b>	1.13	Teacher
Student's prior cognitive ability	1.04	Student
Instructional quality	1.00	Teacher
Direct instruction	.82	Teacher
Acceleration	.72	Student
Remediation/feedback	.65	Teacher
Student's disposition to learn	.61	Student
Class environment	.56	Teacher
Challenge of Goals	.52	Teacher
Peer tutoring	.50	Teacher
Mastery learning	.50	Teacher
Homework	.43	Teacher
Teacher Style	.42	Teacher
Questioning	.41	Teacher
Peer effects	.38	Peers
Advance organisers	.37	Teacher
Simulation & games	.34	Teacher
Computer-assisted instruction	.31	Teacher
Testing	.30	Teacher
Instructional media	.30	Teacher
Affective attributes of students	.24	Student
Physical attributes of students	.21	Student
Programmed instruction	.18	Teacher
Audio-visual aids	.16	Teacher
Individualisation	.14	Teacher
Finances/money	.12	School
Behavioural objectives	.12	Teacher
Team teaching	.06	Teacher
Physical attributes (e.g., class size)	-.05	School



## Teachers are **expected** to . . .

---

- Align curriculum and teach to rigorous standards
- Differentiate instruction
- Analyze and use data
- Collaborate in PLCs, PLTs, and \_\_\_\_\_
- Read all those emails and announcements.
- And, be very open minded and committed to the school's teacher evaluation system.

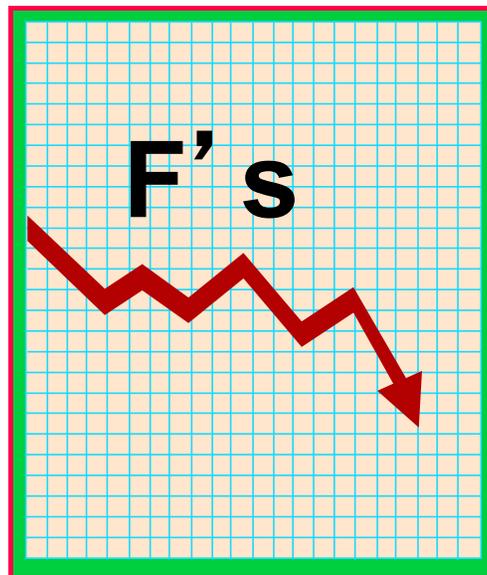


# Evidence of Student Failure/ Underachievement/Struggles

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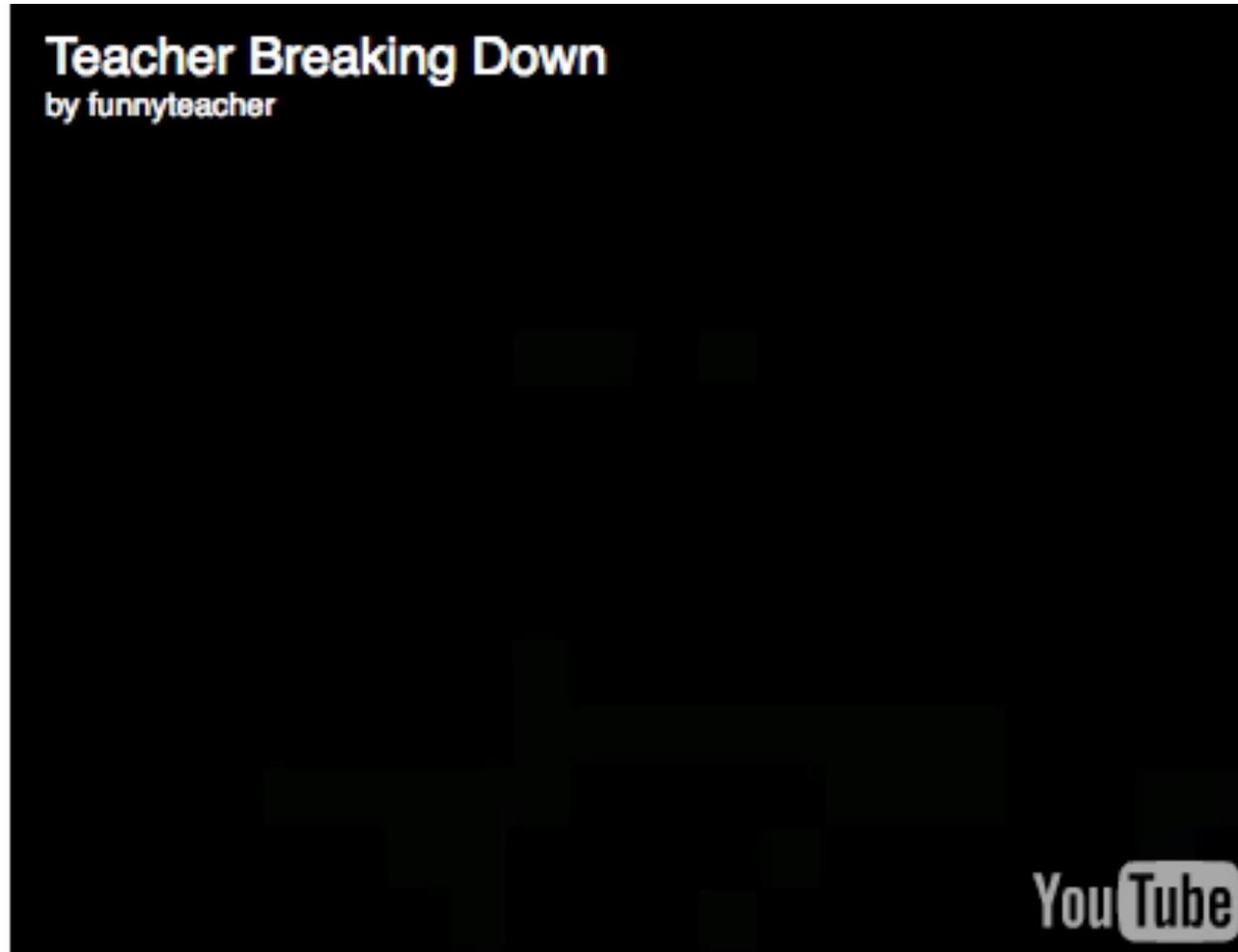
1. Poor attendance in school
2. Lack of attention in classes
3. Failure to attempt and/or complete in and out-of-class assignments
4. Revengeful behavior and chronic misconduct
5. Failure to participate in available interventions
6. Resistance and defiance
7. Low test scores and poor performance on assignments
8. A cycle of failure

There are many struggling learners who earn one or more F's and underachieve. **Choose a number 1-5.**



1. How does it affect teachers?
2. How does it affect administrators?
3. How does it affect parents?
4. How does it affect students?
5. How does it affect the organization?

Struggling learners and underachievement may cause teachers to feel overwhelmed.



Some students choose defiance and resistance. Defiance is often a . .

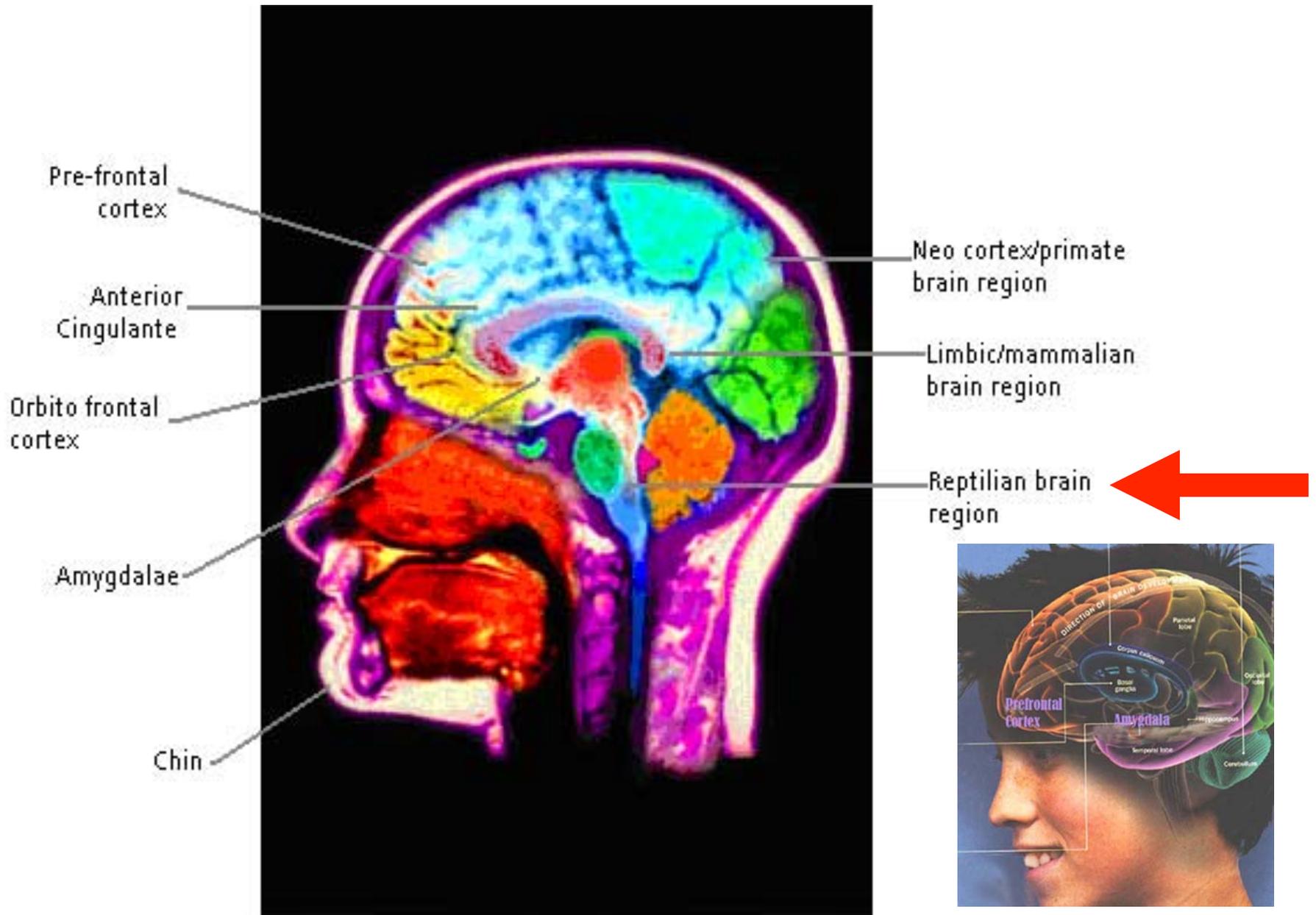
- response to too much anxiety.
- result of the student feeling out of control.
- result of the student trying to cover up feelings of impotence and/or incompetency.

Defiance is a . . .

- response to an overwhelmed limbic system-- flight or fight.



Defiance is a predicted response to anxiety overload.



# Every school in America wants to . . .

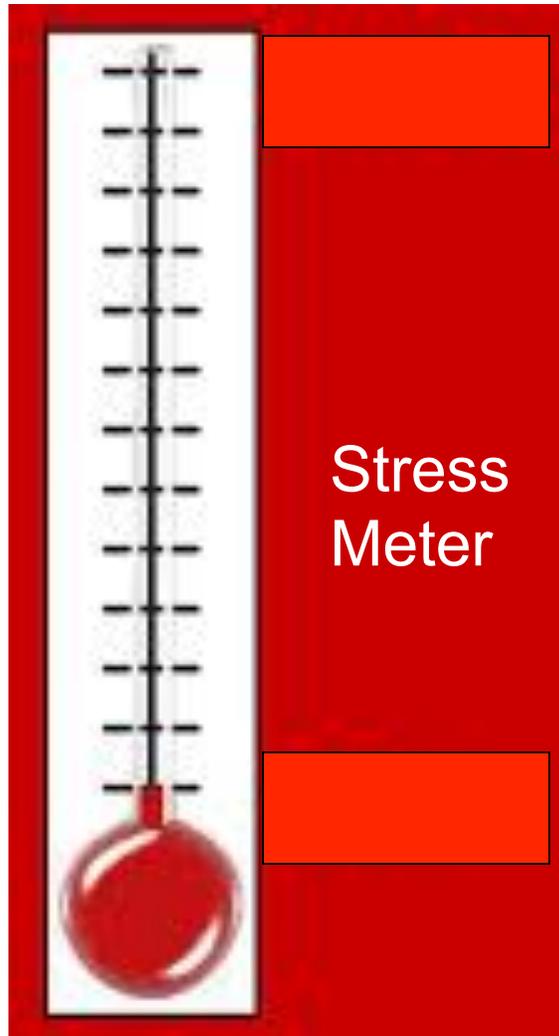
- increase achievement



- reduce achievement gaps



What was your level of anxiety regarding the struggling learners last year?



I am totally **freaking** out.



I'm worried. I need some . . .



I will survive . . .



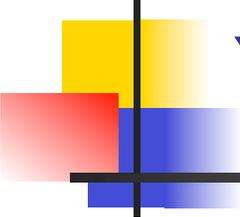
It use to be easier . . .





**TAKE THIS JOB  
AND SHOVE IT**

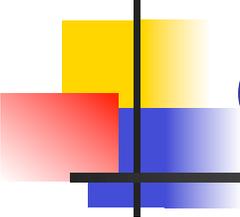
**I'M OUTTA HERE**



You may say, **WAIT!**

---

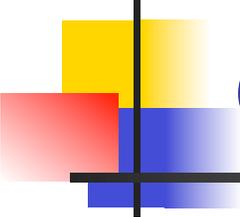
I am an experienced educator. I can handle these changes. I should be able to help struggling learners.



# You might be an experienced educator if . . .

---

- You want to slap the next person who says, “Must be nice to have all your holidays and summers free.”
- Out in public you feel the urge to talk to strange children and correct their behavior.
- You encourage obnoxious parents to check into other schools or home schooling.



# You might be an experienced educator if . . .

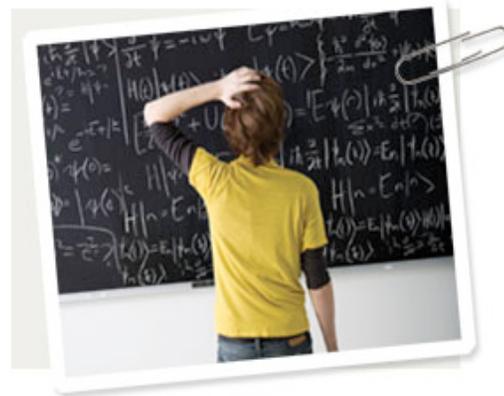
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- You had a hard time choosing your child's name because there is NO name you could give a child that wouldn't bring on high blood pressure the moment you heard it.
- Around November, your staff vote on having a Prozac dispenser in the lounge.

# This is NOT how we encourage teachers to use best practices.



# Struggling Learners: **Four Causes** and Five Potential Cures



## Help Needed

Dr. Bobb Darnell [bobbdarnell@mac.com](mailto:bobbdarnell@mac.com)  
[www.achievementstrategies.org](http://www.achievementstrategies.org)

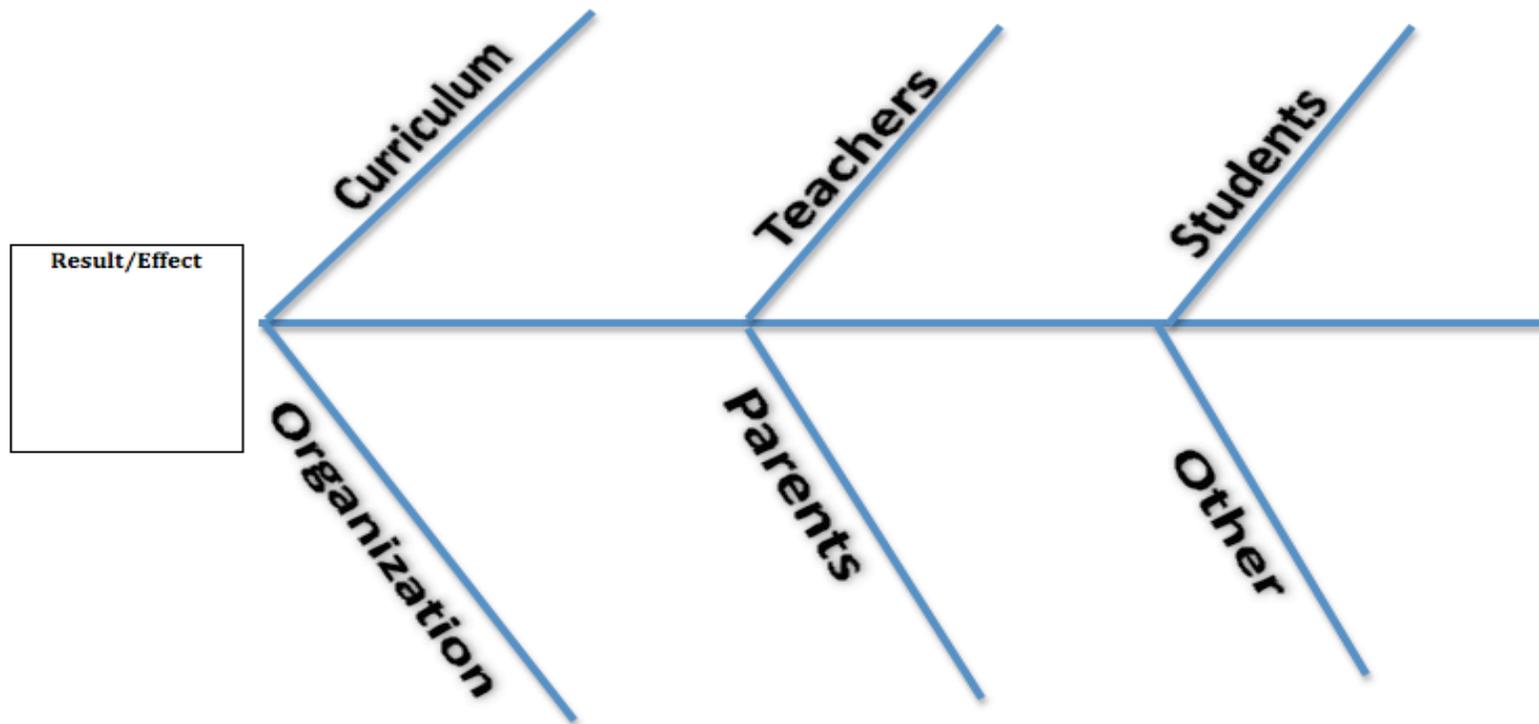
# What causes students to struggle and experience low achievement?



Think about your struggling students?

# Contributing Factors for Failure and Underachievement

Analyzing Contributing Factors/Causes  
Essential Question: Why is performance the way it is?



Did you choose these possible  
causes?

I'm proposing that struggling  
learners often. . .



1. Lack effective learning-to-learn/content skills and strategies
2. Lack effective executive functioning skills and strategies
3. Do not have a growth mindset
4. Do not have or take advantage of a success coach/coaches

Did you choose these possible causes?

I'm proposing that struggling learners often. . . .



1. Lack effective learning-to-learn/content skills and strategies
2. Lack effective executive functioning skills and strategies
3. Do not have a growth mindset
4. Do not have or take advantage of a success coach/coaches

# Why do students struggle to succeed the first time?



1. Lack of skills (Learning-to-learn, content executive functioning skills)
2. Lack of confidence (growth mindset)
3. Lack of motivation
4. Lack of perseverance/determination
5. Lack of respect for the culture of school/education
6. Lack of vision for the role school plays in career preparation or lifestyle
7. Lack of connection to positive relationships with teachers and/or peers



## Do your struggling students . . .



1. establish **improvement goals and plan**?
2. **solve academic problems** independently?
3. use **effective memory skills to follow directions** and acquire content material?
4. **organize** their materials and time?
5. **focus** their attention?
6. **self-manage** impulses?
7. **self monitor and adjust** strategies?

**Cause: Lack of well-developed executive functioning skills**



## Do your struggling students . . .



1. independently read and understand required materials?
2. solve multi-step math and science problems?
3. listen and take notes?
4. remember required content materials?
5. think critically?
6. write to learn and communicate?

**Cause: Lack of learning-to-learn skills and strategies**

# Skills to Succeed at School!

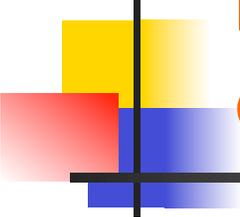
## Content Area Knowledge and Skills

### Learning-to-Learn Skills

1. Memory Storage and Retrieval
2. Note taking
3. Vocabulary Attainment and Development
4. Writing/Summarizing
5. Reading for Information and Literary Analysis
6. Solving Multi-Step Math and Scientific Problems
7. Kinesthetic Coordination

### Executive Functioning Skills

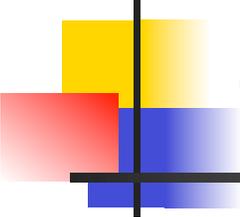
1. Goal Setting
2. Planning
3. Organization
4. Problem Solving
5. Self-Assessment/  
Monitoring
6. Focusing Attention
7. Impulse Control
8. Self-Advocacy



## I'm proposing that struggling learners often . . .

---

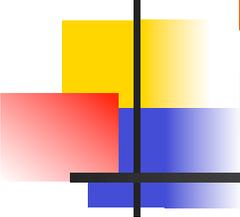
1. Lack effective learning-to-learn/content skills and strategies
2. Lack effective executive functioning skills and strategies
3. **Do not have a growth mindset**
4. Do not have or take advantage of a success coach/coaches



# Growth Mindset

---

1. Believe that abilities are not fixed and can be developed through dedication and hard work
2. Possess a love of learning and improvement
3. Choose to be resilient
4. Desire accomplishment (i.e. reach a goal, solve a compelling problem)



## I'm proposing that struggling learners . . .

---

1. Lack effective learning-to-learn/content skills and strategies
2. Lack effective executive functioning skills and strategies
3. Do not have a growth mindset
4. Do not have or take advantage of a success coach/coaches

You may have to really be inspirational to help struggling learners.



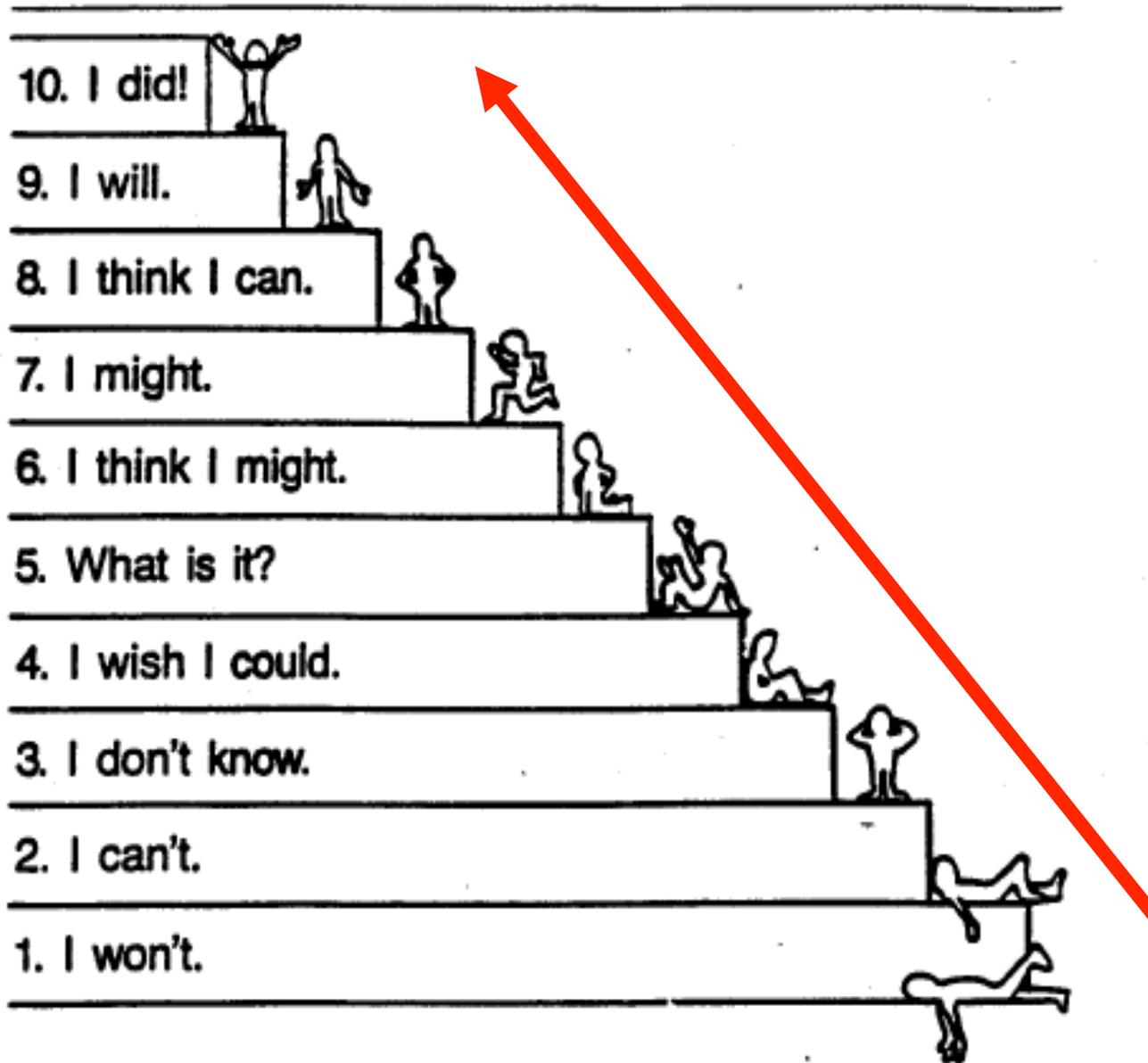
<http://www.youtube.com/watch?v=d6wRkzCW5qI>

# One Important Characteristic of a Coach



Hoosiers (1986) For educational use only

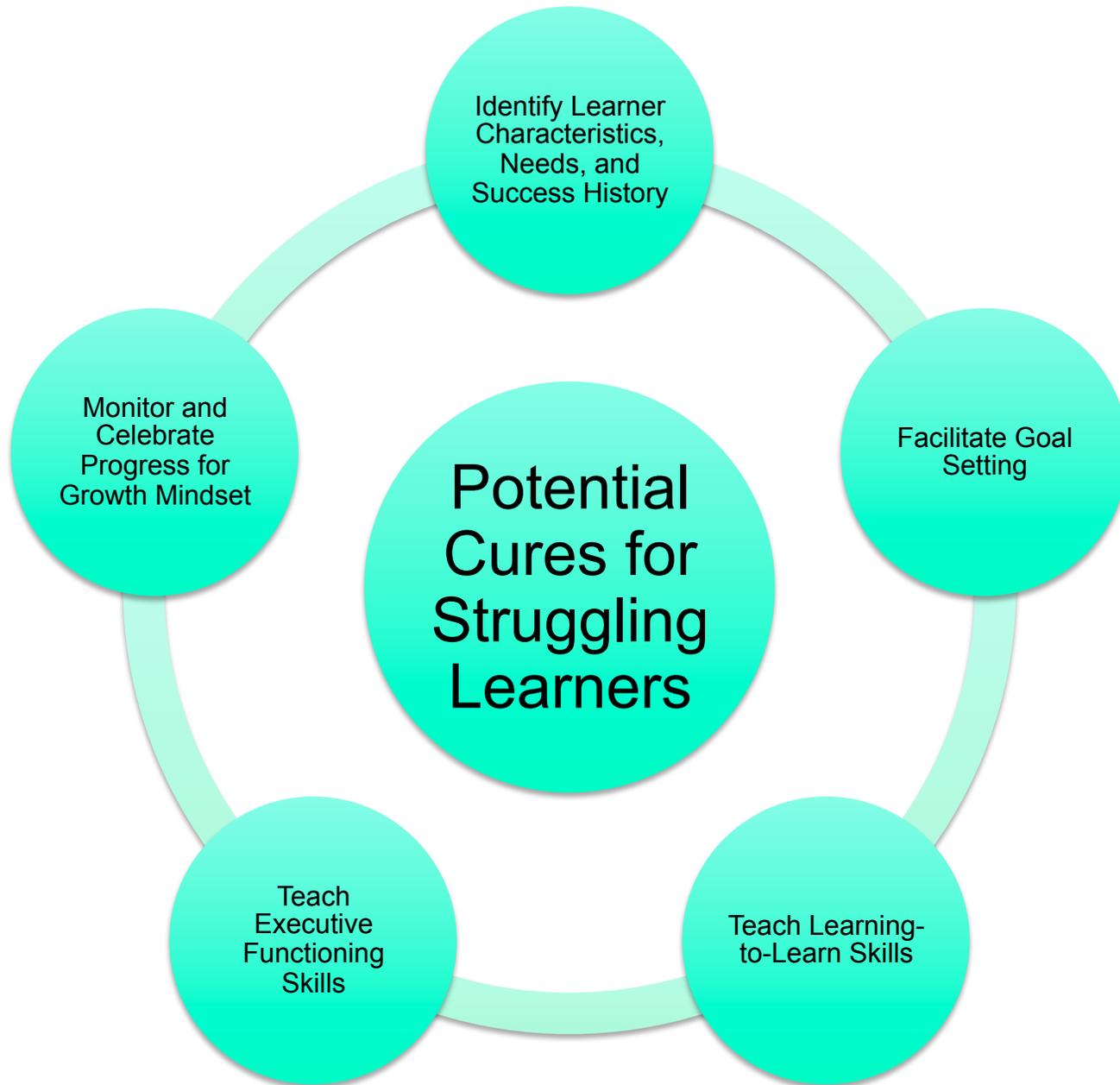
# POWER THINKING



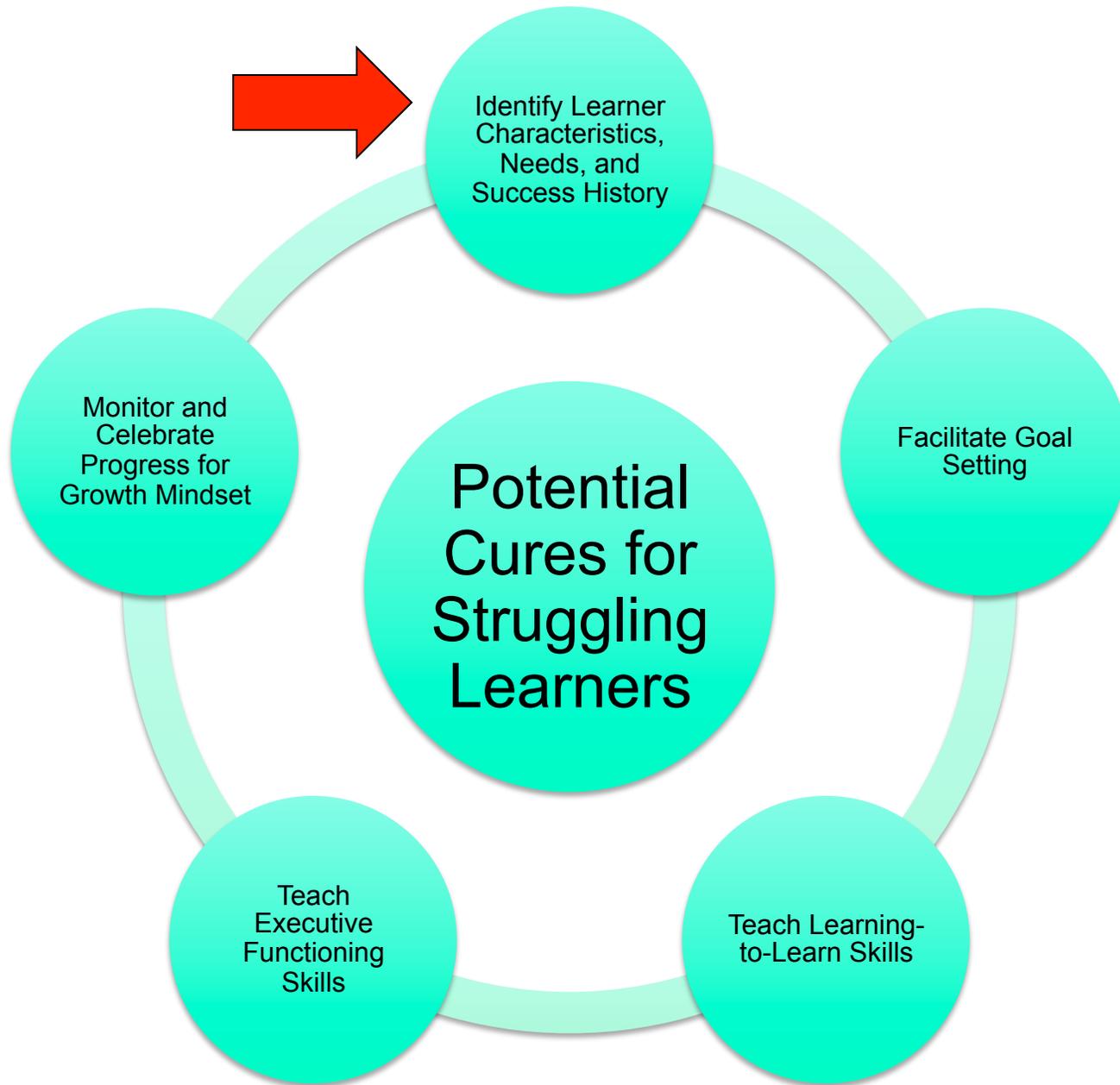
Marzano,  
Tactics in  
Thinking, 1989

# Teaching and Coaching for Success





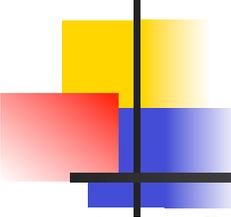
# Teaching and Coaching for Success



# Teaching and Coaching for Success

# 1 Identify student's learner needs, characteristics, and history of success.





## Collect student profile data.

---

1. Grades % and Letter Grade
2. Attendance and Tardiness
3. Behavior Referrals
4. Standardized Test Results
5. State Test Results
6. Observations Performance
7. Responsible Behaviors Observations Checklist and Executive Functioning Skills
8. Attempted, Successful, and Unsuccessful Interventions

<b>Factor</b>	<b>Results</b>	<b>Current</b>	<b>Last Year</b>	<b>Comments</b>
<b>Grades % and Letter Grade</b>	<b>English/Reading</b>			
	<b>Math</b>			
	<b>Science</b>			
	<b>Social Studies</b>			
	<b>PE</b>			
	<b>Elective</b>			
<b>Attendance and Tardiness</b>	<b>Excused</b>			
	<b>Unexcused</b>			
<b>Behavior Referrals</b>	<b>Infractions</b>			
	<b>Consequences</b>			
<b>Standardized Test Results</b>				
<b>State Test Results</b>				
<b>Observations/ Performance</b>				
<b>Responsible Behaviors Checklist Observations</b>	<b>Concerns</b>			
<b>Interventions Attempted</b>	<b>Successful</b>			
	<b>Unsuccessful</b>			

## Responsible Behaviors Rating Scale

±

Responsible Behaviors	Always	Most of the Time	Some of the Time	Rarely
<b>Is Prompt and Prepared</b>				
1. Comes on time				
2. Comes with needed materials				
3. Comes with assignments complete				
4. Accepts responsibility for identifying work missed during an absence				
<b>Respects Authority</b>				
5. Follows directions promptly				
6. Accepts responsibility for behavior				
7. Follows school rules and regulations				
<b>Respects Others</b>				
8. Uses appropriate voice and language				
9. Listens to speaker				
10. Refrains from harassment				
11. Manages and resolves disagreement and conflict				
12. Displays courtesy and tact				
13. Allows others to remain on task				
14. Works cooperatively with others to achieve group goals				
15. Values diversity				

<b>Respects Property</b>				
16. Uses facilities, equipment, and resources appropriately				
17. Requests to use the property of others				
<b>Creates/Does Quality Work</b>				
18. Understands and commits to learning goals and tasks				
19. Makes realistic plans and manages time to address questions and tasks				
20. Remains on task in independent and group situations				
21. Applies established standards while completing tasks/assignments				
22. Uses guidelines and criteria to evaluate work progress				
23. Responds productively to feedback from others by making corrections and adjustments				
24. Seeks help when needed from teachers, peers, parents, and other sources				
25. Applies problem solving strategies productively				
26. Applies decision making strategies productively				
27. Shows determination/perseverance in pursuit of a goal				
28. Controls and alters mood and impulsivity				
29. Recognizes incremental progress and celebrates success/achievement				
30. Establishes personal improvement goals and plans				

# Skills to Succeed at School!

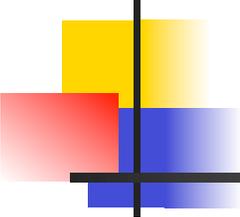
## Content Area Knowledge and Skills

### Learning-to-Learn Skills

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5. Reading for Information and Literary Analysis
6. Solving Multi-Step Math and Scientific Problems
7. Kinesthetic Coordination

### Executive Functioning Skills

1. Goal Setting
2. Planning
3. Organization
4. Problem Solving
5. Self-Assessment/  
Monitoring
6. Focusing Attention
7. Impulse Control
8. Self-Advocacy



## Identify the learning challenges and what specifically is happening when it occurs.

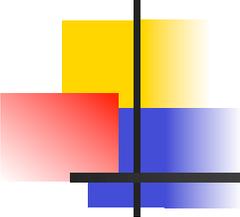
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- What is the low performance?
- When is it occurring?
- Where is it occurring?
- How is the student responding to the feedback about low performance?
- Why is performance the way it is (contributing factors)?

Identify history of interventions  
and determine their effectiveness.

---



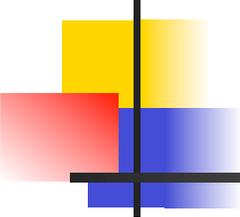


Identify the interventions that have been or are being used to address the learning challenge/problem.

---

Intervention ↔ Results

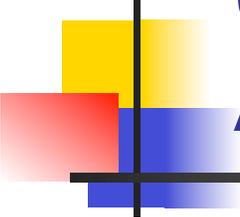
Intervention ↔ Results



# Attempted, Successful, and Unsuccessful Interventions

---

- One-on-one tutoring
- Classroom differentiation of curriculum, assessment, instruction, learning environment (Explain)
- Correctives and test re-takes and/or assignment re-dos
- Parent involvement
- After-school program
- Computer-assisted reading or math program
- At-home computer use
- Use of other support staff (e.g., special ed, paraprofessionals, psychologist, social worker)
- Explicit teaching of learning-to-learn skills/study strategies
- Other (Describe)

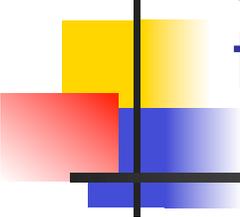


# Categories of Instructional Strategies That Affect Student Achievement

---

<b>Category</b>	<b>Percentile Gain</b>
■ <b>Identifying Similarities and Differences</b>	<b>45</b>
■ <b>Summarizing and note taking</b>	<b>34</b>
■ <b>Reinforcing effort and providing recognition</b>	<b>29</b>
■ <b>Homework and practice</b>	<b>28</b>
■ <b>Non-linguistic representations</b>	<b>27</b>
■ <b>Cooperative Learning</b>	<b>27</b>
■ <b>Setting objectives and feedback</b>	<b>23</b>
■ <b>Generating and testing hypotheses</b>	<b>23</b>
■ <b>Question, cues, and advanced organizers</b>	<b>22</b>

# Math Research: Students' performance increases when teachers . . .



---

1. Explicitly teach concept vocabulary.
2. Use non-linguistic presentations and graphic organizers.
3. Model and use tightly sequenced forms of explicit instruction.
4. Explicitly teach the use of problem representation and problem solving strategies.
5. Providing immediate feedback about incremental progress.
6. Use small group, cooperative learning, and peer tutoring.
7. Explicitly teach summarizing and writing extended responses.

# Strategies to Teach Students Text Comprehension

National Reading Panel Report (2000)

---

1. Monitoring Comprehension
2. Metacognition
3. Graphic and semantic organizers
4. Answering questions
5. Generating questions
6. Recognizing story structure
7. Summarizing
8. Reciprocal teaching
9. Cooperative learning
10. Mental Imagery

# Skills to Succeed at School!

## Content Area Knowledge and Skills

### Learning-to-Learn Skills

1. Memory Storage and Retrieval
2. Note taking
3. Vocabulary Attainment and Development
4. Writing/Summarizing
5. Reading for Information and Literary Analysis
6. Solving Multi-Step Math and Scientific Problems
7. Kinesthetic Coordination

### Executive Functioning Skills

1. Goal Setting
2. Planning
3. Organization
4. Problem Solving
5. Self-Assessment/  
Monitoring
6. Focusing Attention
7. Impulse Control
8. Self-Advocacy

What has been attempted and what has been successful and unsuccessful?

## **1. Change Content**

What students will learn and the materials that represent the content

## **2. Change Process**

Activities through which students make sense of key ideas using essential skills

## **3. Change Product**

How students demonstrate and extend what they understand and can do as a result of a span of learning

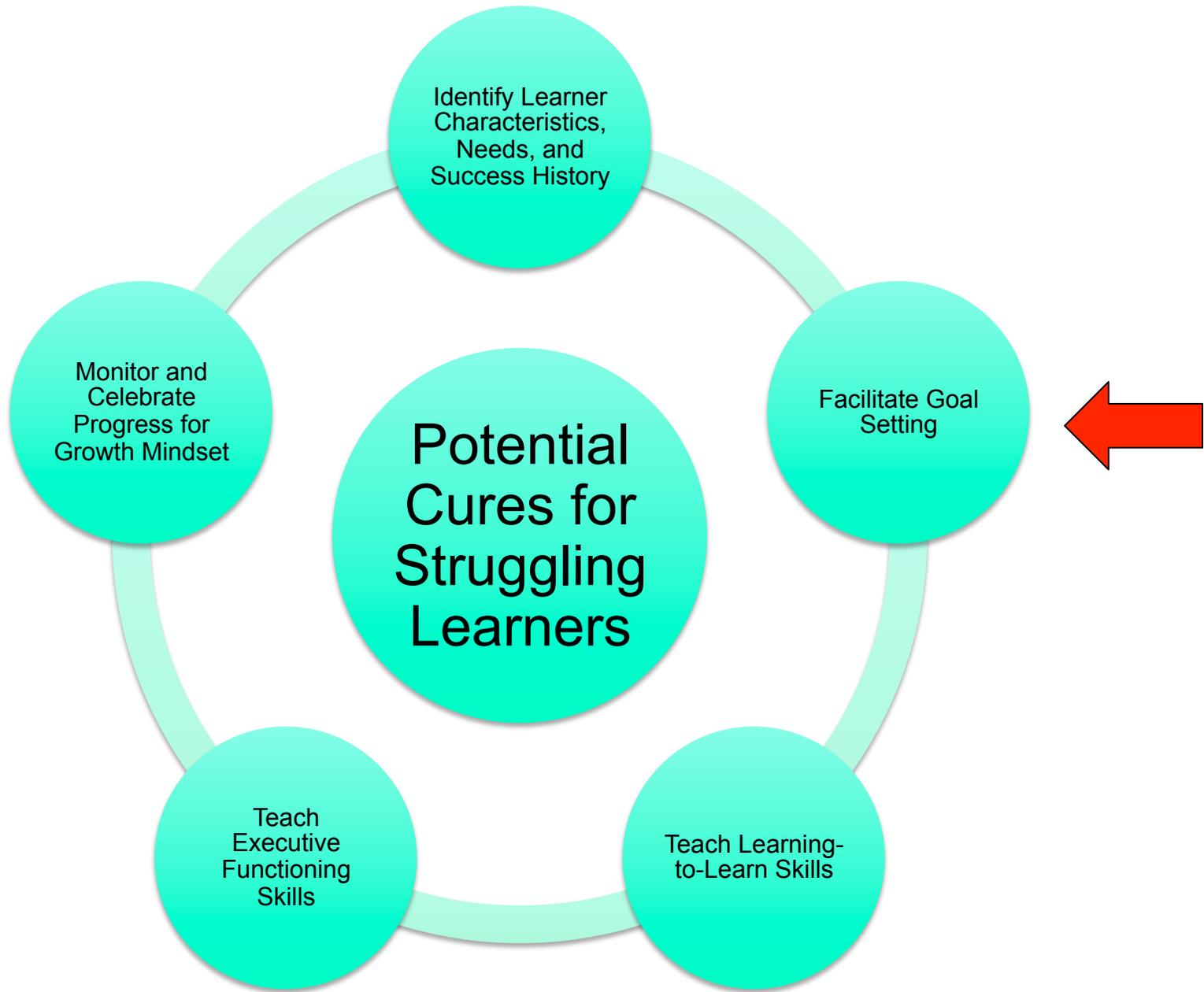
## **4. Change Environment**

The classroom conditions that set the tone expectations of learning

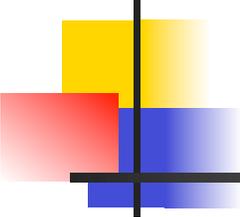
# Inventory of Interventions: Which interventions work in your school/classroom?

---





# Teaching and Coaching for Success



# 2

Coach students to establish goals, make plans, and self advocate.

---



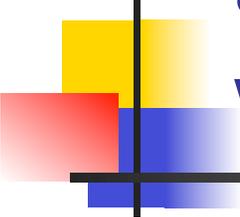
**GOAL**

**Plans**

**Support**

What is good, bad, or ugly about this conference?





If you keep on doing what you have always done you will continue to get what you always got.

---

- What do you want?
- What have you been doing to get what you want?
- What do you need to change?
- What's my plan?

Do you feel this way while working with students who are underachieving and struggling?

---

**You Say Yes**

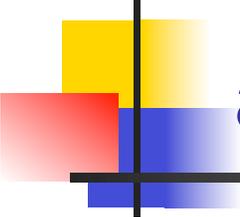


**We Can Work It Out**



Let's use what we know about how the kids today achieve when they spend a 100 hours or more to “get good” at something.

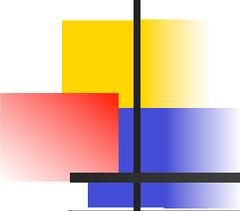
- They don't . . .
  - get grades
  - get extra credit
  - win money
  - get public acclaim
- And they rarely play a game a second time without knowing/learning . . .
  1. Objectives/goals
  2. Strategies and skills
  3. Vocabulary
  4. How well they are doing
  5. What to do better next time



This is how they “get good” at games and activities.

---





# Create a Success Plan

<b>1. Identify a short-term goal (5-10 days).</b>	<b>2. Determine indicators of success (Look fors)</b>
Subject area/class What improvement(s) is desired/needed?	<ul style="list-style-type: none"><li>• Consistent and on-time attendance</li><li>• Successful completion of in-class and homework assignments</li><li>• Grades of C and above on assessments</li><li>• Consistent participation in intervention services</li><li>• Demonstration of learning-to-learning skills and responsible behaviors</li></ul>
<b>3. Identify potential obstacles and what is needed to overcome obstacles.</b>	<b>4. What positive results might occur if the plan works?</b>
<b>5. What support/help is needed?</b>	<b>6.</b>

# Skills to Back Up a Growth Mindset

## Content Area Knowledge and Skills

### Learning-to-Learn Skills

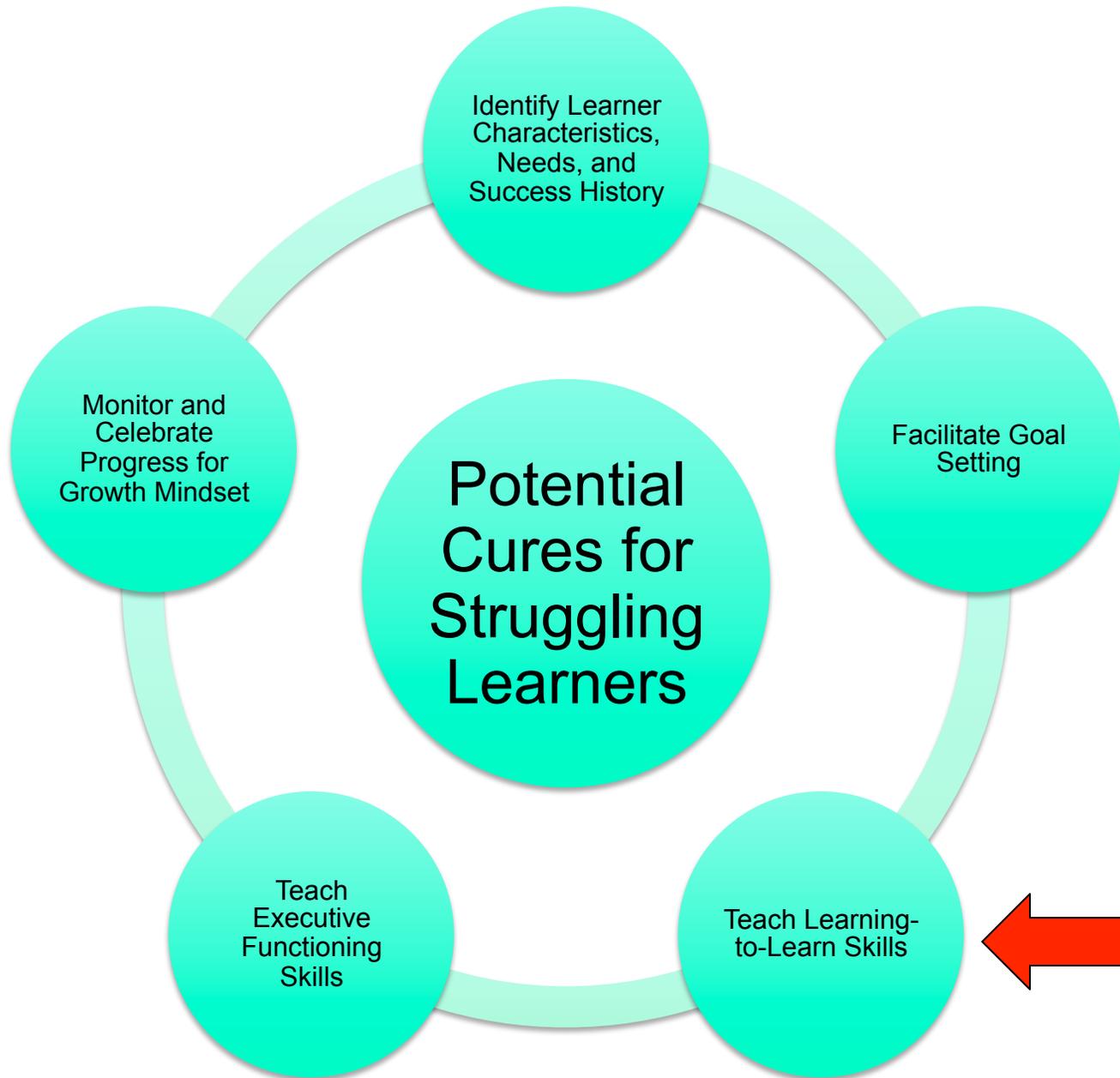
1. Memory Storage and Retrieval
2. Note taking
3. Vocabulary Attainment and Development
4. Writing/Summarizing
5. Reading for Information and Literary Analysis
6. Solving Multi-Step Math and Scientific Problems
7. Kinesthetic Coordination

### Executive Functioning Skills

1. Goal Setting
2. Planning
3. Organization
4. Problem Solving
5. Self-Assessment/  
Monitoring
6. Focusing Attention
7. Impulse Control
8. Self-Advocacy

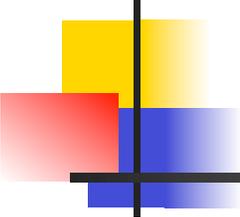
<b>(I) IDENTIFY Improvement Goal</b>	<b>(D) Determine Indicators of Success “Look-fors and Listen tos”</b>	<b>(D) Determine Measures</b>	<b>(E) Explore Methods/Strategies</b>	<b>(A) Adopt a Plan and Timeline</b>
<b>Reduce/Eliminate Student Grades Below D and Increase Graduation Rate</b>	1. Consistent and on-time attendance	•Attendance records	•Truancy Policy Enforcement •Counseling and social worker involvement •Parent communication	•Examine available interventions, policies, procedures and determine viability •Create and implement new interventions or modify existing interventions •Track and discuss progress
	2. Successful completion of in-class and homework assignments	•Homework grades •Assignment grades	1. Implement the Pyramid of Interventions 2. Explicit teaching of . . . •Learning-to-Learn Skills •Responsible Learning Behaviors 3. Teacher strategies for processing information	•Complete professional development for strategies •Track progress daily and then weekly •Use weekly protocols to discuss progress and “fine tune” strategies. •Create 30-day goals
	3. Grades of C and above on assessments	•Test and quiz results •Project/product/presentation grades	See methods/strategies for indicator 2	See indicator 2 above
	4. Consistent participation in intervention services	•Attendance at interventions (e.g., tutorials, teacher conferences) •Student corrective activities and re-assessment	•Counseling and social worker involvement •Parent communication	•Examine available interventions and determine viability •Create and implement new interventions or modify existing interventions •Track and discuss progress
	5. Demonstration of learning-to-learning skills and responsible behaviors	•Student artifacts •Student observations •Student self-assessment journals •Test and assignment results	See methods/strategies for indicator 2	See indicator 2 above

**(S) Study implementation, evaluate, adjust, and celebrate.**



# Teaching and Coaching for Success

# SD Buffets



## Hot Topics-SD Du Jour

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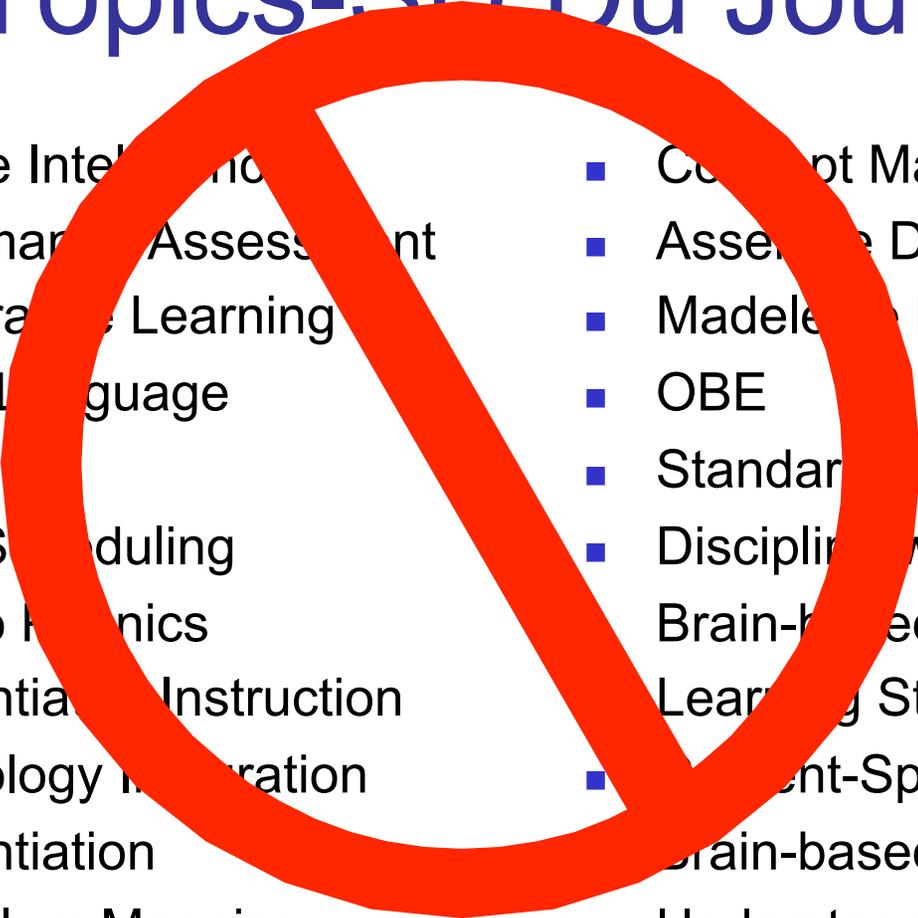
- Multiple Intelligences
- Performance Assessment
- Cooperative Learning
- Whole Language
- ESL
- Block Scheduling
- Back to Phonics
- Differentiated Instruction
- Technology Integration
- Differentiation
- Curriculum Mapping
- Concept Mapping
- Assertive Discipline
- Madeleine Hunter
- OBE
- Standards-based Learning
- Discipline with Dignity
- Brain-based Learning
- Learning Styles
- Content-Specific
- Brain-based Learning
- Understanding by Design

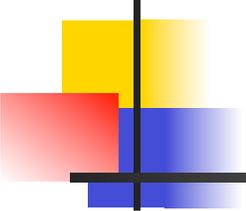
We may need change therapy.



# NO MORE SD Buffets

## Hot Topics-SD Du Jour

- 
- Multiple Intelligences
  - Performance Assessment
  - Cooperative Learning
  - Whole Language
  - ESL
  - Block Scheduling
  - Back to Basics
  - Differentiated Instruction
  - Technology Integration
  - Differentiation
  - Curriculum Mapping
  - Concept Mapping
  - Assessment Discipline
  - Madeline Hunter
  - OBE
  - Standards-based Learning
  - Discipline with Dignity
  - Brain-based Learning
  - Learning Styles
  - Student-Specific
  - Brain-based Learning
  - Understanding by Design



# **3 Explicitly teach learning-to-learn skills and strategies.**

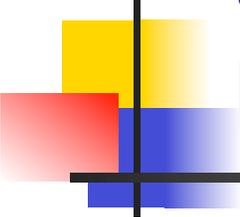
## **Learning-to-Learn Skills and Strategies**

1. Memory Storage and Retrieval
2. Note taking
3. Vocabulary Attainment and Development
4. Writing/Summarizing
5. Reading for Information and Literary Analysis
6. Solving Multi-Step Math and Scientific Problems
7. Kinesthetic Coordination

# Causing and Recognizing Growth by Teaching Skills



Karate Kid (1984) for Educational Use Only



Kids will play a video game, sport, or other activity an average of 100 hours to “get good “ at it.

---

- They don't . . .
  - get grades
  - get extra credit
  - win money
  - get public acclaim
- And they rarely play a game a second time without knowing/learning . . .
  1. Objectives/goals
  2. Strategies and skills
  3. Vocabulary
  4. How well they are doing
  5. What to do better next time

# Why do students fail to succeed the first time?



1. **Lack of skills**
2. Lack of confidence
3. Lack of motivation
4. Lack of perseverance/determination
5. Lack of respect for the culture of school/education
6. Lack of vision for the role school plays in career preparation or lifestyle
7. Lack of connection to positive relationships with teachers and/or peers

**Reduction/elimination of low achievement has to include teaching for skill development, transfer, and retention.**



**strat·e·gy**

(strāt' ə-jē) *n.*

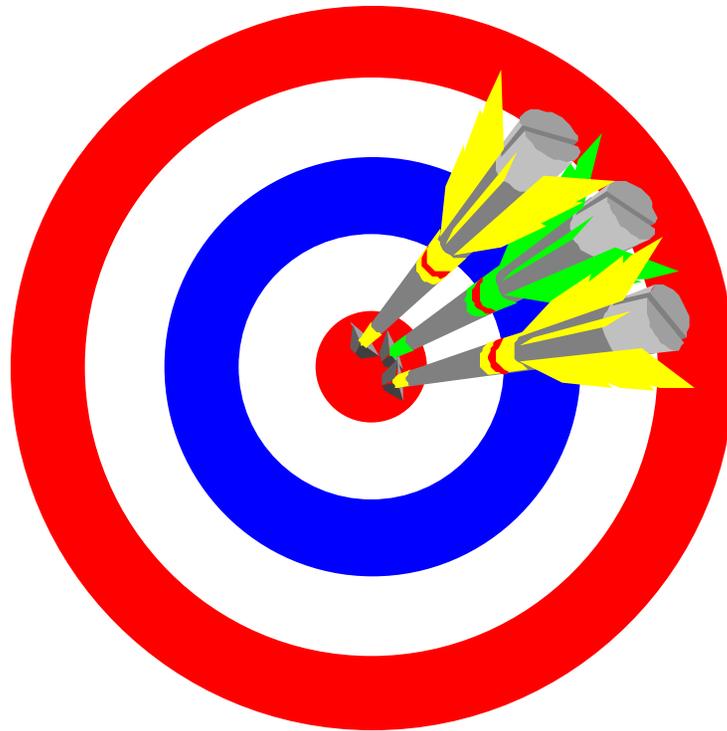
1. Plan of action  
designed to achieve  
a particular goal.

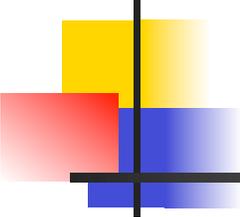
**Let's use what we know about how the kids today achieve when they spend a 100 hours or more to “get good” at something.**

- They don't . . .
  - get grades
  - get extra credit
  - win money
  - get public acclaim
- And they rarely play a game a second time without knowing/learning . . .
  1. Objectives/goals
  2. Strategies and skills
  3. Vocabulary
  4. How well they are doing
  5. What to do better next time

Here's how important it is to explicitly teach an important lesson or skill.

---





Let's feel what it is like to . . .

---

**Succeed!**

Remember as many words as you  
can.

You have 20 seconds.

**black**

**brown**

**cinnamon**

**gloves**

**canary**

**parrot**

**sweater**

**shirt**

**dove**

**green**

**garlic**

**pepper**



# How did you do?

**black**

**brown**

**cinnamon**

**gloves**

**canary**

**parrot**

**sweater**

**shirt**

**dove**

**green**

**garlic**

**pepper**

Remember as many words as you can.  
You have 20 seconds.

**vanilla**

**chocolate**

**strawberry**

**horse**

**camel**

**elephant**

**yellow**

**red**

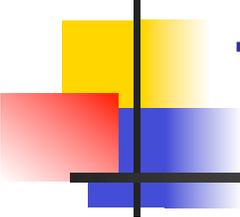
**green**

**desk**

**table**

**chair**





# Three important Questions

---

1. Did it seem like the time I gave you to study was longer for the second list?
2. Did you have more confidence in your performance on the second list?
3. Did you think the second list was easier when you first saw it?

How did you do now?

**vanilla**

**chocolate**

**strawberry**

**horse**

**camel**

**elephant**

**yellow**

**red**

**green**

**desk**

**table**

**chair**

# Grouping and Patterning

- Lesson:
  - Students can increase their comprehension and recall when they group information and identify patterns.

Most people remember the right side better than the left side in a timed test.

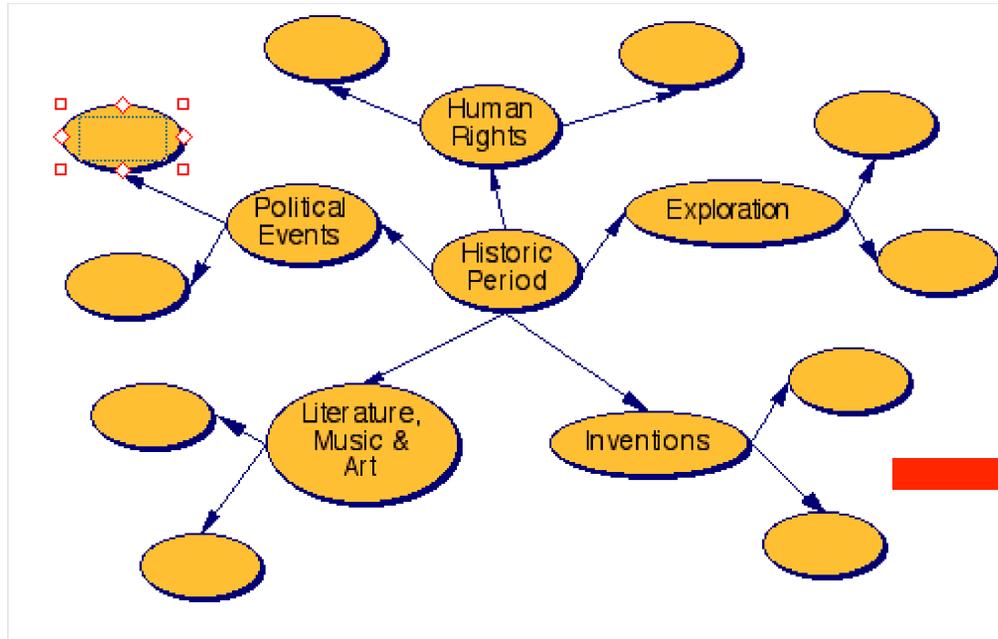
<b>black</b>	<b>brown</b>
<b>cinnamon</b>	<b>gloves</b>
<b>canary</b>	<b>parrot</b>
<b>sweater</b>	<b>shirt</b>
<b>dove</b>	<b>green</b>
<b>garlic</b>	<b>pepper</b>

<b>vanilla</b>	<b>horse</b>
<b>chocolate</b>	<b>camel</b>
<b>strawberry</b>	<b>elephant</b>
<b>yellow</b>	<b>desk</b>
<b>red</b>	<b>table</b>
<b>green</b>	<b>chair</b>

This is like the silverware drawer in your home.



A graphic organizer is a tool used to construct meaning and provide evidence of learning.



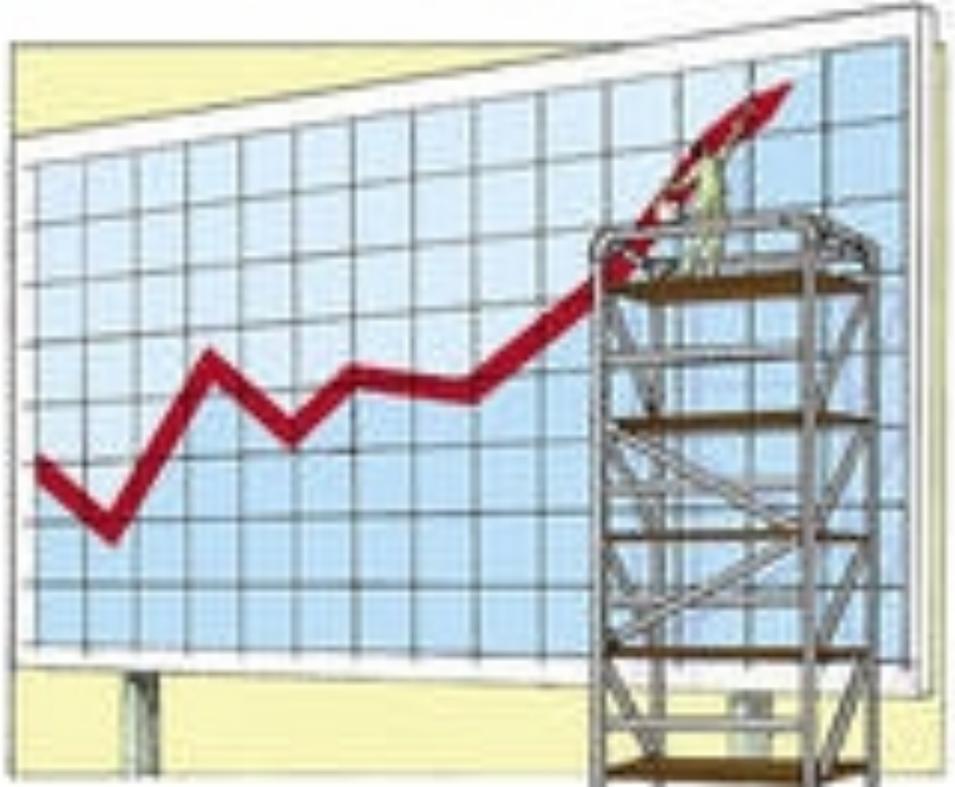
1. Main Idea Identification and Summary
2. Significant Detail
3. Sequential/Order Relationships
4. Comparative Relationships
5. Cause-Effect Relationships
6. Problem-solution relationships
7. Meanings of Words
8. Generalizations/Drawing Conclusions
9. Author's Voice and Method
10. Interpreting Instructions
11. Using Maps, Charts, and Graphs
12. Literary Analysis

**and**  
**Content Area Learning**

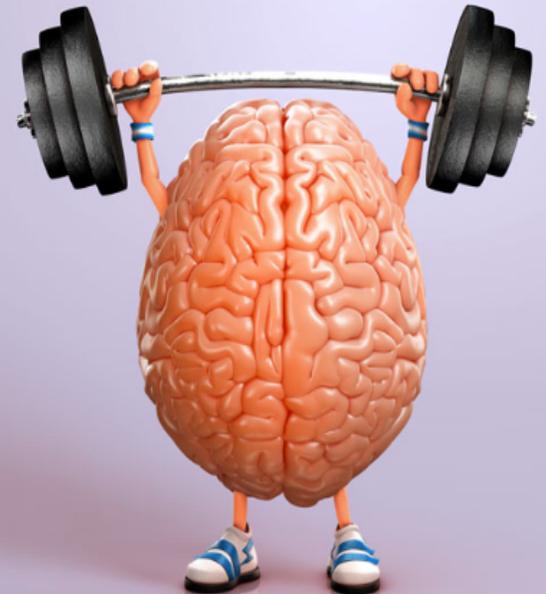
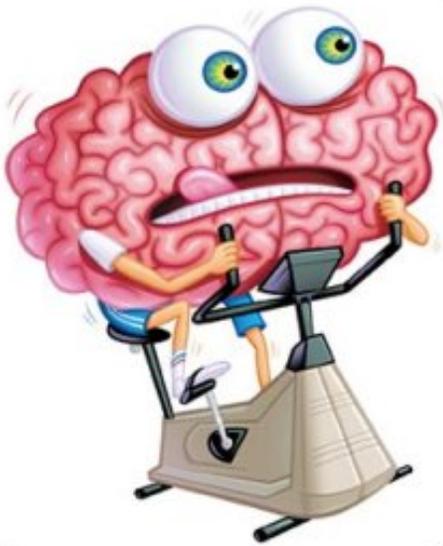
# The Brain and Successful Learning

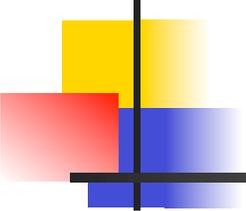
Neurotransmitter	Purpose and Result
<b>Noradrenalin</b>	Arousal Energy Drive Excitement
<b>Serotonin</b>	Calming neurotransmitter important to the maintenance of good mood
<b>Acetylcholine</b>	Focus Memory Feelings of pleasure
<b>Dopamine</b>	Pleasure Reward Good Feelings towards others

# Scaffolding Skills and Content



# Train the Brain

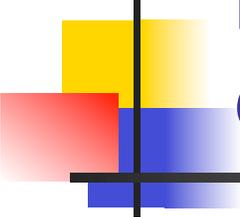




# 3 Explicitly teach learning-to-learn skills and strategies.

## Learning-to-Learn Skills and Strategies

1. Memory Storage and Retrieval
2. Note taking
- 3. Vocabulary Attainment and Development**
4. Writing/Summarizing
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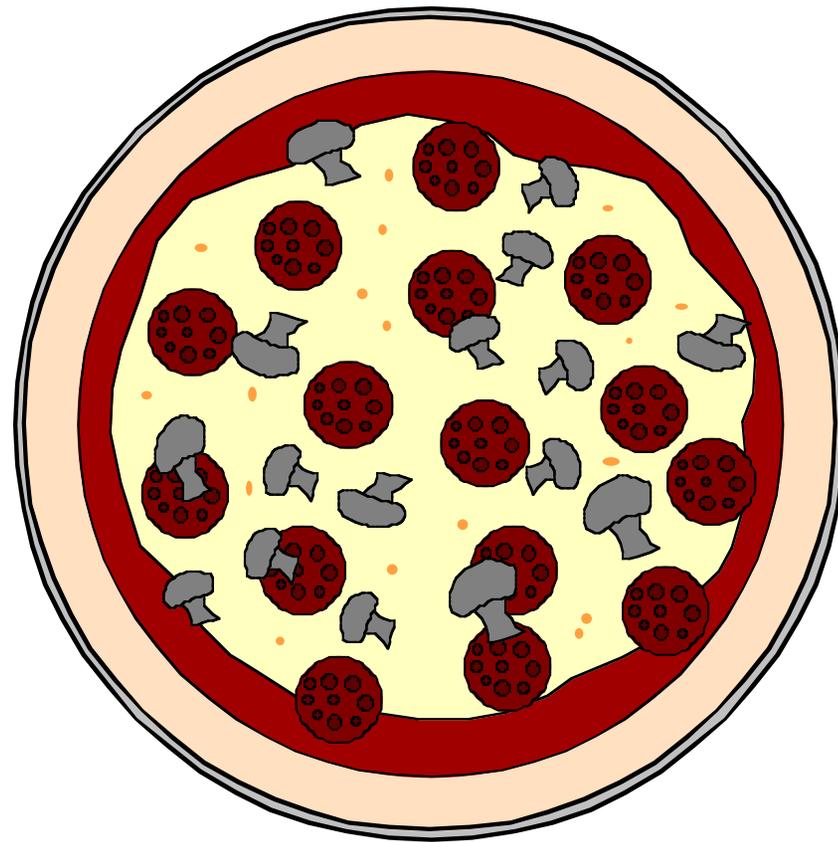


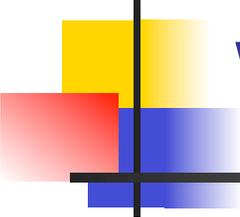
# Reading, observing, & listening to information to identify, understand, communicate, and use . . .

---

1. Main/Central Idea
2. Significant Details/  
Evidence
3. Sequential/Order  
Relationships
4. Comparison Relationships
5. Cause and Effect  
Relationships
6. **Knowledge of  
vocabulary/key terms**
7. Generalizations and  
Conclusions
8. Problem-Solution  
Relationships
9. Multi-step Instructions/  
Directions
10. Author's Purpose,  
Techniques, Claims,  
Views, and Arguments
11. Knowledge of Maps,  
Charts, and Graphs
12. Literary Analysis
13. Information from  
Researching

Think about pizza for the next 30 seconds.





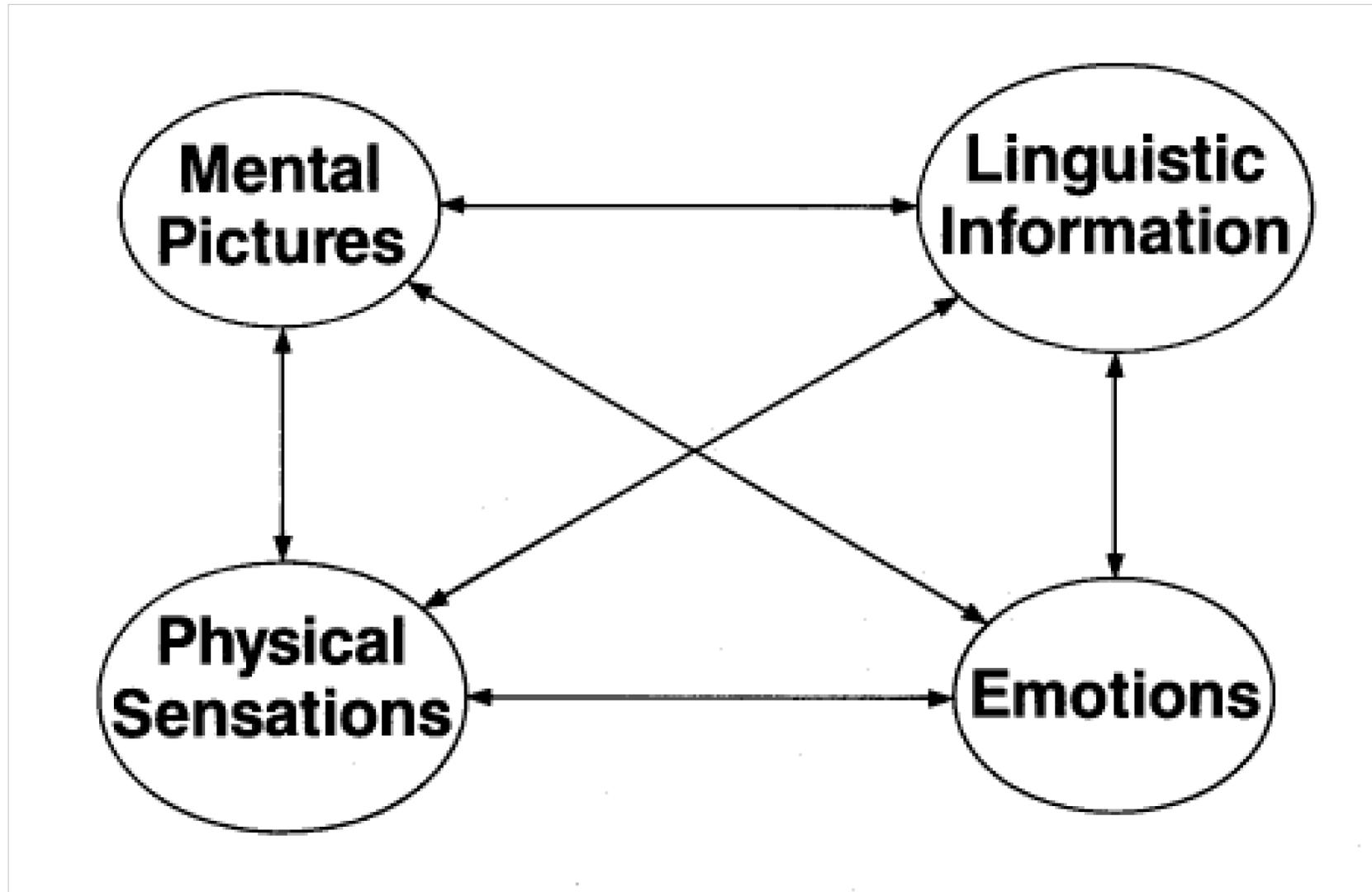
# What was your pizza like?

---

- Tell your partner about your pizza

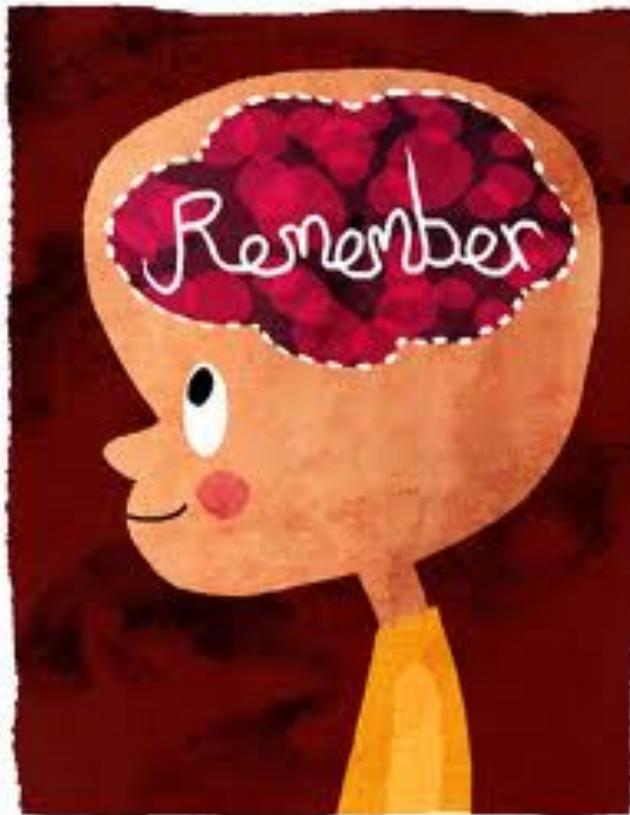


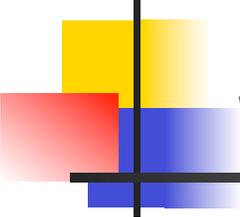
# Diagram of a Concept.



# How do you address the need for skills to . . .

- remember/retain knowledge?

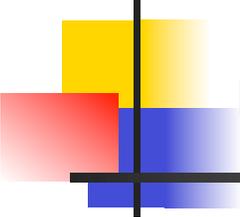




# Vocabulary Knowledge and Skills

---

1. Word Recognition (Sight words)
2. Word Origins (Roots, Prefixes, and Suffixes)
3. Context Clues
4. **Memory and Retrieval**
5. Using Words in Writing



# Select items to be remembered and understood.

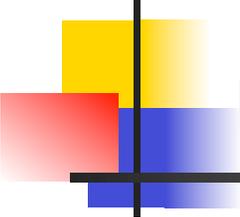
---

- species
- population
- community
- ecosystem
- biome
- biosphere
- exponential growth
- boom and bust
- carrying capacity
- biomagnification
- extinction
- pollution
- commensalism
- mutualism
- competition
- predation

Organize content vocabulary and concepts visually (graphic organizer) into logical chunks/ categories.

<b>Populations</b>	<b>Ecological Relationships</b>	<b>Food Chains and Webs</b>	<b>Ecosystems</b>
<ul style="list-style-type: none"> <li>•species</li> <li>•population</li> <li>•community</li> <li>•ecosystem</li> <li>•biome</li> <li>•biosphere</li> </ul>	<ul style="list-style-type: none"> <li>• exponential growth</li> <li>• boom and bust</li> <li>• carrying capacity</li> <li>• biomagnification</li> <li>• extinction</li> <li>• pollution</li> <li>• commensalism</li> <li>• mutualism</li> <li>• competition</li> <li>• predation</li> </ul>	<ul style="list-style-type: none"> <li>• producer</li> <li>• primary consumer</li> <li>• secondary consumer</li> <li>• decomposer</li> <li>• scavenger</li> <li>• energy flow</li> <li>• energy pyramid</li> </ul>	<ul style="list-style-type: none"> <li>• climate</li> <li>• weather</li> <li>• biotic factors</li> <li>• abiotic factors</li> <li>• nutrients</li> <li>• matter</li> <li>• cycles</li> </ul>





# Take notes using the three-column notetaking system including.

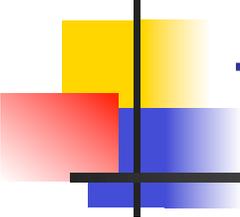
---

- Helps students document words, definitions, and memory cues in an organized way.
- Provides an organized format for drill and practice.
- Gives credibility to saving foundation knowledge.
- Teaches and models effective notetaking.

## **The Three-Column Format**

<b>Word</b>	<b>Definition</b>	<b>Memory Cue</b>

--	--	--



See if you can remember  
these items.

---

one -- bun

six -- sticks

two -- shoe

seven -- heaven

three -- tree

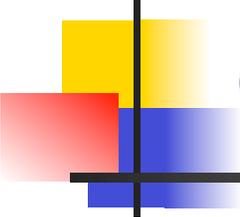
eight -- gate

four -- door

nine -- line

five -- hive

ten -- hen



# Can you remember?

---

**one**

**two**

**three**

**four**

**five**

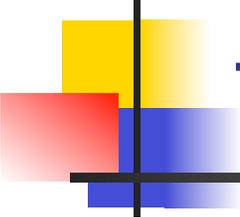
**six**

**seven**

**eight**

**nine**

**ten**



See if you can remember  
these items.

---

one -- bun

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eight -- gate

four -- door

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ten -- hen

# The Brain and Successful Learning

Neurotransmitter	Purpose and Result
<b>Noradrenalin</b>	Arousal Energy Drive Excitement
<b>Serotonin</b>	Calming neurotransmitter important to the maintenance of good mood
<b>Acetylcholine</b>	Focus Memory Feelings of pleasure
<b>Dopamine</b>	Pleasure Reward Good Feelings towards others

# You will remember when . . .

- Visual images



- Auditory images



- Movement images



- Tactile images

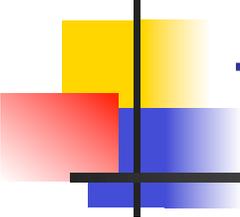


- Smell and taste images



- Emotional images





See if you can remember  
these items.

---

one -- bun

six -- sticks

two -- shoe

seven -- heaven

three -- tree

eight -- gate

four -- door

nine -- line

five -- hive

ten -- hen

# The Three-Column Format

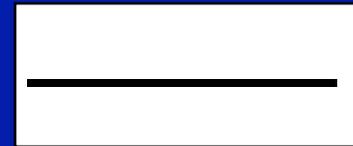
**Word**

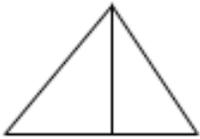
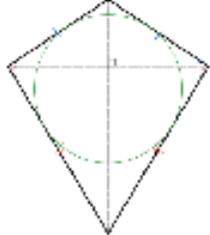
**Definition**

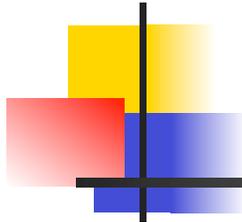
**Memory Cue**

crease

The end point  
before the goal



Word/Concept/Important Person, Event, or Big Idea	Meaning/Definition/Explanation	Memory Cue
<u>median</u> of a Triangle	Segment from the vertex of the triangle to the midpoint on the opposite side  (vertex-points where the lines (segments meet) <u>midpoint</u> is the middle of the triangle	 <div data-bbox="1270 418 1638 527" style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">           Visual is the middle of the triangle         </div>
<u>isosceles trapezoid</u>	A trapezoid whose two nonparallel sides are the same length  Trapezoid is a 4 sided figure with 2 sides parallel	
<u>kite</u>	Is a 4 sided figure with two pairs of congruent (equal) sides that are across from each other ( <u>adjacent</u> )	
<u>rhombus</u>	A four-sided polygon having all four sides of equal length.  Square is a four-side polygon having all four sides of equal length plus four right angles	
<u>parallelogram</u>	Is a quadrilateral with both pairs of opposite sides parallel but all four sides are not equal	

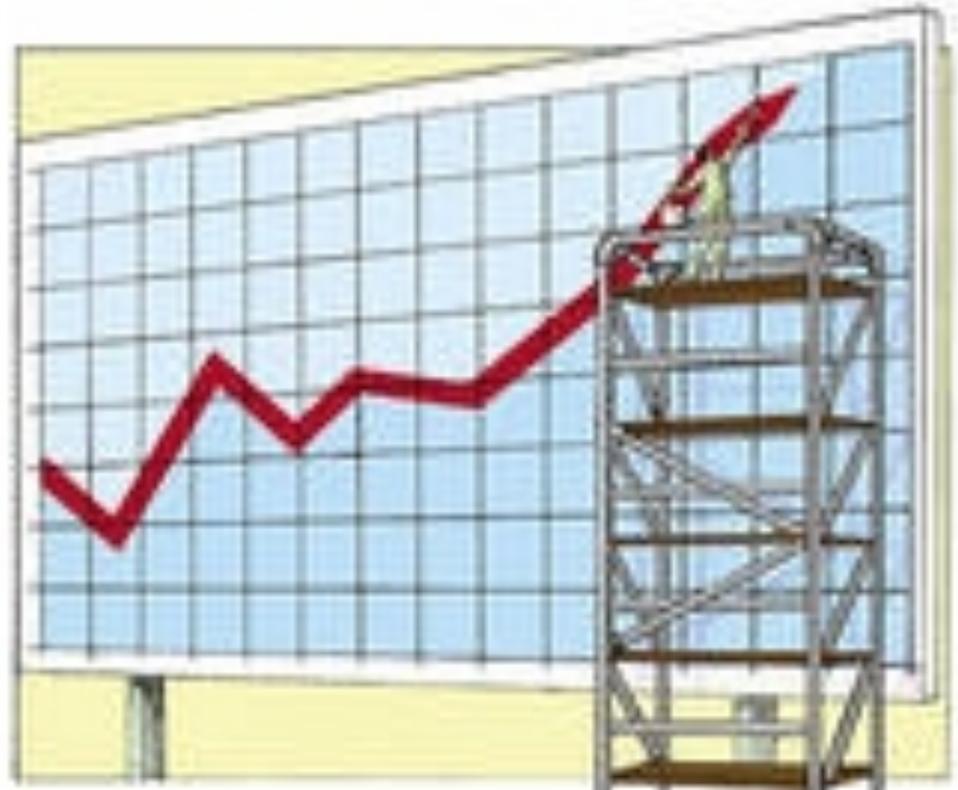


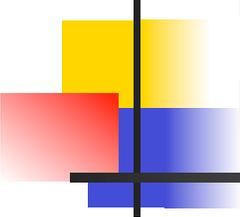
# Practice

---

Word	Explanation	Memory Cue
nefarious	utterly immoral or wicked	

# Scaffolding Skills and Content

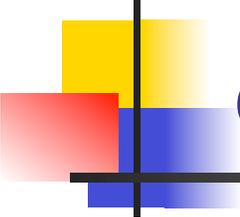




# Here's how to get students to remember concept words and their meanings.

---

1. Select and teach approximately 5-7 words each day.
2. Students go home with their three column format and study the words for approximately 10-15 minutes.
3. Students pair up and test each other for 1-2 minutes each.
4. Ask the students to talk about their progress and to share memory cues.

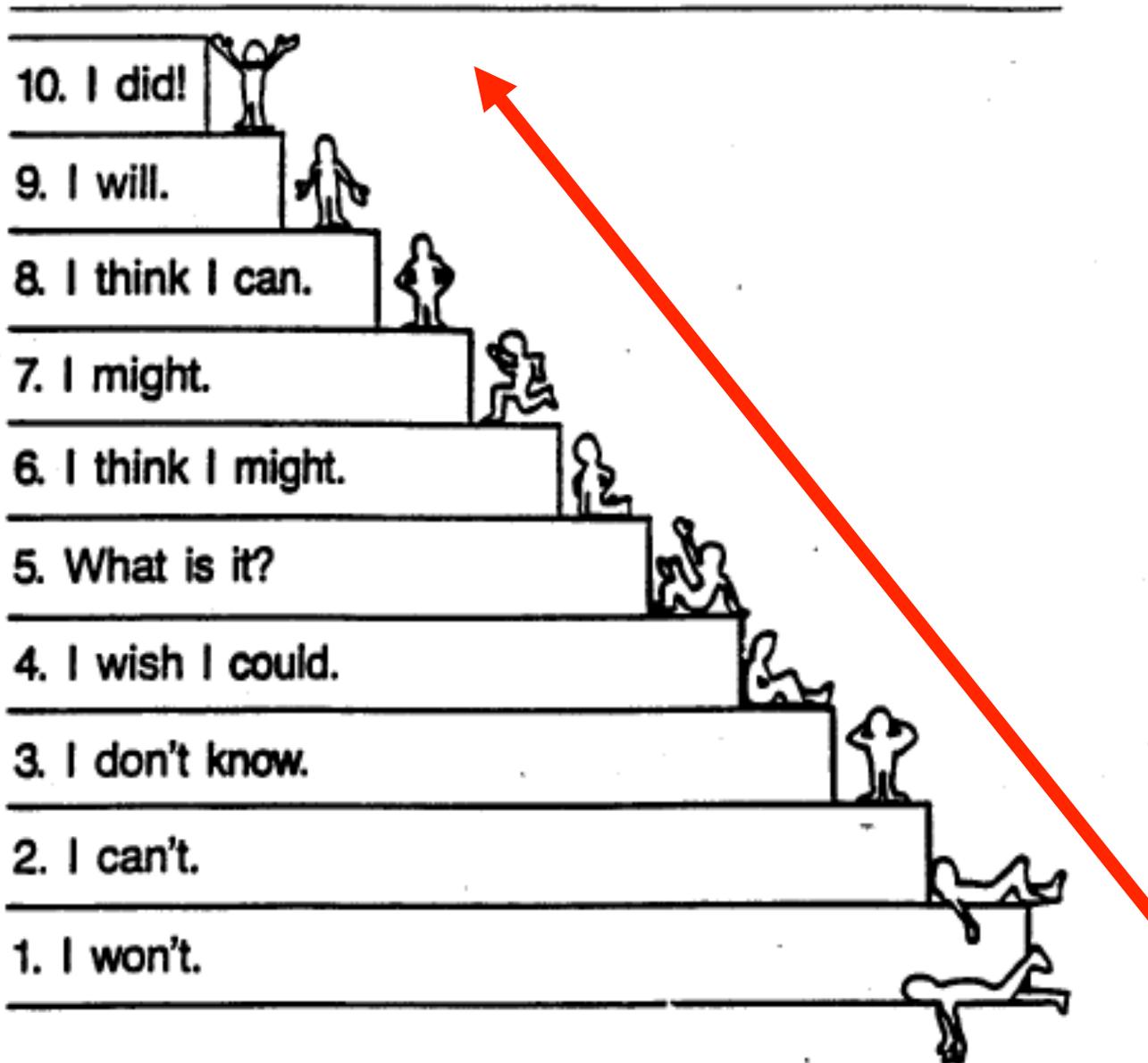
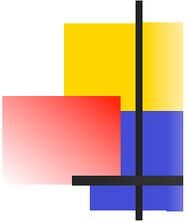


## Continue the process of teaching effective memory strategies.

---

5. Students go home and review the previous words and learn 5-7 new words.
6. Students pair up and test each other for 1-2 minutes each.

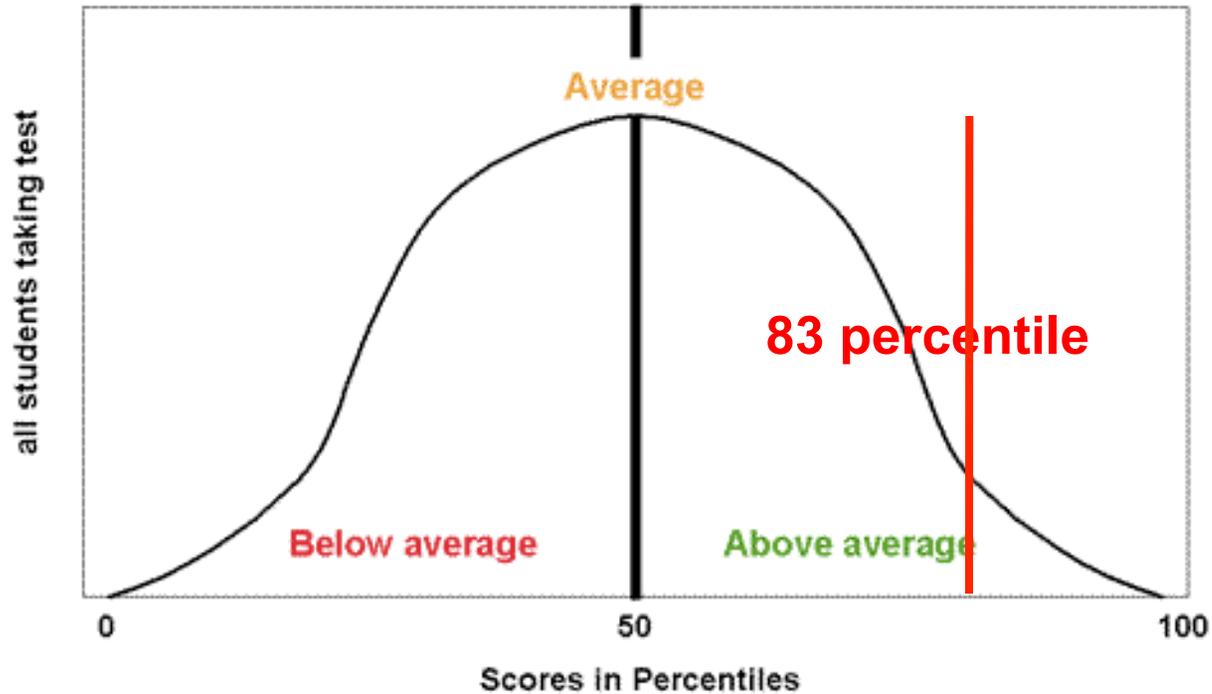
# POWER THINKING



Marzano,  
Tactics in  
Thinking, 1989

# The Bell Curve

Norm-referenced Tests (NRTs) are designed to compare student performance to other students



**Explicitly teaching  
academic vocabulary  
(33 percentile  
increase)**

desserts

angel

lychee

decaffeinated

foods

Shark

corn

pods

brisket

Red Delicious

vegetable

meat

crammed

peaches

tender

fruits

banana

skin

ice cream

Chiquita

chocolate

Diet Rite

ground

beans

cob

artichoke

soda

apples

peas

green

cake

tea

seeds

coffee

orange

chopped

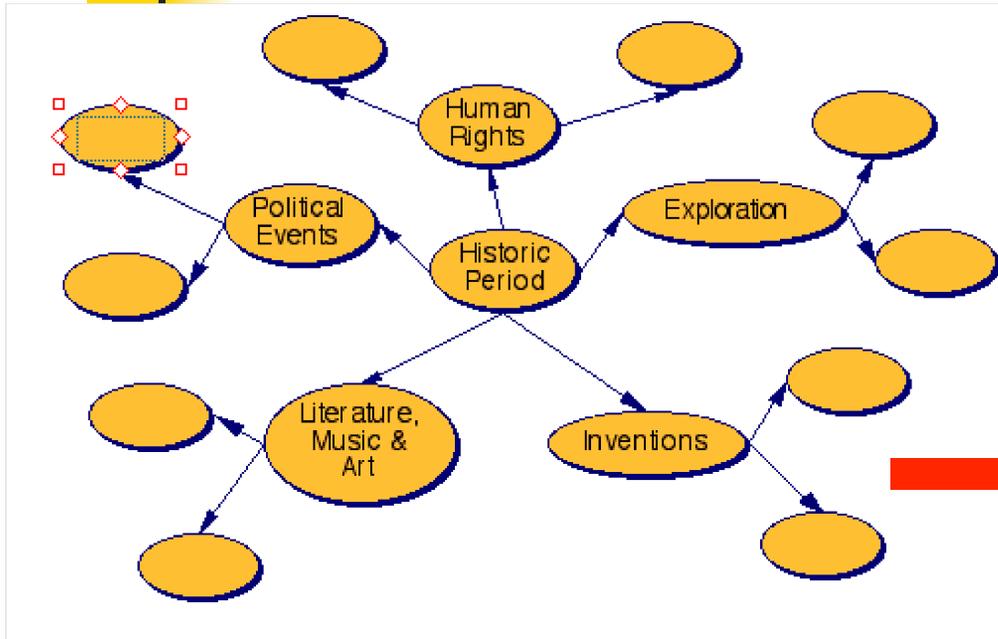
frappe'

lychee

agneau

Desserts	Meat	Beverages	Vegetable	Fruits
Angel cake ice cream chocolate	tender ground chopped brisket skin agneau	decaffeinated Shark Diet Rite tea soda coffee frappe'	corn pods seeds artichoke peas creamed beans cob green	Red Delicious apples peaches banana lychee orange Chiquita

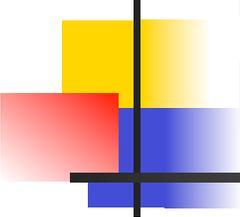
A graphic organizer is a tool used to construct meaning and provide evidence of learning.



1. Main Idea Identification and Summary
2. Significant Detail
3. Sequential/Order Relationships
4. Comparative Relationships
5. Cause-Effect Relationships
6. Problem-solution relationships
7. Meanings of Words
8. Generalizations/Drawing Conclusions
9. Author's Voice and Method
10. Interpreting Instructions
11. Using Maps, Charts, and Graphs
12. Literary Analysis

**and**  
**Content Area Learning**





# What will you do to teach and reinforce vocabulary skills and word knowledge?

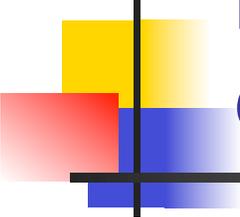
---

1. Word Recognition (Sight words)
2. Word Origins (Roots, Prefixes, and Suffixes)
3. Context Clues
4. Memory and Retrieval
5. Using Words in Writing

**Activities and Strategies ????????**

Succeeding in school is all  
about . . .



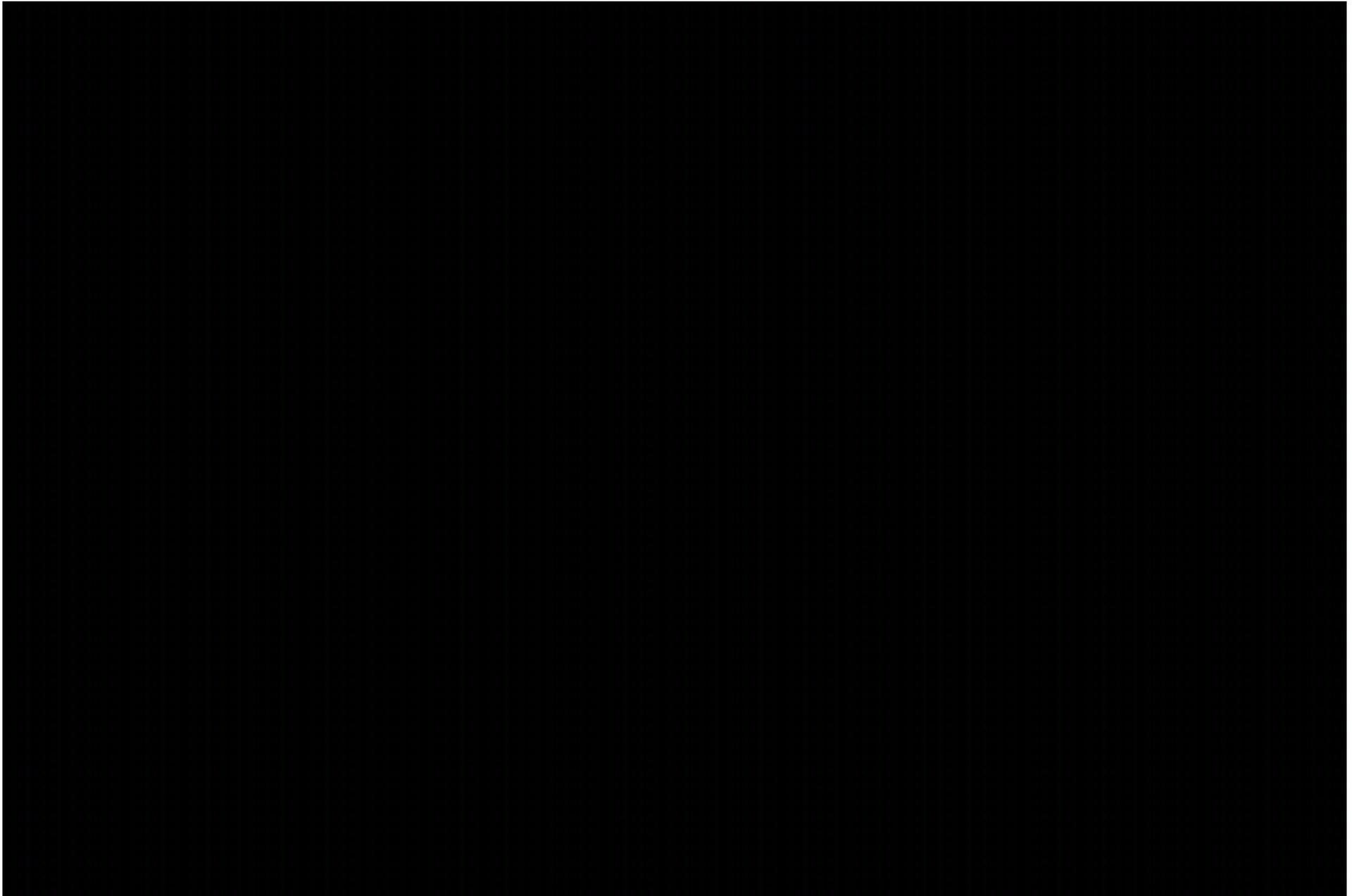


# Reading, observing, & listening to information to identify, understand, communicate, and use . . .

---

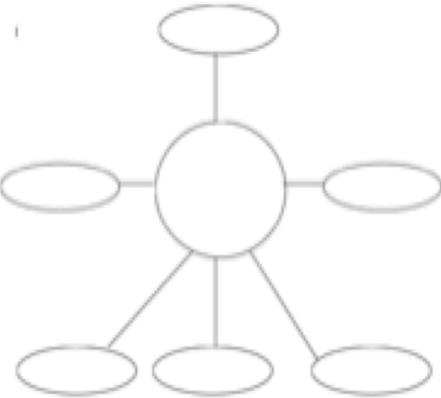
1. Main/Central Idea
2. Significant Details/  
Evidence
3. Sequential/Order  
Relationships
4. Comparison Relationships
5. Cause and Effect  
Relationships
6. Knowledge of vocabulary/  
key terms
7. Generalizations and  
Conclusions
8. Problem-Solution  
Relationships
9. Multi-step Instructions/  
Directions
10. Author's Purpose,  
Techniques, Claims,  
Views, and Arguments
11. Knowledge of Maps,  
Charts, and Graphs
12. Literary Analysis
13. Information from  
Researching

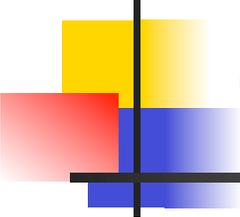
# If They Could Only Think and Discuss



# Select a standard and related skill.

<b>Select a matching graphic organizer.</b>	<b>Select a summary template and purpose.</b>	<b>Select question prompts.</b>	<b>Learn how to use a matching hand signal.</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

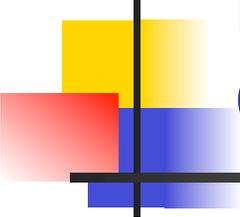
<b>Graphic Organizer</b>	<b>Summary Template</b>	<b>Questions</b>	<b>Hand Signal/ Movement</b>
<p data-bbox="262 917 451 954"><b>Bubble Map</b></p> 	<p data-bbox="625 876 913 1047">The main idea of this passage is _____. The author stated that _____.</p> <p data-bbox="625 1096 913 1323">The passage/article also mentioned that _____. In addition, (another idea) _____.</p> <p data-bbox="625 1331 913 1453">Finally, the passage/article stated _____.</p>	<ol data-bbox="955 876 1722 1502" style="list-style-type: none"> <li>The main point of the article is . . .</li> <li>Summarize what you read.</li> <li>The main theme of the story is . . .</li> <li>List the facts regarding . . .</li> <li>The text is about . . .</li> <li>The story/article mainly tells . . .</li> <li>Which of the following best expresses the main idea? <u>A</u> B C D E</li> <li>On the basis of information in the passage, we can determine that . . .</li> <li>What would be the best title for this passage?</li> <li>Which statement best expresses the central idea of this passage?</li> <li>The main idea expressed in this passage is . . .</li> </ol>	<p data-bbox="1764 876 1942 1136">Hold a fist (main idea) and dangle and wiggle fingers (details).</p>



# EXPLICIT TEACHING and Guided Practice

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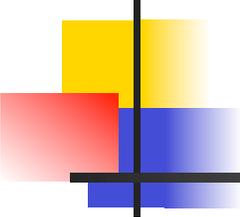
1. I do
2. We do
3. I Do
4. We do
5. I do
6. You do
7. Closure
8. The next day



# Making Reading/Thinking Skill Connections with Content

---

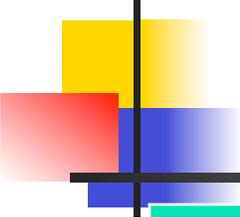
1. Main/Central Idea
2. Significant Details/  
Evidence
3. Sequential/Order  
Relationships
4. Comparison Relationships
5. Cause and Effect  
Relationships
6. Knowledge of vocabulary/  
key terms
7. Generalizations and  
Conclusions
8. Problem-Solution  
Relationships
9. Multi-step Instructions/  
Directions
10. Author's Purpose,  
Techniques, Claims,  
Views, and Arguments
11. Knowledge of Maps,  
Charts, and Graphs
12. Literary Analysis
13. Information from  
Researching



I will be able to . . . /I can . . .

---

- identify and summarize the main idea and details.
- identify central themes about the history of the world.



# Main/Central Idea



---

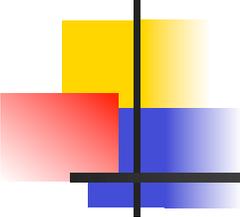
**Detail**

**Detail**

**Detail**

**Detail**

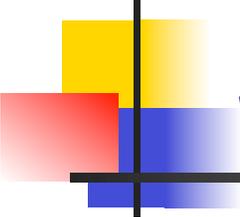
**Detail**



# Main/Central Idea and Details

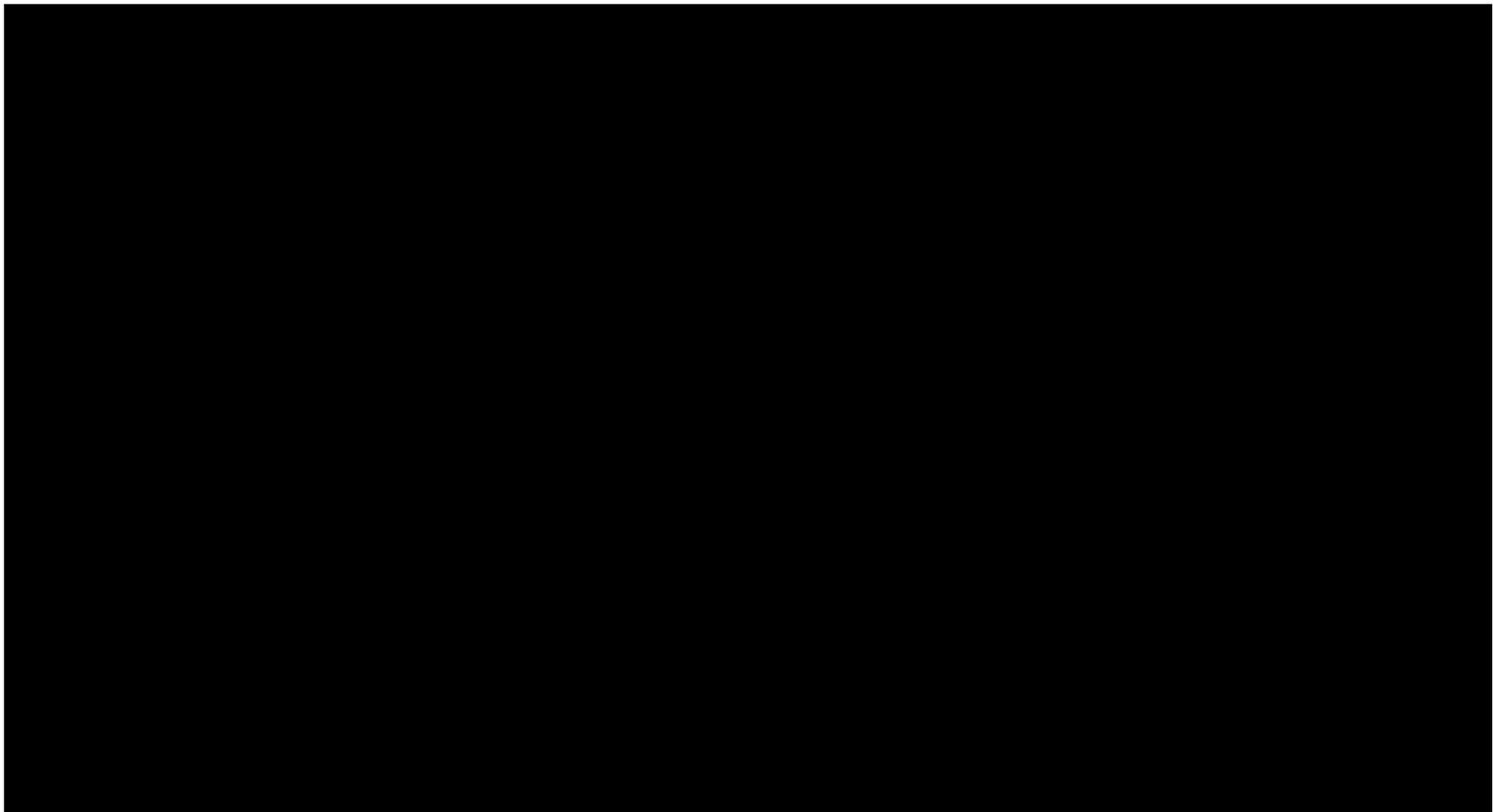
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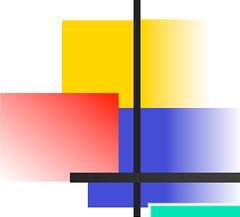
One main idea of the History of the World video is that humankind has been innovative/inventive. One example of that idea is when the floppy disk was invented. Another example of innovation/inventiveness was \_\_\_\_\_. In addition, innovation and inventiveness was illustrated when \_\_\_\_\_. Finally, innovation and inventiveness was shown when \_\_\_\_\_



# Start Small! Three to six- Sentence Summaries

---





# Main/Central Idea



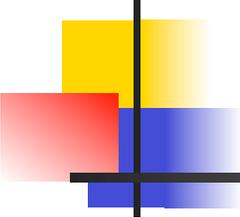
**Detail**

**Detail**

**Detail**

**Detail**

**Detail**



# Main/Central Idea and Details

---

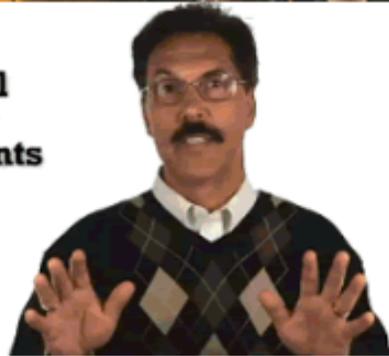
One main idea of the History of the World video is that humankind has been innovative/inventive. One example of that idea is when the floppy disk was invented. Another example of innovation/inventiveness was \_\_\_\_\_. In addition, innovation and inventiveness was illustrated when \_\_\_\_\_. Finally, innovation and inventiveness was shown when \_\_\_\_\_.

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Environments**



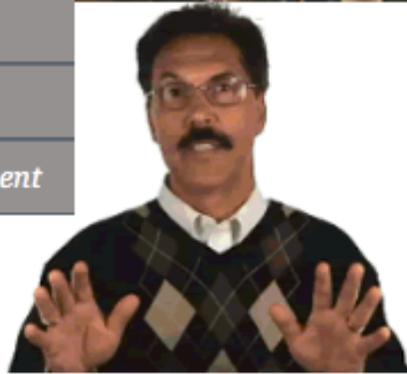
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Dr. Bobb Darnell | email: [bobbdarnell@achievementstrategies.org](mailto:bobbdarnell@achievementstrategies.org) | 847.452.4300

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## ***Instruction***



*English Language Arts and Content Area Literacy*

*Math*

*Technology*

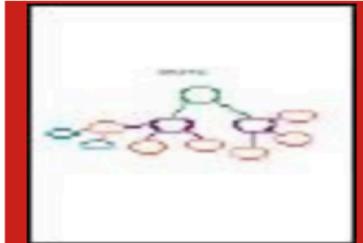
*English Language Learners*

<b>Reading Skills</b>	<b>Graphic Organizers</b>	<b>Summary Templates</b>	<b>Questions/Prompts</b>	<b>Hand Signals</b>
1. <i>Main/Central Idea</i>	<ul style="list-style-type: none"> <li>• spider map</li> <li>• network tree map</li> <li>• cluster map</li> <li>• bubble map</li> </ul>	<ul style="list-style-type: none"> <li>• main idea paragraph and two-sentence summary</li> <li>• MEL-Con</li> </ul>	<ul style="list-style-type: none"> <li>• main/central idea</li> </ul>	<ul style="list-style-type: none"> <li>• Hold a fist (main idea) and dangle and wiggle fingers (details).</li> </ul>
2. <i>Significant Details/Evidence</i>	<ul style="list-style-type: none"> <li>• spider map</li> <li>• network tree map</li> <li>• cluster map</li> <li>• bubble map</li> <li>• w's chart</li> </ul>	<ul style="list-style-type: none"> <li>• topic sentence evidence/detail</li> <li>• MEL-Con</li> </ul>	<ul style="list-style-type: none"> <li>• significant details/evidence</li> </ul>	<ul style="list-style-type: none"> <li>• Dangle and wiggle fingers (details)</li> </ul>
3. <i>Sequential/Order Relationships</i>	<ul style="list-style-type: none"> <li>• cycle map</li> <li>• flow map</li> <li>• storyboard</li> <li>• continuum/timeline</li> </ul>	<ul style="list-style-type: none"> <li>• sequence paragraph</li> <li>• chronological summary</li> </ul>	<ul style="list-style-type: none"> <li>• sequence/ order</li> </ul>	<ul style="list-style-type: none"> <li>• Say put things in order with one hand pounding on the open palm of the other hand while moving both hands from left to right.</li> </ul>

## ***Graphic Organizers***



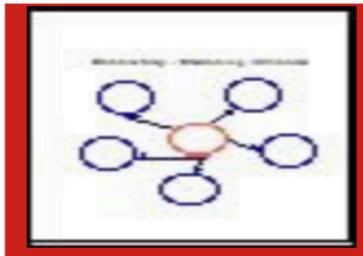
***Spider Map***



***Network Tree***



***Cluster Map***



***Bubble Map***

## **Summary and Constructed-Response Templates**

*Main Idea/Details Summary*

*MEL-Con*

*Two-Sentence Summary*

*Paragraph*

### **Questions/ Prompts**

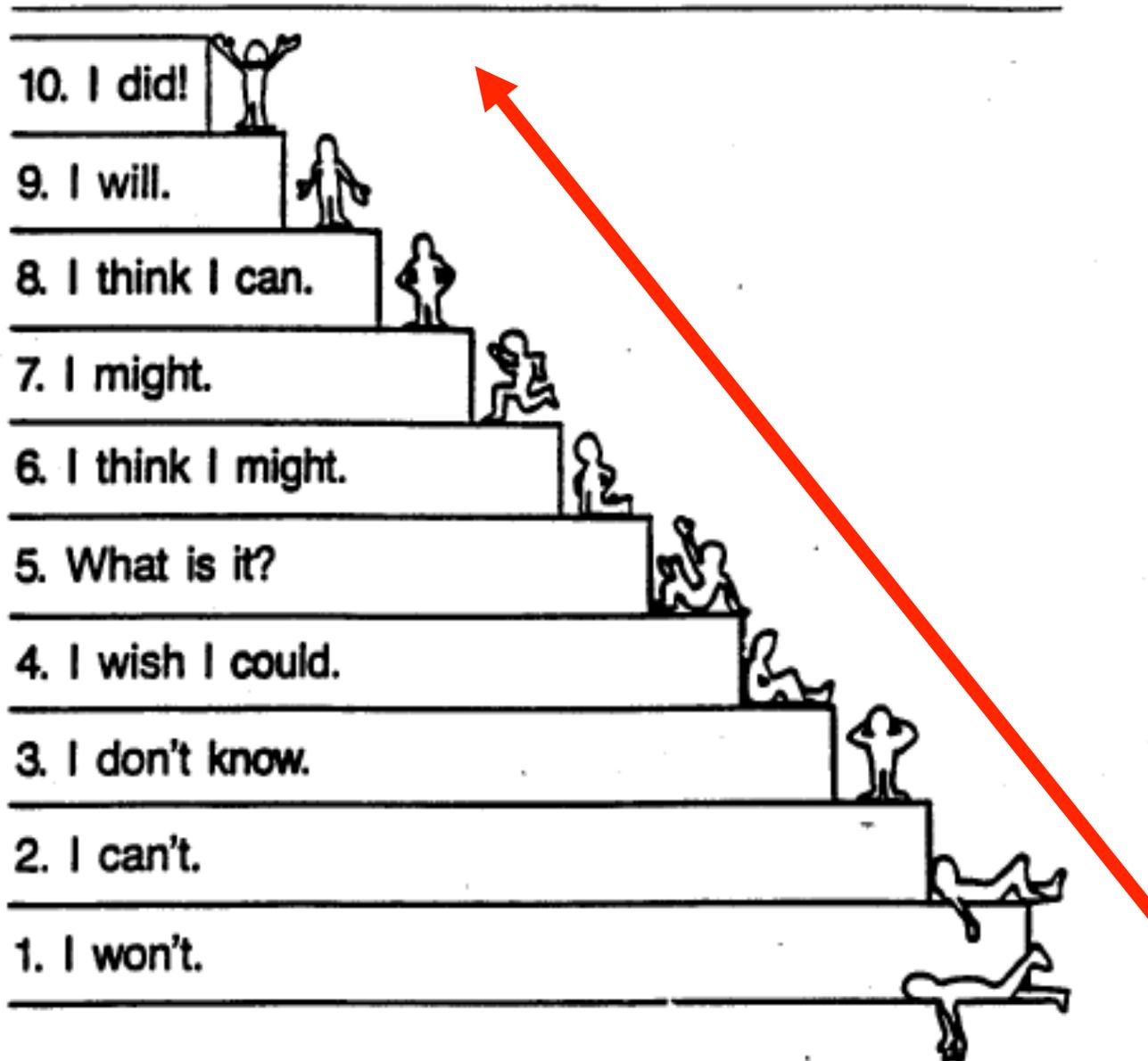
- 1. The main point of the article is . . .*
- 2. Summarize what you read.*
- 3. The main theme of the story is . . .*
- 4. List the facts regarding . . .*
- 5. The text is about . . .*
- 6. The main idea is about . . .*
- 7. The story/article mainly tells . . .*
- 8. Which of the following best expresses the main idea?*
- 9. On the basis of information in the passage, we can determine that . . .*
- 10. What would be the best title for this passage?*
- 11. Which statement best expresses the central idea of this passage?*
- 12. The main idea expressed in this passage is . . .*

## ***Hand Signals for Focusing on the Skills & Strategies***

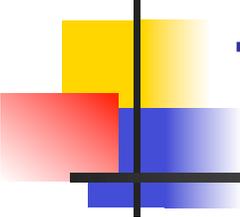
*Hold a fist (main idea) and dangle and wiggle fingers (details).*



# POWER THINKING



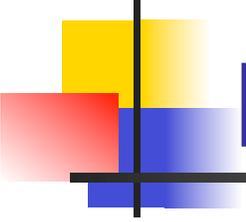
Marzano,  
Tactics in  
Thinking, 1989



# Transfer skills to print

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- Cause and Effect



# Transfer skills to math problem solving

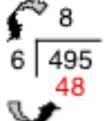
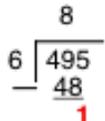
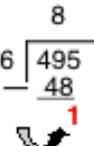
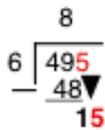
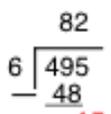
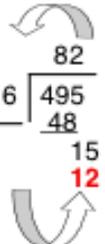
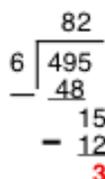
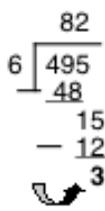
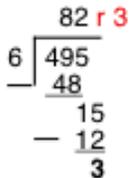
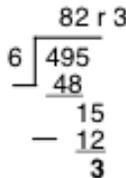
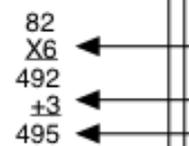
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- Sequence and Algorithms

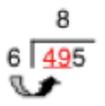
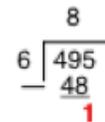
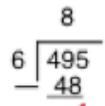
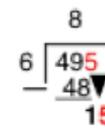
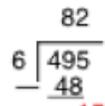
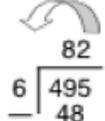
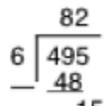
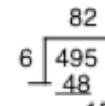
# Summarizing

The vacuum sales movie was about incorrect use of math to solve the problem  $7 \times 13 = ???$ . First the salesman tried to \_\_\_\_\_ to get the answer. He made a mistake because he \_\_\_\_\_. Then he tried to \_\_\_\_\_ to get the answer. He incorrectly \_\_\_\_\_. Finally, he tried to \_\_\_\_\_ to get the answer. He was incorrect because he \_\_\_\_\_. The correct answer is \_\_\_\_\_.

SIMPLIFIED IPS: Illustrated Performance Sequence of a Long Division Problem (495 ÷ 6)

<p>1. Compare</p>  <p style="text-align: right;">?</p>	<p>2. Divide</p>  <p style="text-align: center;">÷</p>	<p>3. Multiply</p> 	<p>4. Subtract</p> 	<p>5. Compare</p>  <p style="text-align: right;">?</p>	<p>6. Bring Down</p> 
<p>Optional</p>	 <p style="text-align: center;">÷</p>	<p>X</p> 		 <p style="text-align: right;">?</p>	
<p>Optional</p>	<p>Remainder</p> 	<p>Final</p> 	<p>Check</p> 		

Compare	Divide	Multiply	Subtract	Compare	Bring Down
Optional	Divide	Multiply	Subtract	Compare	Bring down

<p>1. Compare</p>  <p>?</p>	<p>2. Divide</p>  <p>÷</p>	<p>3. Multiply</p> 	<p>4. Subtract</p> 	<p>5. Compare</p>  <p>?</p>	<p>6. Bring Down</p> 
Optional	<p>÷</p>  <p>÷</p>	<p>X</p> 	<p>-</p> 	 <p>?</p>	

792/9

# Order of Operations $3+6 \times (5+4) \div 3-7$

<b>Parenthesis</b> $3+6 \times (5+4) \div 3-7$  $3+6 \times 9 \div 3-7$	<b>Multiplication</b> $3+6 \times 9 \div 3-7$  $3+54 \div 3-7$	<b>Division</b> $3+54 \div 3-7$  $3+18-7$
<b>Addition</b> $3+18-7$  $21-7$	<b>Subtraction</b> $21-7$  $14$	

<b>Parenthesis</b> $9+4 \times (3+6) \div 5-3$	<b>Multiplication</b>	<b>Division</b>
<b>Addition</b>	<b>Subtraction</b>	

# Transportation

## Space, Land, Water, Air

airplane

automobile

anchor

Apollo

astronaut

balloon

beam

bicycle

bilge

brig

bus

cable car

deck

Galileo

galley

Glenn

glider

Hubble

keel

missions

NASA

Orbiter

parachute

probe

ports

rocket

taxi

terminal

train

trolley

truck

van

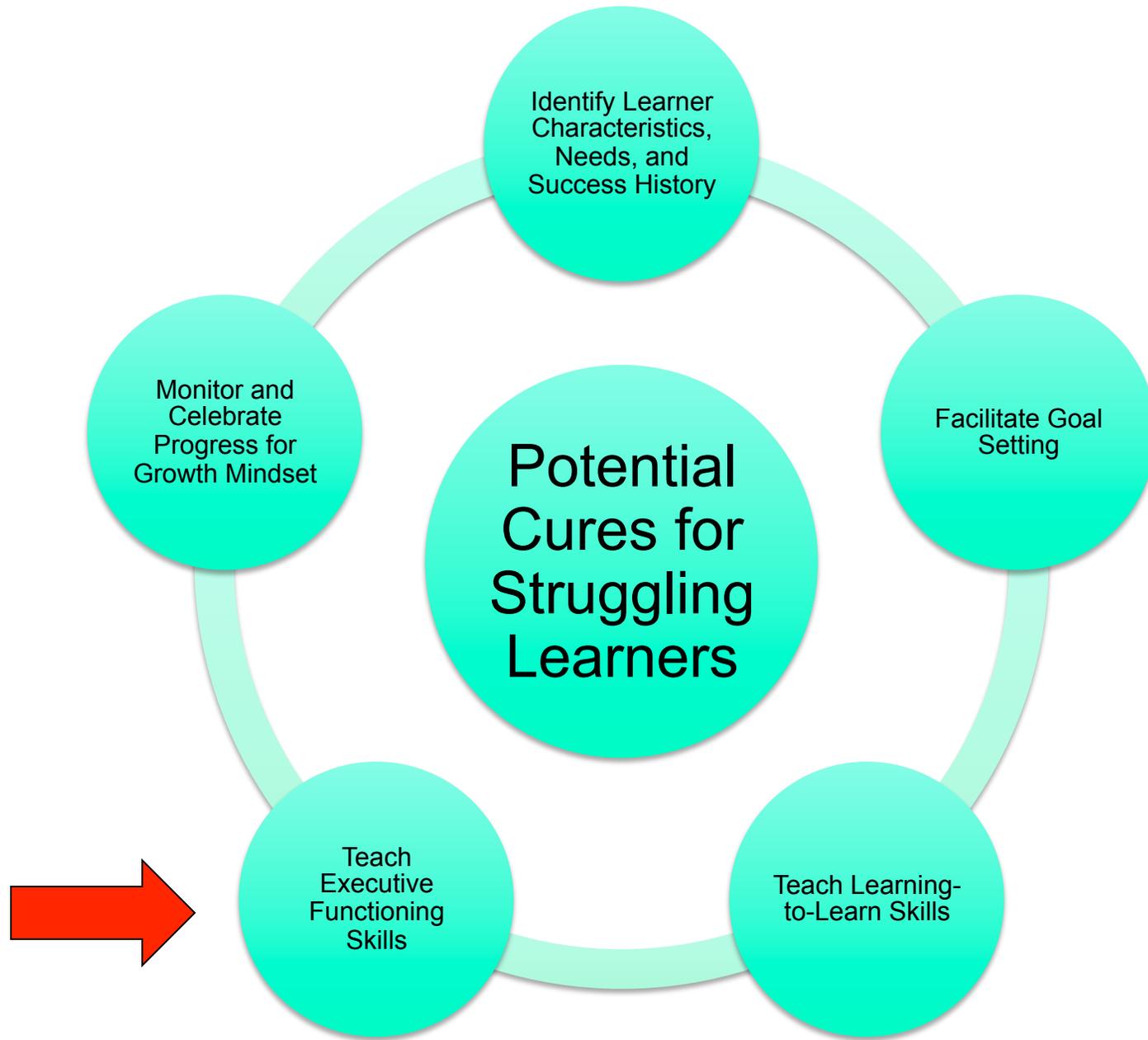
wings

# Transportation

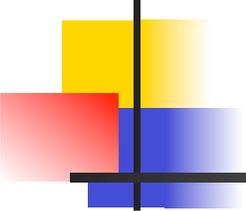
Space Exploration	Transportation on Land	Transportation on Water	Transportation in the Air
<ul style="list-style-type: none"><li>• Apollo</li><li>• astronaut</li><li>• Galileo</li><li>• Glenn</li><li>• Hubble</li><li>• missions</li><li>• NASA</li><li>• Orbiter</li><li>• probe</li><li>• rocket</li></ul>	<ul style="list-style-type: none"><li>• bicycle</li><li>• automobile</li><li>• bus</li><li>• cable car</li><li>• taxi</li><li>• train</li><li>• trolley</li><li>• truck</li><li>• van</li></ul>	<ul style="list-style-type: none"><li>• anchor</li><li>• beam</li><li>• bilge</li><li>• brig</li><li>• deck</li><li>• galley</li><li>• keel</li><li>• ports</li></ul>	<ul style="list-style-type: none"><li>• airplane</li><li>• balloon</li><li>• glider</li><li>• parachute</li><li>• terminal</li><li>• wings</li></ul>

# Transportation

<b>Space Exploration</b>	<b>Transportation on Earth/Land</b>	<b>Transportation on Water</b>	<b>Transportation in the Air</b>



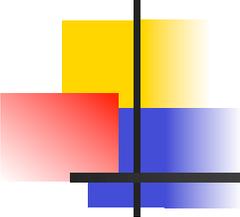
# Teaching and Coaching for Success



# 4 Explicitly teach executive functioning skills and strategies.

## Executive Functioning Skills

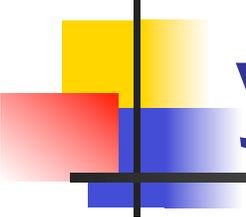
1. Goal Setting
2. Planning
3. Organization
4. Problem Solving
5. Self-Assessment/Monitoring
6. Focusing Attention
7. Impulse Control
8. Self-Advocacy



# High performers . . .

---

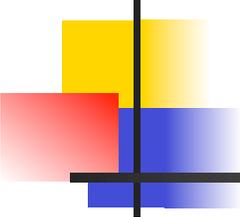
- want to engage in the task.
- know the standards.
- learn strategies to achieve the benchmarks.
- practice and get great coaching.
- **self-assess**
- solve problems.
- celebrate success.



# Think of a big project or task you completed successfully.

---

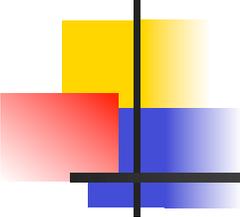
- What strategies, techniques, or resources did you use successfully?
- What would change if you did this project again?
- What are the first two steps you would take to make one of the changes?



# Students can self-assess/ reflect for higher achievement.

---

1. selecting strategies.
2. monitoring task performance.
3. establishing improvement goals and adjustments to your strategies.

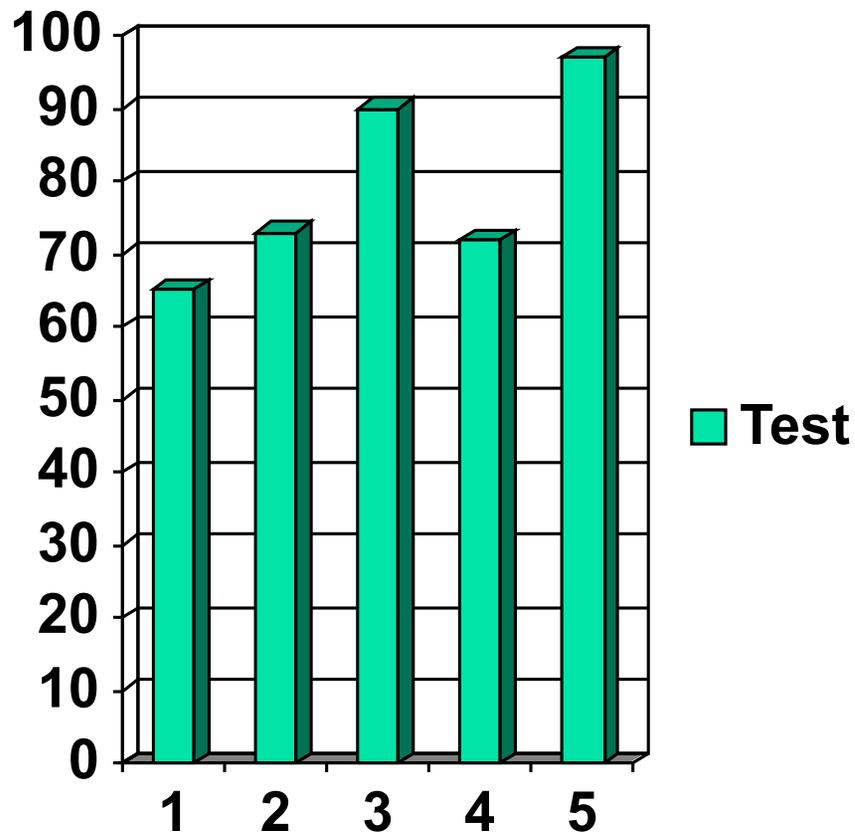


# Metacognition

---

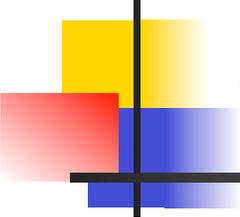
- Lesson:
  - Students can increase their performance when they think about and adjust their strategies the learning process.

# Tracking Progress and Determining What Worked and Didn't Work



- Strategies that helped
- Strategies that didn't help
- What caused changes?

<b>My level of understanding</b>	<b>I can...</b>
☺ ☹ ☹	1. Define and use unit vocabulary.
☺ ☹ ☹	2. Evaluate numeric expressions using properties of exponents.
☺ ☹ ☹	3. Evaluate expressions that have zero and negative exponents.
☺ ☹ ☹	4. Simplify algebraic expressions using multiplication properties of exponents.
☺ ☹ ☹	5. Simplify algebraic expressions using division properties of exponents.
☺ ☹ ☹	6. Convert numbers from decimal (standard) form to scientific notation.
☺ ☹ ☹	7. Convert numbers from scientific notation to decimal (standard) form.



# The Self-Assessment and Goals Setting Strategy

---

1. What did you accomplish?
2. What strategies, steps, or practices did you successfully apply?
3. What do you need to abandon or change? (goal setting)
4. What's your plan? (planning)
5. What assistance do you need? (self advocacy)

# Skills to Succeed at School!

## Content Area Knowledge and Skills ✓

### Learning-to-Learn Skills

1. Memory Storage and Retrieval
2. Note taking
3. Vocabulary Attainment and Development
4. Writing/Summarizing
5. Reading for Information and Literary Analysis
6. Solving Multi-Step Math and Scientific Problems

### Executive Functioning Skills

1. Goal Setting ✓
2. Planning ✓
3. Organization ✓
4. Problem Solving
5. **Self-Assessment/Monitoring** ✓
6. Focusing Attention ✓
7. Impulse Control ✓
8. **Self-Advocacy** ✓

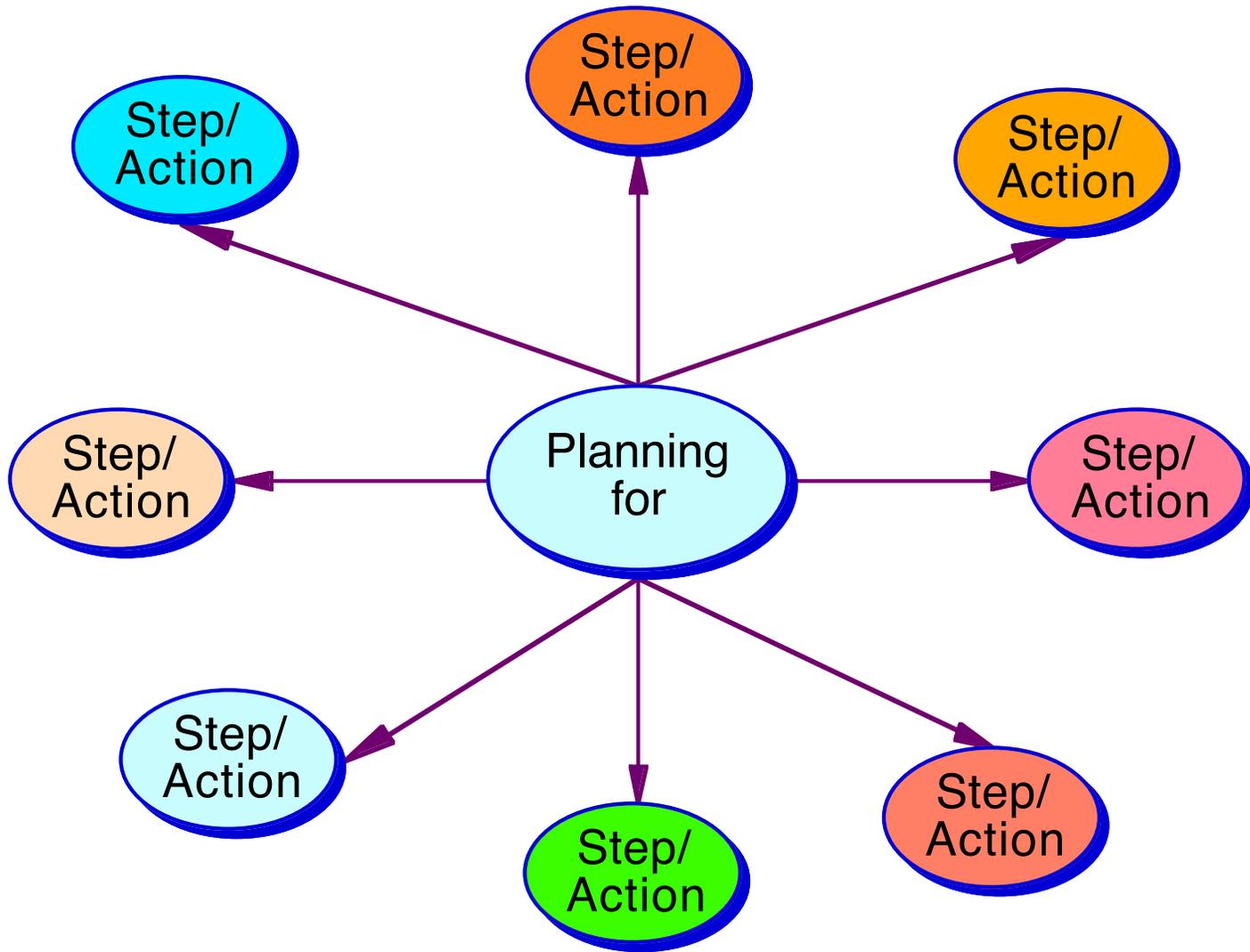
# Create a Failure Reduction/ Improvement Plan

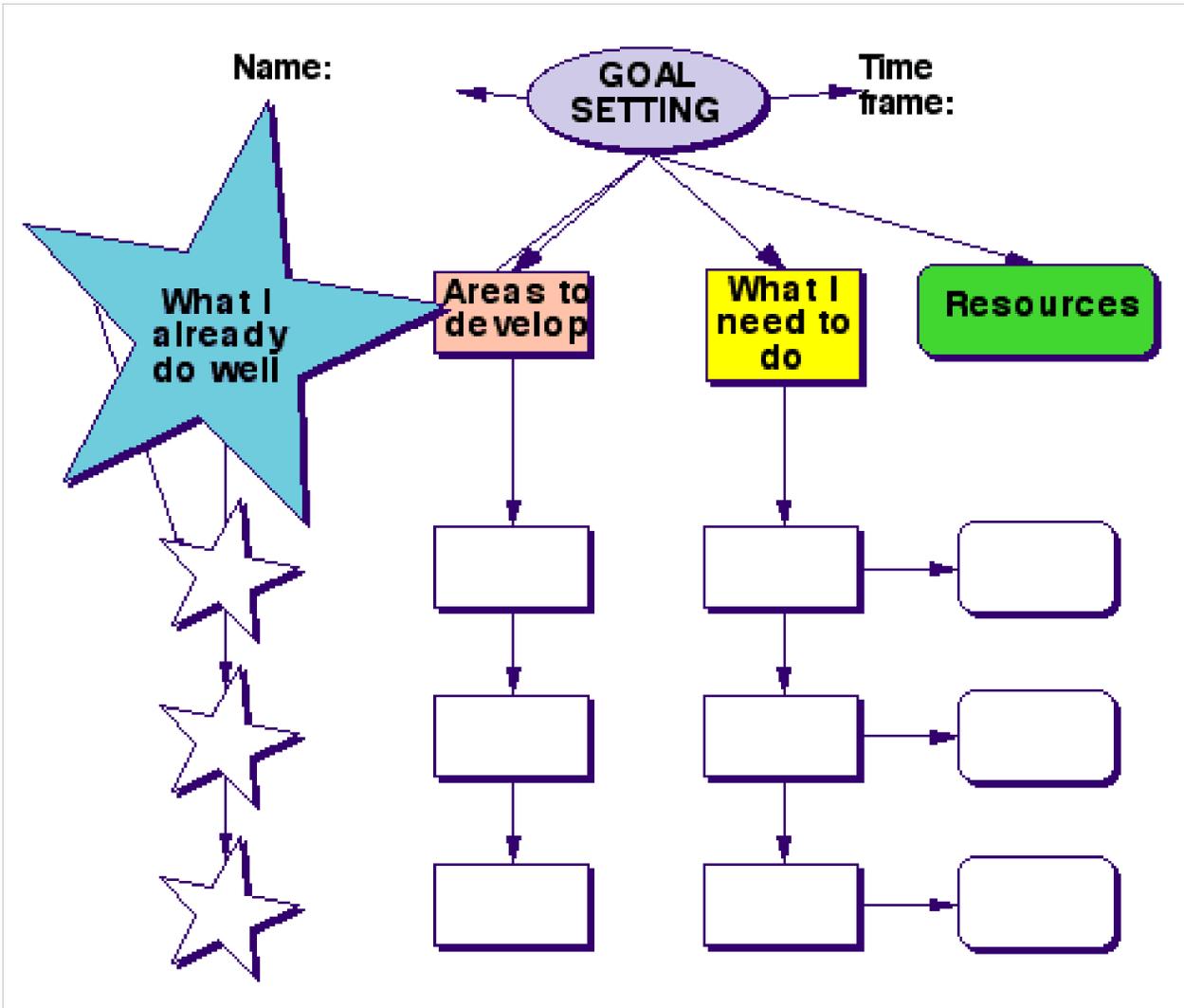
<b>1. Identify a short-term goal (5-10 days).</b>	<b>2. Determine indicators of success (Look fors)</b>
Subject area/class What improvement(s) is desired/needed?	<ul style="list-style-type: none"> <li>• Consistent and on-time attendance</li> <li>• Successful completion of in-class and homework assignments</li> <li>• Grades of C and above on assessments</li> <li>• Consistent participation in intervention services</li> <li>• Demonstration of learning-to-learning skills and responsible behaviors</li> </ul>
<b>3. Identify potential obstacles and what is needed to overcome obstacles.</b>	<b>4. What positive results might occur if the plan works?</b>
<b>5. What support/help is needed?</b>	<b>6.</b>

# Connecting Content with Executive Functioning Skills:

## Goal Setting and Planning

- **English**      What are the goals of the main character?  
How did the main character accomplish her goals?
- **Math**      What are you trying to find, locate, or solve?
- **Science**      What is the goal of the experiment?    What is the scientist's plan?
- **Social Studies**      What were the goals of Germany, US, and England prior to WWII? After WWII?  
How would you plan to improve your strength, endurance, and flexibility?
- **PE**      What mood did the composer try to set and maintain?
- **Music**      How do you plan to communicate your message to your viewers? Which techniques and tools will you use?
- **Art**

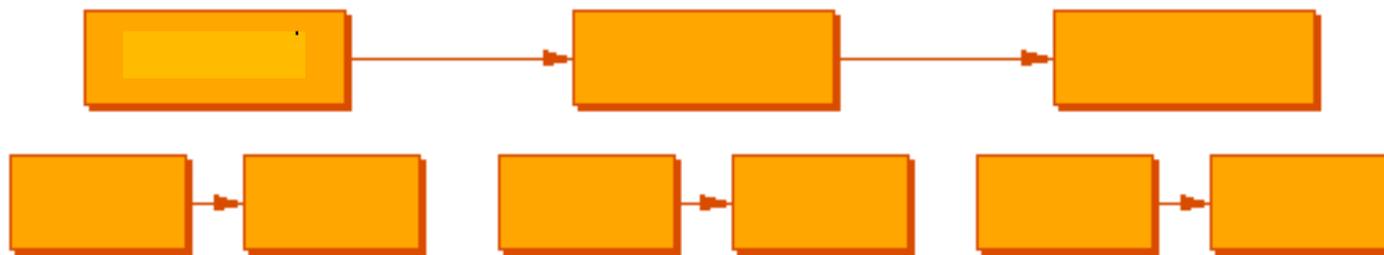




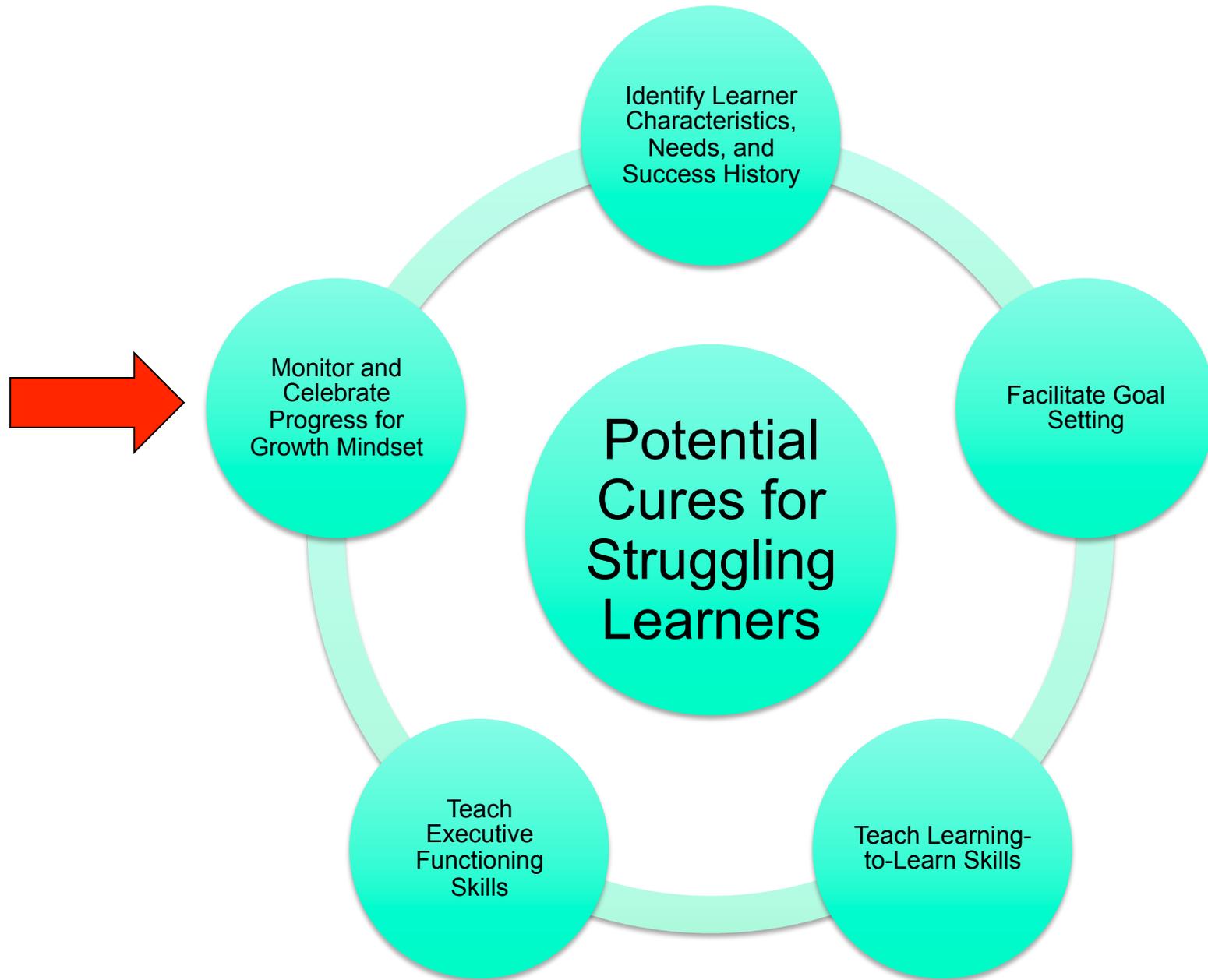
Goal Setting  
Worksheet

Today's date:





Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						



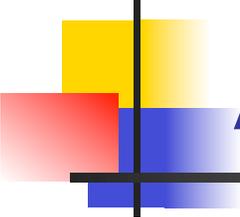
# Teaching and Coaching for Success

# 5 Monitor and Celebrate Progress for Growth Mindset



# Monitoring can be part of your assessment plan.





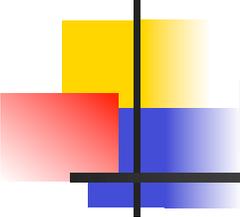
# Monitoring Progress and Making Adjustments: Self Assessment

---

1. selecting strategies.
2. monitoring task performance.
3. establishing improvement goals and adjustments to your strategies.

# What types of assessments do you use?

Closed-Ended Selected Response	Open-Ended Constructed Response	Products	Performances	Process-Focused	Student Self-Assessment
<ul style="list-style-type: none"> <li>•multiple-choice</li> <li>•true-false</li> <li>•matching</li> </ul>	<ul style="list-style-type: none"> <li>•fill in the blank</li> <li>•short answer sentence(s)</li> <li>•paragraphs</li> <li>•label diagram</li> <li>•show your work</li> <li>•visual representation</li> <li>•web</li> <li>•concept map</li> <li>•flow chart</li> <li>•graph/table</li> <li>•matrix</li> <li>•illustration</li> </ul>	<ul style="list-style-type: none"> <li>•essay</li> <li>•research paper</li> <li>•log/journal</li> <li>•lab report</li> <li>•story/play</li> <li>•poem</li> <li>•portfolio</li> <li>•art exhibit</li> <li>•science project</li> <li>•model</li> <li>•video/audiotape</li> <li>•spreadsheet</li> </ul>	<ul style="list-style-type: none"> <li>•oral presentation</li> <li>•dance/movement</li> <li>•science lab demonstration</li> <li>•athletic competition</li> <li>•dramatic reading</li> <li>•enactment</li> <li>•debate</li> <li>•musical recital</li> </ul>	<ul style="list-style-type: none"> <li>•oral questioning</li> <li>•observation</li> <li>•“kid watching”</li> <li>•interview</li> <li>•conference</li> <li>•process description</li> <li>•“think aloud”</li> <li>•learning log</li> </ul>	<ul style="list-style-type: none"> <li>•reflection prompts</li> <li>•logs</li> <li>•interviews</li> <li>•inventories</li> <li>•discussion</li> </ul>
<p><b>Portfolio</b></p>					



But wait! You haven't earned any points yet.

---

- Let's test your skills and knowledge.



Question 10: Given A and C are the end points of a line segment, the length of the segment is less than 28. There are five other points on the line segment, B, L, M, N and O, which are located at distances of 2, 5, 8, 11 and 14, respectively, from point A. Which of the points could be the midpoint of AC?

- A) B
- B) L
- C) M
- D) N
- E) O

Multiple Choice

Question 11: How many three digit numbers have the hundreds digit equal to 4 and the units digit equal to 2?

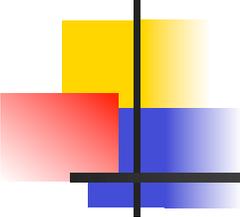
- A) 90
- B) 99
- C) 93
- D) 98
- E) 92

Multiple Choice

Question 12: If  $x$  and  $y$  are positive integers, which of the following expressions is equivalent to  $(2x^2)(3y^3)$ ?

- A)  $6x^2y^3$
- B)  $6xy^3$
- C)  $6x^2y^6$
- D)  $6x^6y^3$
- E)  $6x^3y^6$

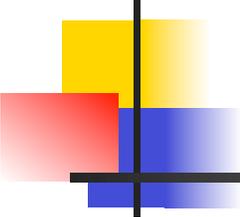
View the full question...



# Main Idea/Concept:

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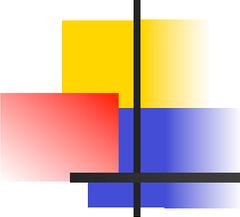
- hammer
- screwdriver
- hand drill
- chisel
- saw



# Main Idea /Concept:

---

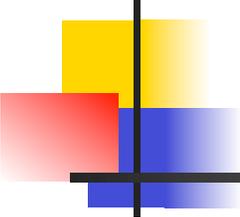
- Washington
- Lincoln
- Roosevelt
- Eisenhower
- Madison



# Main Idea /Concept:

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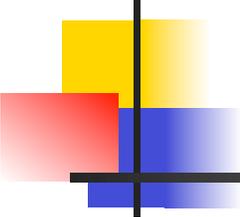
- bed
- chair
- sofa
- desk
- dining table



## Main Idea /Concept:

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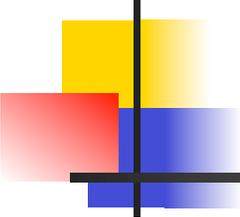
- Rose
- Sylvia
- Harriet
- Pennie
- Caryl



## Main Idea /Concept:

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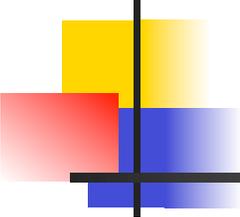
- schematic association
- metacognitive assimilation
- synaptic neuropathic patterning
- dendrite pruning
- cerebral dissonance



# Main Idea /Concept:

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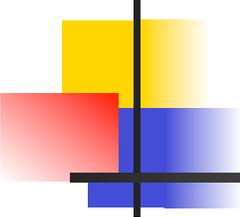
- violin
- harp
- clarinet
- banjo
- guitar



## Main Idea /Concept:

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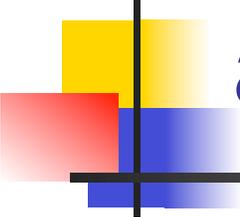
- schematic association
- metacognitive assimilation
- synaptic neuropathic patterning
- dendrite pruning
- cerebral dissonance



## Main Idea / Concept:

---

- Pontiac
- Oldsmobile
- Hummer
- Yugo
- Plymouth



Use a motivating cycle of  
assessment and feedback.

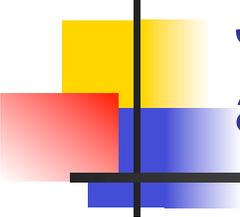
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## Shortened-Cycle Assessment

Teach, assess, and provide corrective or enrichments	Teach, assess, and provide corrective or enrichments	Teach, assess, and provide corrective or enrichments	Teach, assess, and provide corrective or enrichments	Evaluate (Summative Test)
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## Long-Cycle Assessment

Teach	Teach	Teach	Teach	Evaluate (Summative Test)
-------	-------	-------	-------	---------------------------------



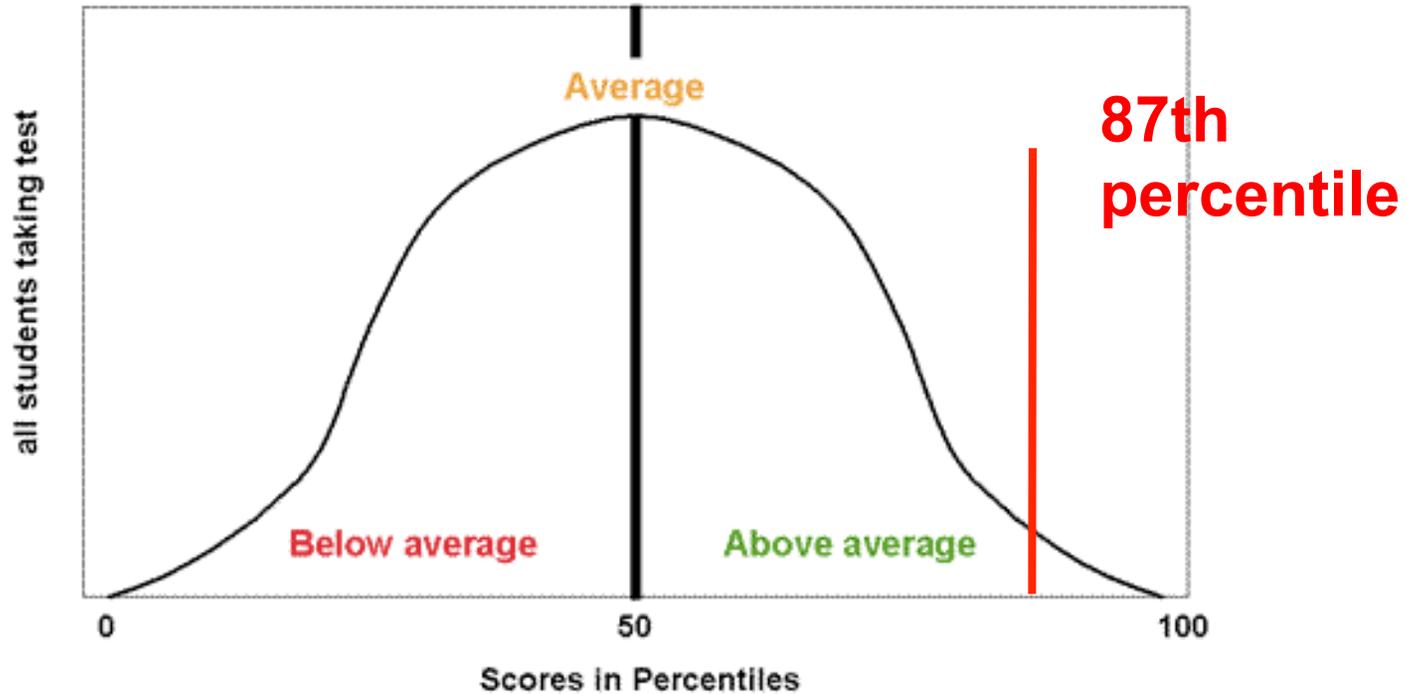
## John Hattie-reviewed 7,827 studies on learning and instruction

---

- Conclusion . . . “The most powerful single innovation that enhances achievement is feedback. The simplest prescription for improving education must be dollops of feedback.”
- Conclusion: Providing students with specific information about their standing in terms of particular objectives increased their achievement by **37 percentile points**.

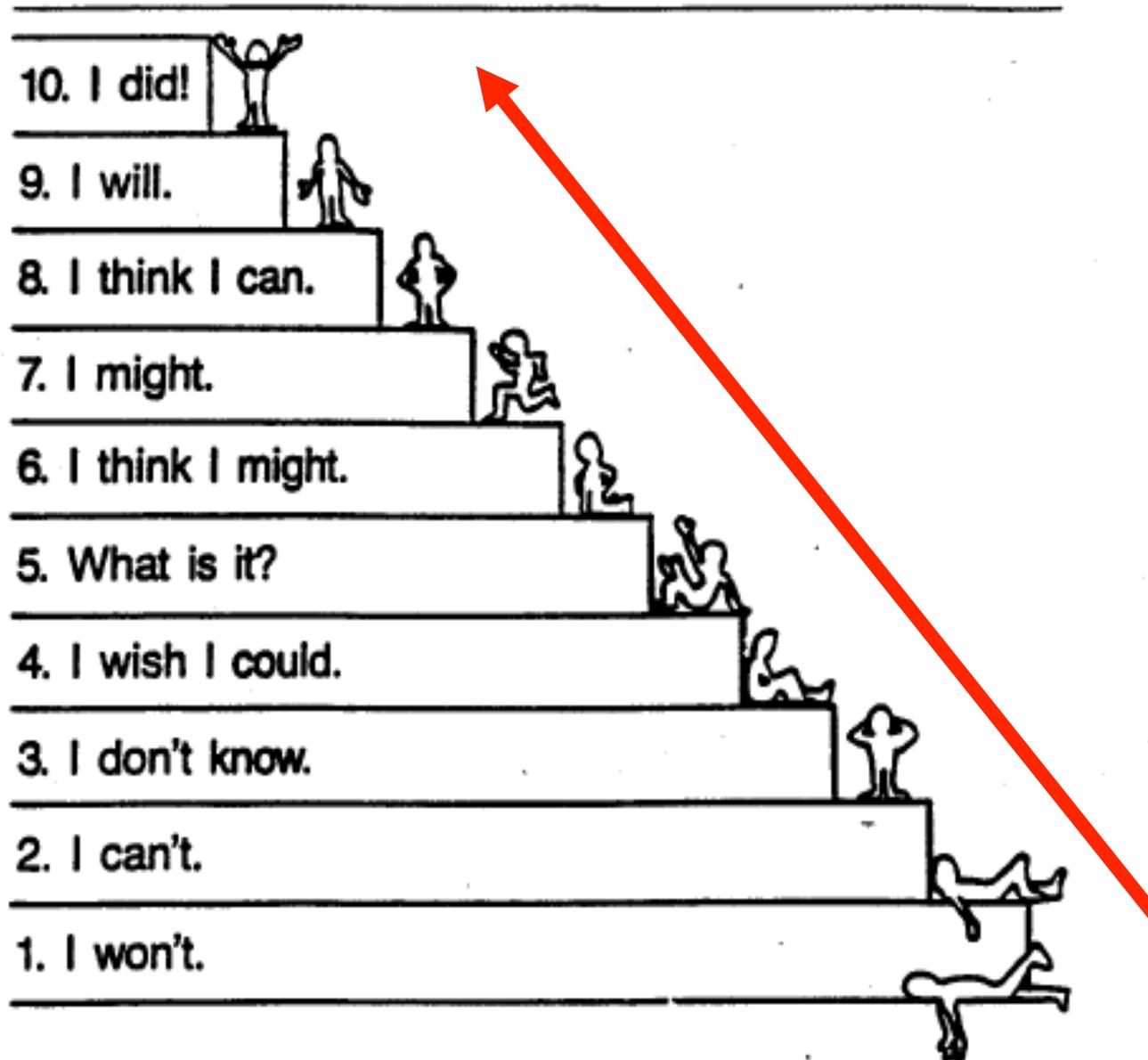
# The Bell Curve

Norm-referenced Tests (NRTs) are designed to compare student performance to other students



**Objectives and feedback  
(37 percentile increase)**

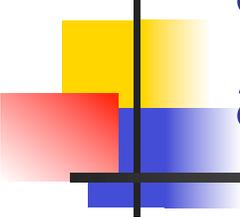
# POWER THINKING



Marzano,  
Tactics in  
Thinking, 1989

## Formative Assessments

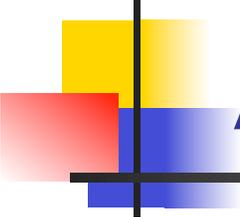
<ol style="list-style-type: none"><li>1. Tests</li><li>2. Quizzes</li><li>3. Homework</li><li>4. Exit tickets/card</li><li>5. Full participation question and answer</li><li>6. Short writes (e.g., summaries, responses to question prompts)</li><li>7. Graphic organizers/web/concept map</li><li>8. Problem solving observation</li></ol>	<ol style="list-style-type: none"><li>9. Student self-assessment</li><li>10. Survey students</li><li>11. Hand signals</li><li>12. Misconception check</li><li>13. Student conference</li><li>14. 3-minute pause</li><li>15. Observation</li><li>16. Portfolio check</li><li>17. Journal entry</li><li>18. Choral response</li><li>19. A-B-C Relate Summaries</li><li>20. Debriefing</li></ol>	<ol style="list-style-type: none"><li>21. Idea Spinner (e.g., predict, explain, summarize, evaluate)</li><li>22. Inside-Outside Quiz Circle</li><li>23. Numbered Heads Together</li><li>24. One-word Summary</li><li>25. One Sentence Summary</li><li>26. Ticket to Leave</li><li>27. Think-Pair-Share/ Turn to Your Partner</li><li>28. Oral Questioning</li><li>29. Show and tell</li><li>30. Model it</li></ol>
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Kids will play a video game an average of 100 hours to “get good” at it.

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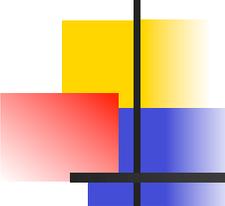
- They don't . . .
  - get grades
  - get extra credit
  - win money
  - get public acclaim
- And they rarely play a game a second time without knowing/learning . . .
  1. Objectives/goals
  2. Strategies and skills
  3. Vocabulary
  4. How well they are doing
  5. What to do better next time



# Teacher-Guided Monitoring, Adjusting, and Celebrating

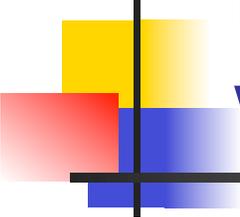
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1. **Review the look-fors** (i.e. success indicators with the student).
2. **Recognize incremental progress** and determine what created positive results.
3. **Adjust the plan and strategies** and/or establish a new goal.
4. **Share the feedback** with other teachers, parents, and support staff.
5. **Radically celebrate progress** and provide encouragement and optimism.



# Review the look-fors (i.e. success indicators) with the student.

<b>1. Identify a short-term goal (5-10 days).</b>	<b>2. Determine indicators of success (Look fors)</b>
Subject area/class What improvement(s) is desired/needed?	<ul style="list-style-type: none"><li>• Consistent and on-time attendance</li><li>• Successful completion of in-class and homework assignments</li><li>• Grades of C and above on assessments</li><li>• Consistent participation in intervention services</li><li>• Demonstration of learning-to-learning skills and responsible behaviors</li></ul>
<b>3. Identify potential obstacles and what is needed to overcome obstacles.</b>	<b>4. What positive results might occur if the plan works?</b>
<b>5. What support/help is needed?</b>	<b>6.</b>



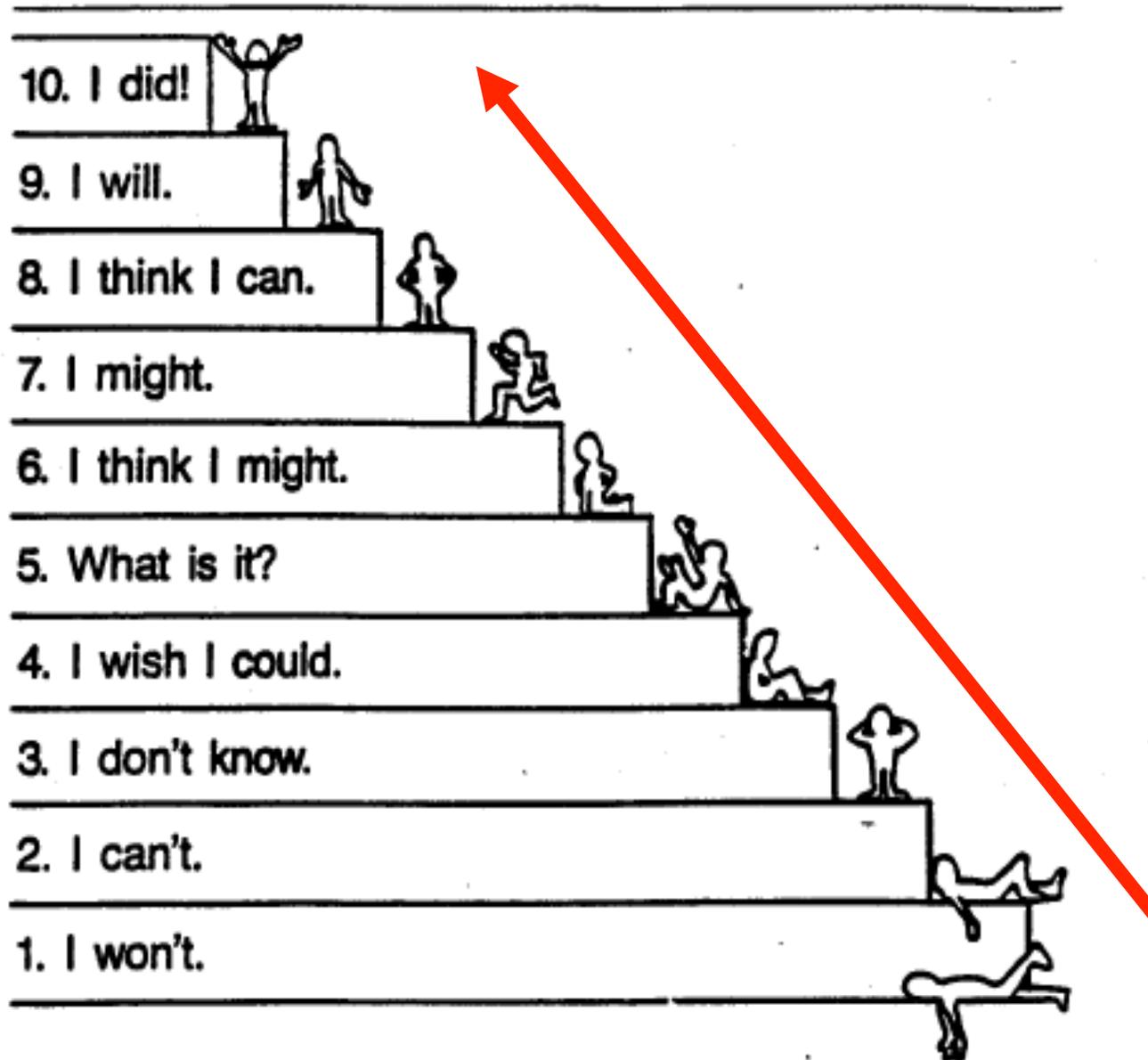
Recognize progress and determine what created positive results.

---

■ Intervention      ■ Results

■ Intervention      ■ Results

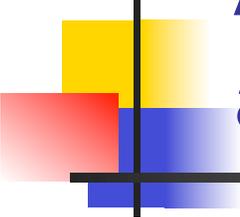
# POWER THINKING



Marzano,  
Tactics in  
Thinking, 1989

# The Brain and Successful Learning

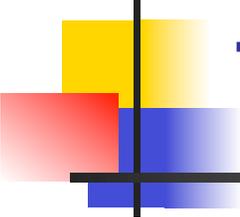
Neurotransmitter	Purpose and Result
<b>Noradrenalin</b>	Arousal Energy Drive Excitement
<b>Serotonin</b>	Calming neurotransmitter important to the maintenance of good mood
<b>Acetylcholine</b>	Focus Memory Feelings of pleasure
<b>Dopamine</b>	Pleasure Reward Good Feelings towards others



Adjust the plan and strategies  
and/or establish a new goal.

---

If your  
PLAN A  
doesn't work,  
the alphabet has  
25 more letters!  
Stay cool!



# Try the IDEAL Strategy

---

- **I**dentify the dimensions of the problem.
- **D**etermine alternative solutions.
- **E**stablish standards and evaluate each alternative solution.
- **A**dopt and implement a plan.
- **L**ook back, evaluate, and adjust.

# Skills to Succeed at School!

## Content Area Knowledge and Skills ✓

### Learning-to-Learn Skills

1. Memory Storage and Retrieval
2. Note taking
3. Vocabulary Attainment and Development
4. Writing/Summarizing
5. Reading for Information and Literary Analysis
6. Solving Multi-Step Math and Scientific Problems

### Executive Functioning Skills

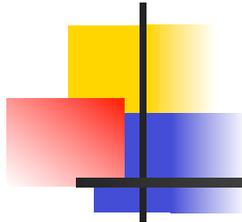
1. Goal Setting ✓
2. Planning ✓
3. Organization ✓
4. Problem Solving ✓
5. Self-Assessment/  
Monitoring ✓
6. Focusing Attention ✓
7. Impulse Control ✓
8. Self-Advocacy ✓

# Session Goals . . .

can . . .

---

1. Describe the causes and effects of student failure/and underachievement.
2. Explain what we are doing to prevent and address student failure/underachievement (e.g., practices, strategies, interventions).
3. Describe best instructional and assessment practices.



# Success

---

To laugh often and much

To win the respect of intelligent people and endure the betrayal of fake friends

To make the world a bit better . . .

by a healthy child

a garden patch

or a redeemed social condition

To know that one life breathes easier because you lived

This is to be a success. (Emerson)