



Combining Curriculum, Technology & Behavioral Opportunities for Success with Each Child

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One System: Curriculum, Technology, Behavior

The Who

Unexpected
Abilities

A Wanted
Curriculum

Shift

More Paths,
More Supports

System

Thick
Institutions

The What

Habits for
Success

Align for
Engagement

Character Based
Literacy

What's in Your
Suitcase?

Phenomenal
Solutions

Next Generation
Schools

The How

Site Infusion

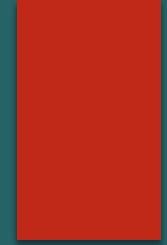
The Technology
Partner

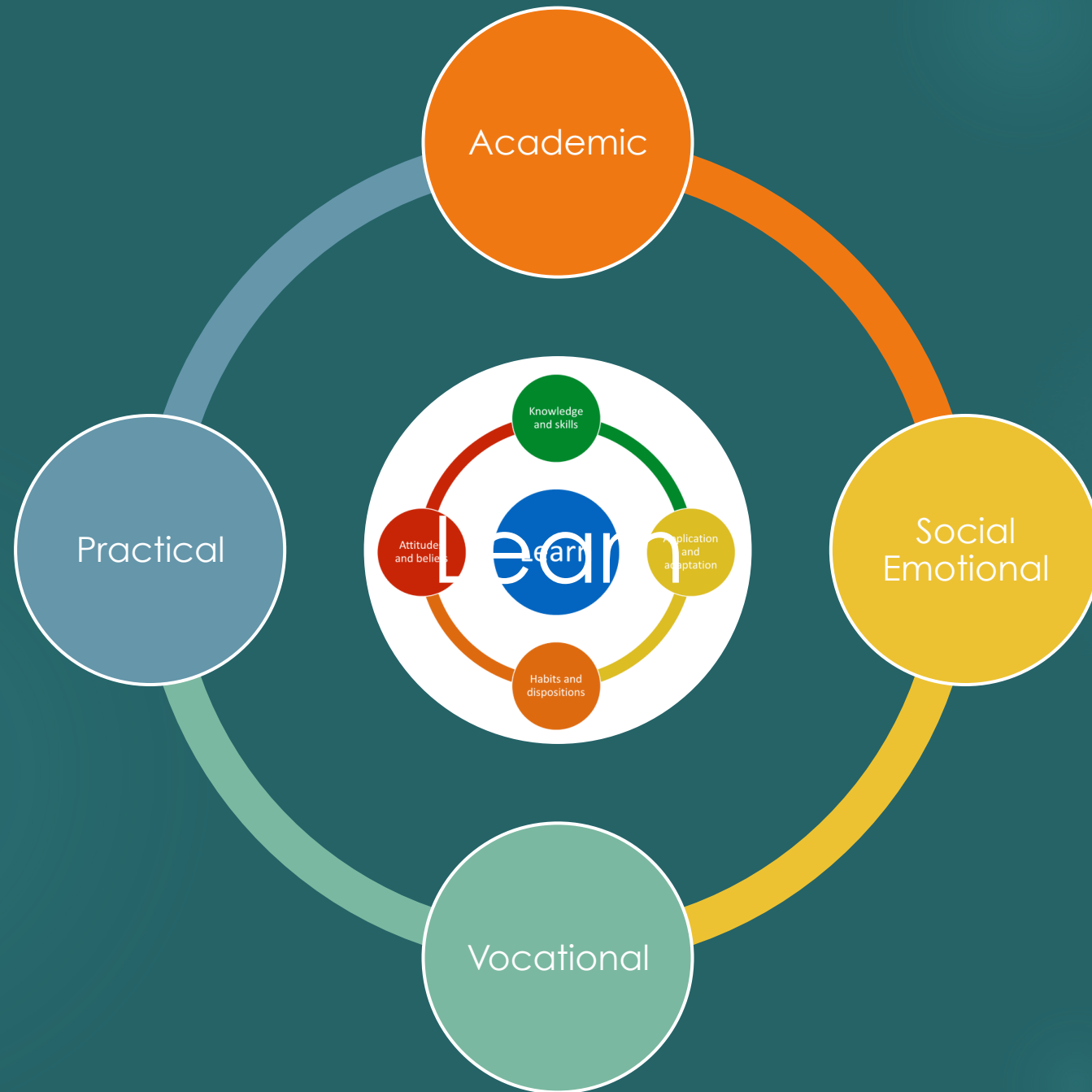
The Technology
Transformer

The Behavioral
Ecology

Multi-Tiered
System of
Supports

Success





SEL refers to the process of integrating thinking, feeling, and behaving in order to become aware of the self and of others, make responsible decisions, and manage one's own behaviors and those of others.

Maurice Elias

...systematic process for promoting students' social and emotional development is the common element among schools that report an increase in academic success, improved quality of relationships between teachers and students, and a decrease in problem behavior.

Marc Bracket and Susan Rivers

RULER

Recognizing,
Understanding,
Labeling,
Expressing, and
Regulating emotions.

1. The need to infuse *the process of integrating thinking, feeling, and behaving in order to become aware of the self and of others, make responsible decisions, and manage one's own behaviors and those of others* into every area of instruction, and across curriculum, technology, and behavior.
2. The need to establish support mechanisms and resources for parents as they support the academic and social emotional learning of their students.
3. The need to provide a Multi-Tiered System of Supports in our schools, but both in and out of school, with integrated mechanisms linking health and mental health services



Unexpected Abilities

WHAT STRENGTHS AND UNEXPECTED ABILITIES DO WE FIND IN THE STUDENTS WE SERVE?



A Wanted Curriculum

WHAT WOULD A CURRICULUM THAT STUDENT'S WANT, AND THAT WANTS STUDENTS, LOOK LIKE?



Shift

HOW HAS STUDENT LEARNING CHANGED, AND HOW DO OUR SUPPORTS FOR STUDENT LEARNING NEED TO SHIFT?



More Paths, More Supports

IF OUR JOB IS TO CHANGE THE SUPPORTS, NOT THE EXPECTATIONS, HOW DO WE PROVIDE MORE PATHS AND MORE SUPPORTS IN A SINGLE SYSTEM OF SUPPORTS.



System

HOW COULD A SINGLE SYSTEM INTEGRATE CURRICULUM,
TECHNOLOGY, AND BEHAVIOR SUPPORTS



Thick Institutions

HOW DO WE BUILD SCHOOLS THAT ARE THICK RATHER THAN THIN INSTITUTIONS?



Habits for Success

WHAT HABITS WILL LEAD TO SUCCESS IN THE LIFE YOU WISH FOR YOURSELF?



Align for Engagement

Character Based Literacy



What's in Your Suitcase?



Phenomenal Solutions

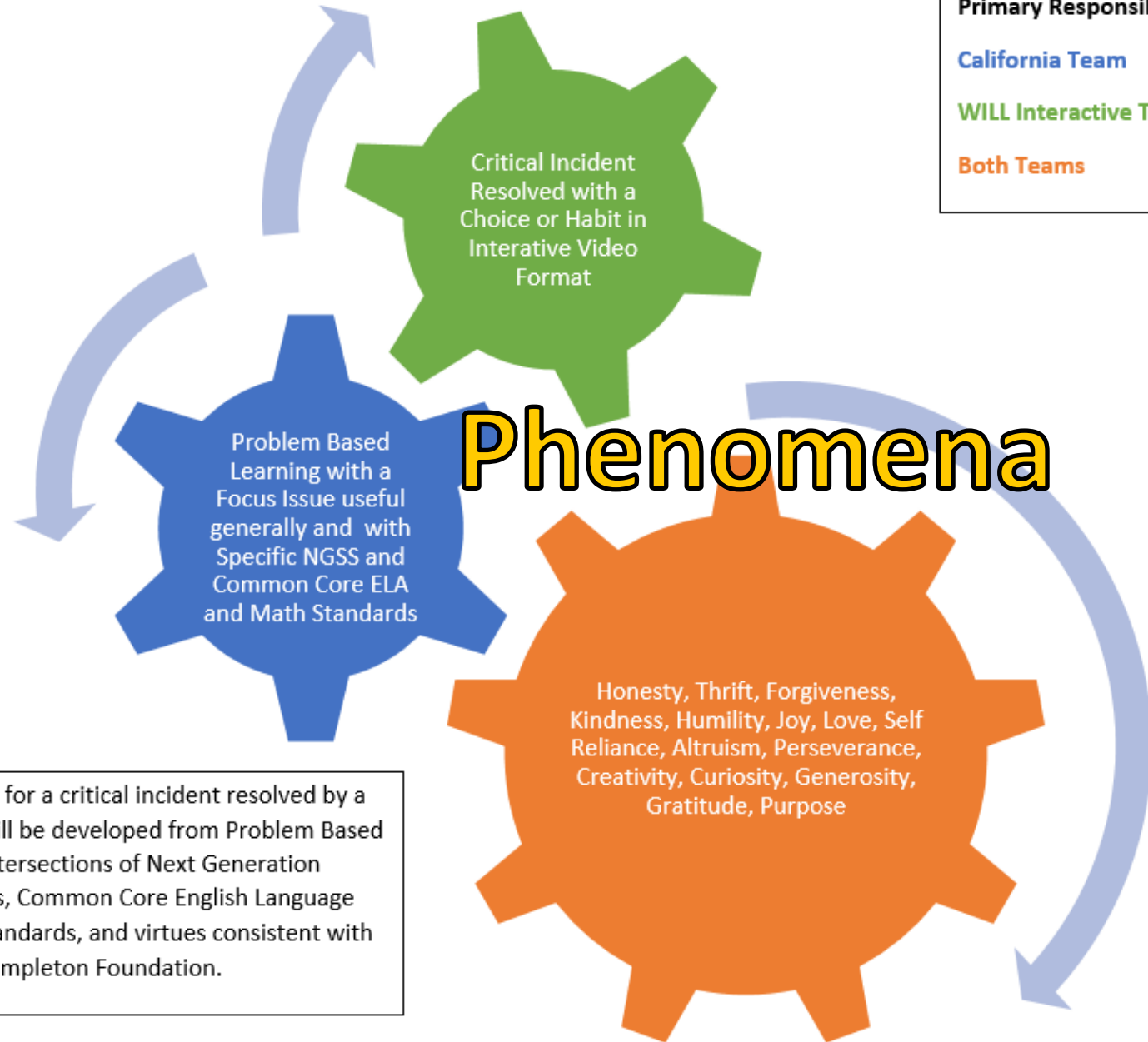
Next Generation Ethics

Working Question

Will observable behaviors, which follow from the practice of specific virtues, increase as a result of experience with interactive media simulations that require reflection and replay of moral choices, and are aligned with a well integrated, multi-disciplinary STEM education mapped to selected *Next Generation Science Standards* for students in K-8 schools in California?

Collaborators

- Templeton World Charities Foundation
- Aquinas Institute in St. Louis, MO
- Now You Know Media
- WILL Interactive
- California Team of faculty affiliated with California State University, Fresno, Loyola Marymount University, and Santa Clara University



Primary Responsibility of

California Team

WILL Interactive Team

Both Teams

Interactive media for a critical incident resolved by a habit or choice will be developed from Problem Based Units based on intersections of Next Generation Science Standards, Common Core English Language Arts and Math Standards, and virtues consistent with the work [of](#) the Templeton Foundation.

For example, a unit for grade 5 could be developed for the critical issues of making personal transportation and buying choices given the effect of these choices on CO₂ levels on earth.



The unit is also integrated with relevant novels, math skills and applications, and social studies content.

Self Reliance, Altruism, Perseverance, Creativity

Where do I go and how do I get there?

Integrate with study of Civil War, reading of *Red Badge of Courage*, and study of Ratio/Proportion

NGSS 5SS3 Earth and Human Activity

Carbon Dioxide: How much is too much? What choices and habits would reduce it?

RI 5.1, 5.7, W5.8, MP 2 Reason and model with information

5-ESS3 Earth and Human Activity

5-ESS3 Earth and Human Activity		
Students who demonstrate understanding can:		
5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.		
<i>The performance expectations above were developed using the following elements from the NRC document <i>A Framework for K-12 Science Education</i>:</i>		
<p style="text-align: center;">Science and Engineering Practices</p> <p>Obtaining, Evaluating, and Communicating Information Obtaining, evaluating, and communicating information in 3–5 builds on K–2 experiences and progresses to evaluating the merit and accuracy of ideas and methods.</p> <ul style="list-style-type: none"> Obtain and combine information from books and/or other reliable media to explain phenomena or solutions to a design problem. (5-ESS3-1) 	<p style="text-align: center;">Disciplinary Core Ideas</p> <p>ESS3.C: Human Impacts on Earth Systems</p> <ul style="list-style-type: none"> Human activities in agriculture, industry, and everyday life have had major effects on the land, vegetation, streams, ocean, air, and even outer space. But individuals and communities are doing things to help protect Earth's resources and environments. (5-ESS3-1) 	<p style="text-align: center;">Crosscutting Concepts</p> <p>Systems and System Models</p> <ul style="list-style-type: none"> A system can be described in terms of its components and their interactions. (5-ESS3-1) <p style="text-align: center;">-----</p> <p style="text-align: center;"><i>Connections to Nature of Science</i></p> <p>Science Addresses Questions About the Natural and Material World.</p> <ul style="list-style-type: none"> Science findings are limited to questions that can be answered with empirical evidence. (5-ESS3-1)
<i>Connections to other DCIs in fifth grade: N/A</i>		
<i>Articulation of DCIs across grade-levels: MS.ESS3.A (5-ESS3-1); MS.ESS3.C (5-ESS3-1); MS.ESS3.D (5-ESS3-1)</i>		
<i>Common Core State Standards Connections:</i>		
<i>ELA/Literacy –</i>		
RI.5.1	Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text. (5-ESS3-1)	
RI.5.7	Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.(5-ESS3-1)	
RI.5.9	Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably. (5-ESS3-1)	
W.5.8	Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources. (5-ESS3-1)	
W.5.9	Draw evidence from literary or informational texts to support analysis, reflection, and research. (5-ESS3-1)	
<i>Mathematics –</i>		
MP.2	Reason abstractly and quantitatively. (5-ESS3-1)	
MP.4	Model with mathematics. (5-ESS3-1)	

The example unit would be based on NGSS 5-ESS3 from the *Next Generation Science Standards*



ELEMENTARY



KINDERGARTEN

 K-PS2 Motion and Stability: Forces and Interactions

K-PS3 Energy

K-LS1 From Molecules to Organisms: Structures and Processes

 K-ESS2 Earth's Systems

K-ESS3 Earth and Human Activity

K-2-ETS1 Engineering Design

FIRST GRADE

 1-PS4 Waves and Their Applications in Technologies for Information Transfer

1-LS1 From Molecules to Organisms: Structures and Processes

 1-LS3 Heredity: Inheritance and Variation of Traits

1-ESS1 Earth's Place in the Universe


K-2-ETS1 Engineering Design

SECOND GRADE

2-PS1 Matter and Its Interactions







 2-LS2 Ecosystems: Interactions, Energy, and Dynamics

2-LS4 Biological Evolution: Unity and Diversity

 2-ESS1 Earth's Place in the Universe

2-ESS2 Earth's Systems

K-2-ETS1 Engineering Design

THIRD GRADE	FOURTH GRADE	FIFTH GRADE
<p>3-PS2 Motion and Stability: Forces and Interactions</p>	<p>4-PS3 Energy</p>	<p>5-PS1 Matter and Its Interactions</p>
<p>3-LS1 From molecules to Organisms: Structures and Processes</p>	<p> 4-PS4 Waves and Their Applications in Technologies for Information Transfer</p>	<p>5-PS2 Motion and Stability: Forces and Interactions</p>
<p>3-LS2 Ecosystems: Interactions, Energy, and Dynamics</p>	<p>4-LS1 From Molecules to Organisms: Structures and Processes</p>	<p> 5-PS3 Energy</p>
<p> 3-LS3 Heredity: Inheritance and Variation of Traits</p>	<p> 4-ESS1 Earth's Place in the Universe</p>	<p>5-LS1 From Molecules to Organisms: Structures and Processes</p>
<p>3-LS4 Biological Evolution: Unity and Diversity</p>	<p>4-ESS2 Earth's Systems</p>	<p> 5-LS2 Ecosystems: Interactions, Energy, and Dynamics</p>
<p>3-ESS2 Earth's Systems</p>	<p>4-ESS3 Earth and Human Activity</p>	<p>5-ESS1 Earth's Place in the Universe</p>
<p> 3-ESS3 Earth and Human Activity</p>	<p>3-5-ETS1 Engineering Design</p>	<p>5-ESS2 Earth's Systems</p>
<p>3-5-ETS1 Engineering Design</p>		<p>5-ESS3 Earth and Human Activity</p>
		<p>3-5-ETS1 Engineering Design</p>



PHYSICAL SCIENCE

MS-PS1 Matter and its Interactions

MS-PS2 Motion and Stability: Forces and Interactions



MS-PS3 Energy



MS-PS4 Waves and their Applications in Technologies for Information Transfer

LIFE SCIENCE

MS-LS1 From Molecules to Organisms: Structures and Processes



MS-LS2 Ecosystems: Interactions, Energy, and Dynamics



MS-LS3 Heredity: Inheritance and Variation of Traits

MS-LS4 Biological Evolution: Unity and Diversity

EARTH AND SPACE SCIENCES



MS-ESS1 Earth's Place in the Universe

MS-ESS2 Earth's Systems




MS-ESS3 Earth and Human Activity

Next Generation Schools

NGSS 101

Shift Happens





**"If you *tell* someone
something, you've forever
robbed them the opportunity
to *discover* it for
themselves."**

~Frank Oppenheimer

Knowing about

versus

Figuring out

FUNDAMENTALLY WE WANT STUDENTS TO
ENGAGE IN **SCIENCE** TO LEARN IT

Three NGSS Shift Continuums

– **Classroom Discourse:**

- Students and teachers support and encourage respectful and constructive discourse.
- Most students can ask questions, make claims, back up their own claims, or critique claims made by others.

– **Use of Evidence:**

- Students use evidence to explain their reasoning, back up their claims, or critique claims made by others.

– **Constructing Understanding :**

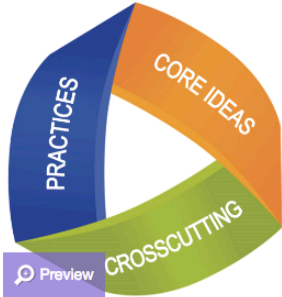
- Students had ample opportunity to make sense of the science concepts addressed.
- Students' understanding evolves over time and aligns with scientific principles.

Accessing Prior Knowledge:



Kahoot

← Back



NGSS? [Edit](#)

A Review of NGSS information

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Or, copy & share this link: <https://play.kahoot.it/#/k/9e65282f-43ea-4f2d-bddc-4f09802599ba>

Type: Quiz Visibility: Public Created: 21 minutes ago By: kreidea Audience: Training Language: English

6 Questions	0 Plays	0 Players	0 Favorites	0 Shares
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Questions [Show ALL answers](#)

02599ba

Name: Issac _____ Date: 3/17/17

My Math Goal Setting Sheet

My goal: <u>Complete</u> <u>and pass 20</u> <u>lessons in a month</u> <u>T.T.M</u>	Date to achieve my goal by: <u>April 17</u> <u>2017</u> <u>3/23/17</u>
---	---


How I will achieve my goal:

I will work on my goal by:	work on math in T.T.M and Moby max
My teacher can help me by:	creating more pathways.
<u>My Dad</u> can help me by:	helping me if I dont know a question.

Name: Issac

My Math Goal Progress Tracker

Date	Assignment/Test	Score
3/17/17	Multiplication, addition, subtraction and division	20 min
3/20/17	Estimating sums and differences - Application	Passed
3/21/17	T.T.M	10/10
3/22/17	T.T.M	17/17
3/22/17	T.T.M	6/6
3/23/17	Guided class practice	good
3/23/17	Study and reviewing multiplication station 4	great
3/23/17	I met my goal	



What is a teacher's role in a technology infused classroom?

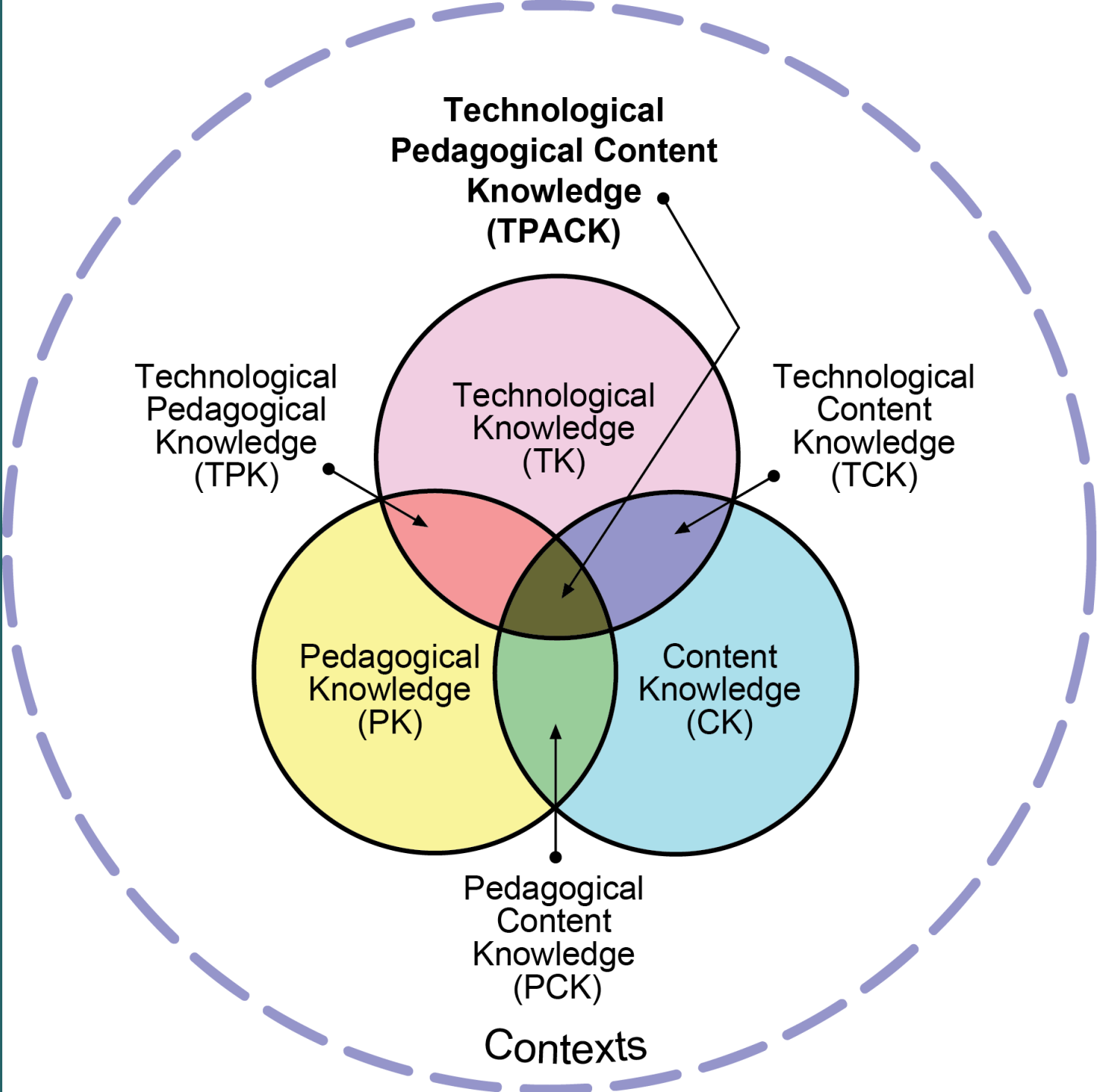
Plan, deliver, monitor, assess, and adapt classroom instruction while managing student behavior to increase student knowledge, skills, beliefs, attitudes, and character.



Blended Learning

Students learn in an intentional mix of school site face to face instruction and online instruction with some student control of time, place, path, and pace.

TPACK



SAMR

Enhancement

Augmentation

Tech acts as a direct tool substitute, with functional improvement

Substitution

Tech acts as a direct tool substitute, with no functional change

Redefinition

Tech allows for the creation of new tasks, previously inconceivable

Modification

Tech allows for significant task redesign

Transformation



What about the devices?



Device Implementation

An adopted **device** and **workflow** is a primary tool for movement of text, image, sound, number, and video files in classroom instruction. Not BYOD and identified by device ratio and associated **platforms**, **applications**, and **analytics**.

Workflow

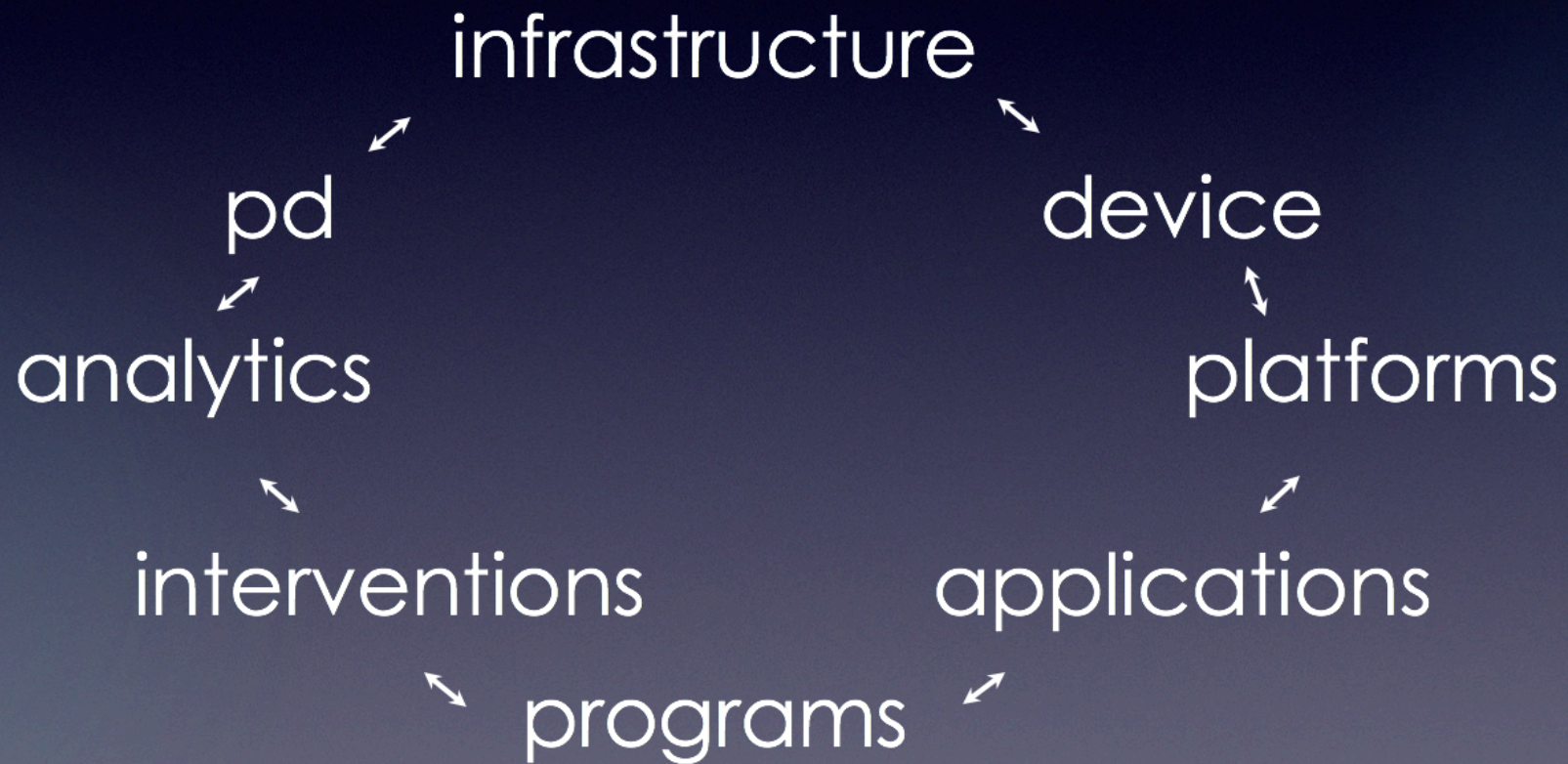
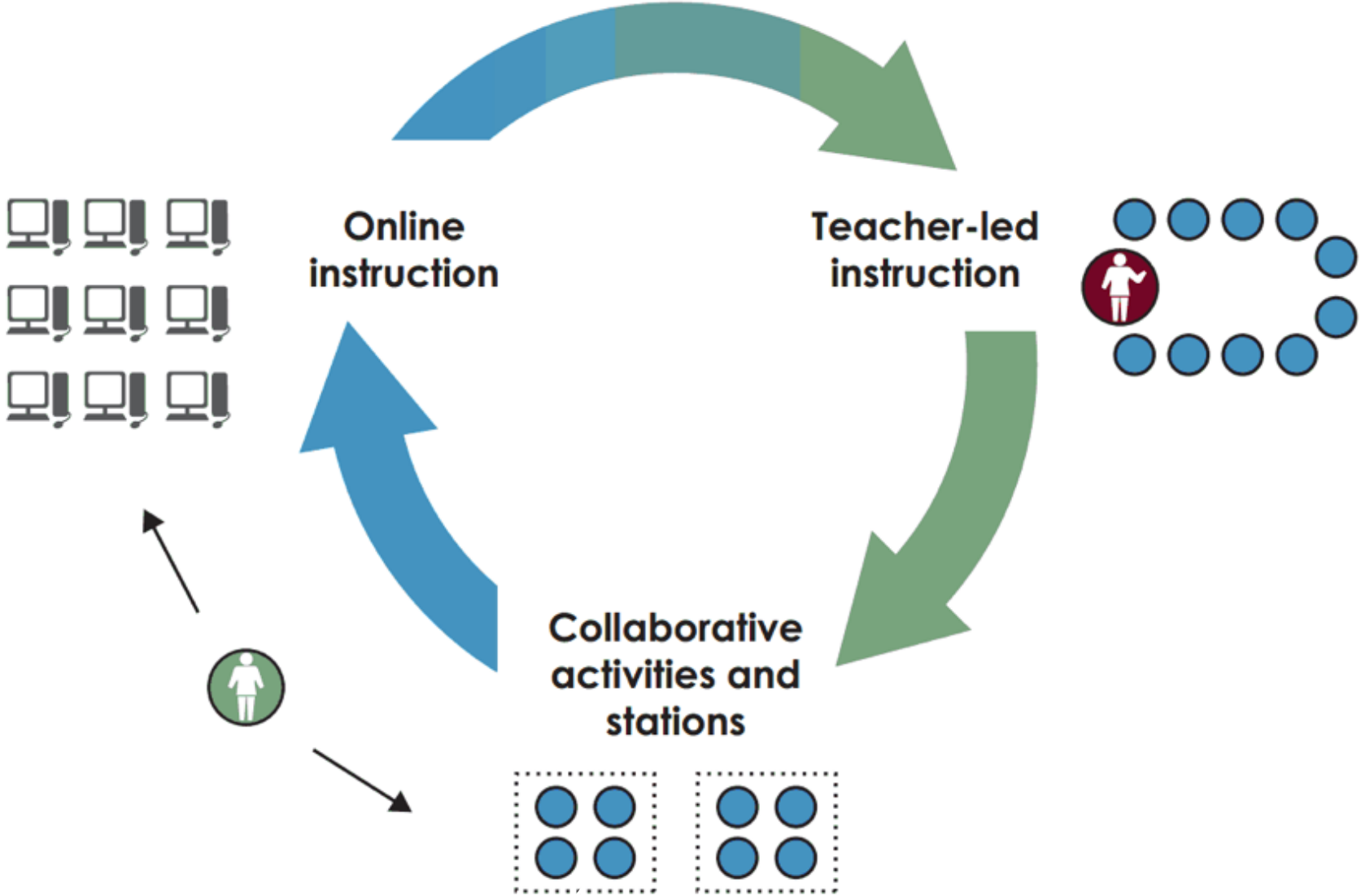
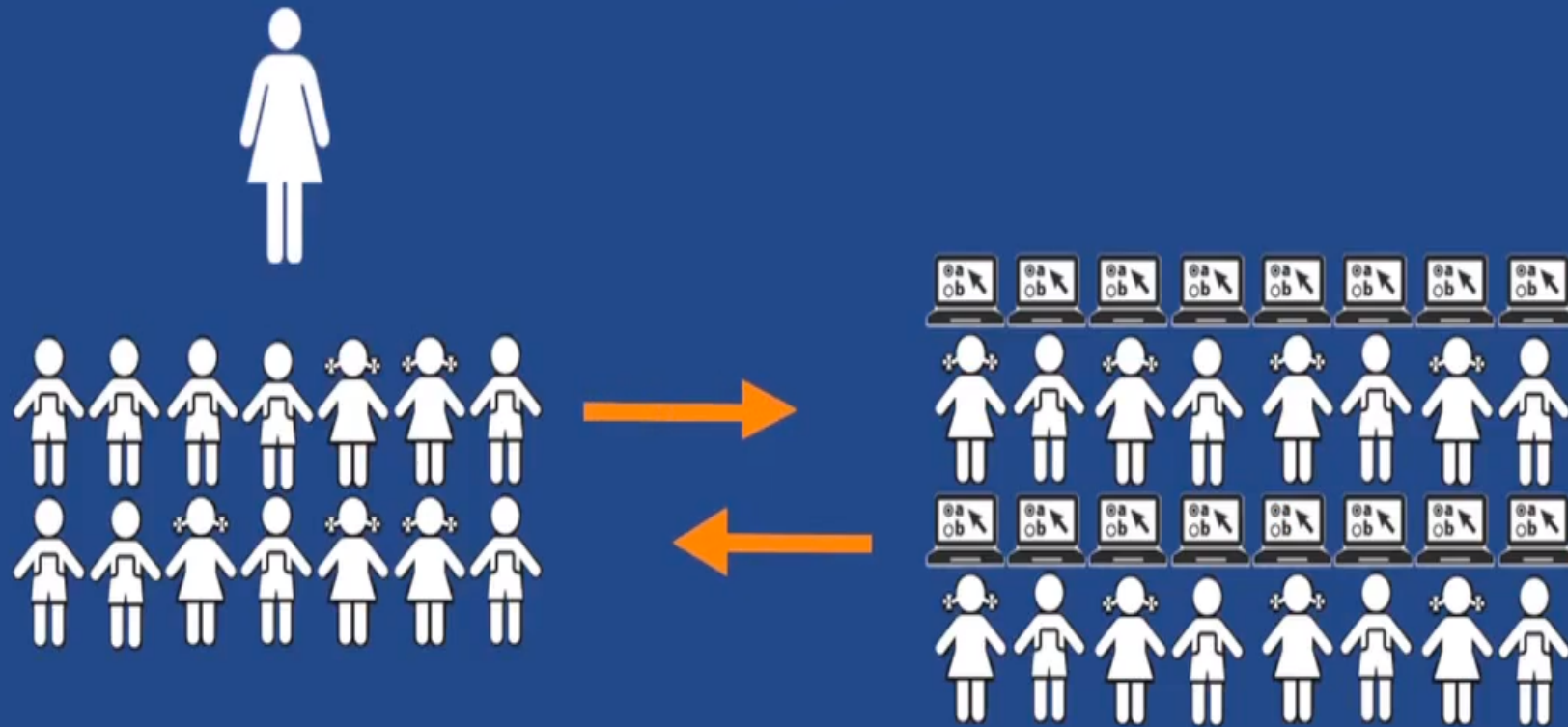


Figure 6. Station-Rotation model, KIPP LA Empower Academy

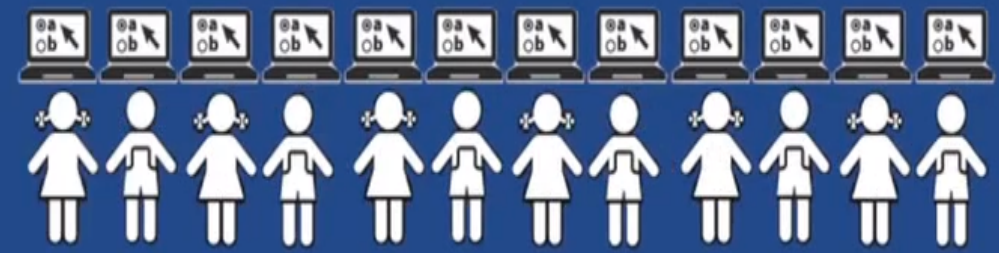


Online learning Offline learning Teacher Paraprofessional

Science & Writing

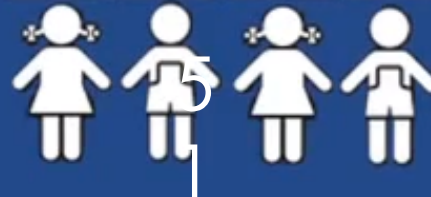
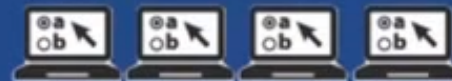
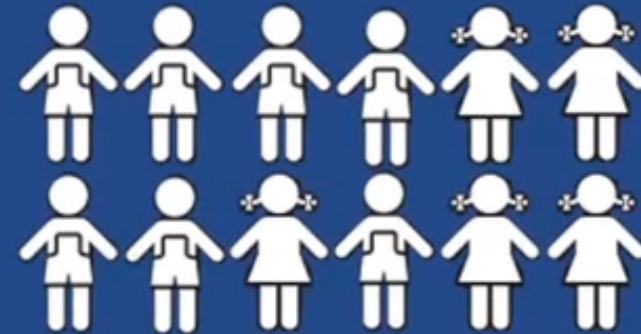
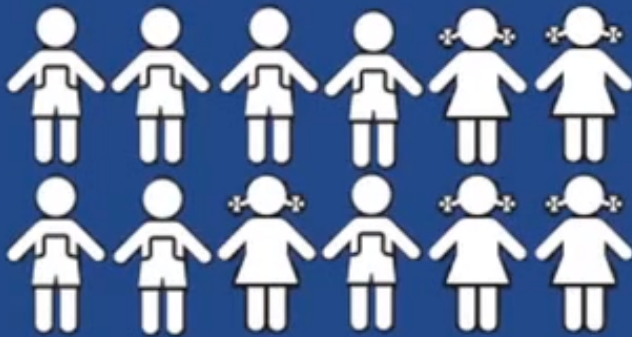


Reading



50

Math



5
1



Adaptive Learning

Computers adapt the presentation of educational material according to the students' learning needs, as indicated by the students' responses to questions and tasks.

Assessment and Instruction

Assessment

- STAR

ELA

- Lexia

Math

- ST Math
- ALEKS



Achieve3000

LAUNCHED



Chromebook Login

LAUNCHED



MobyMax

LAUNCHED



Newsela

LAUNCHED



Think Through Math

LAUNCHED



i-Ready

Secure Sync, Instant Login

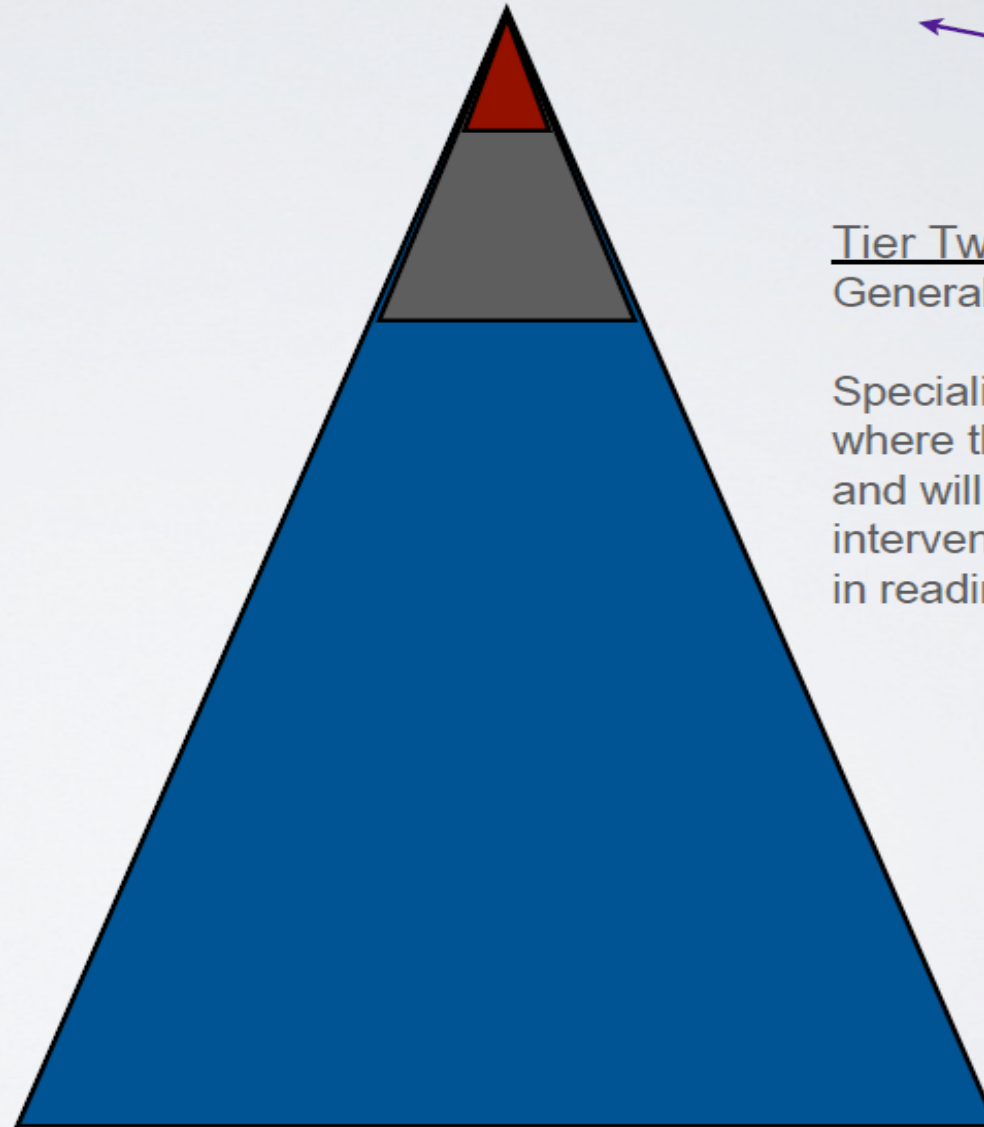
Tiers

Tier One: Instruction

General Education classroom

coordinated between classes, programs,
types of facilities, and school providers:

Where will this student go next? Next?
Next? Next?



Tier Three Intervention

Special Education

- Individually designed special ed

Tier Two Intervention

General Education

Specialized instruction in areas where the student is not succeeding and will not succeed in school until intervention is provided: word study in reading, writing a sentence

Reading: Phonemic Awareness, Word Reading and Fluency

Tier Three Intervention

- Lindamood/Bell
- Wilson Reading System
- Individually designed special ed

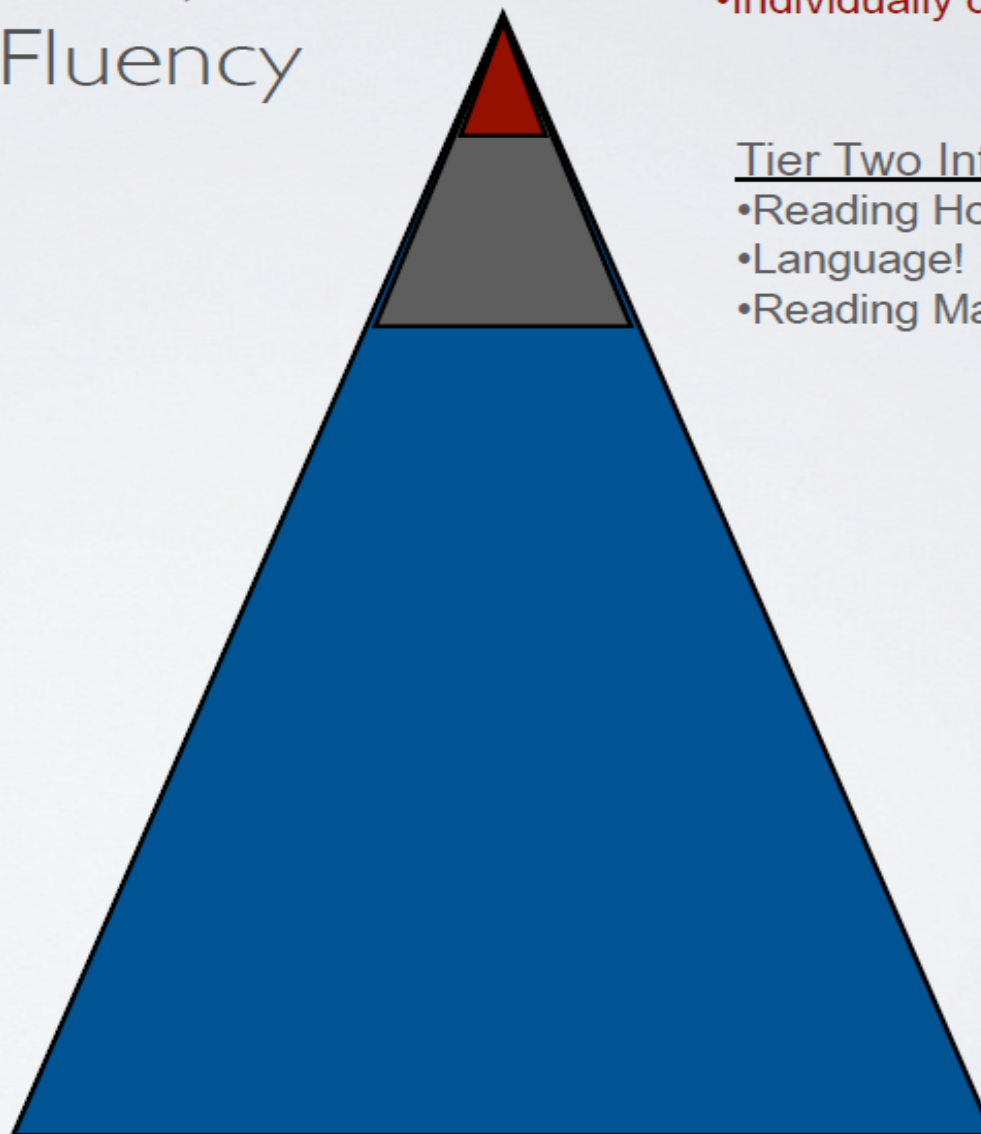
Tier Two Intervention

- Reading Horizons
- Language!
- Reading Mastery

Tier One: Instruction

Standards based differentiated instruction
in all subject areas using validated
strategies with coordinated text

Wide reading in literature circles, content
and informational text

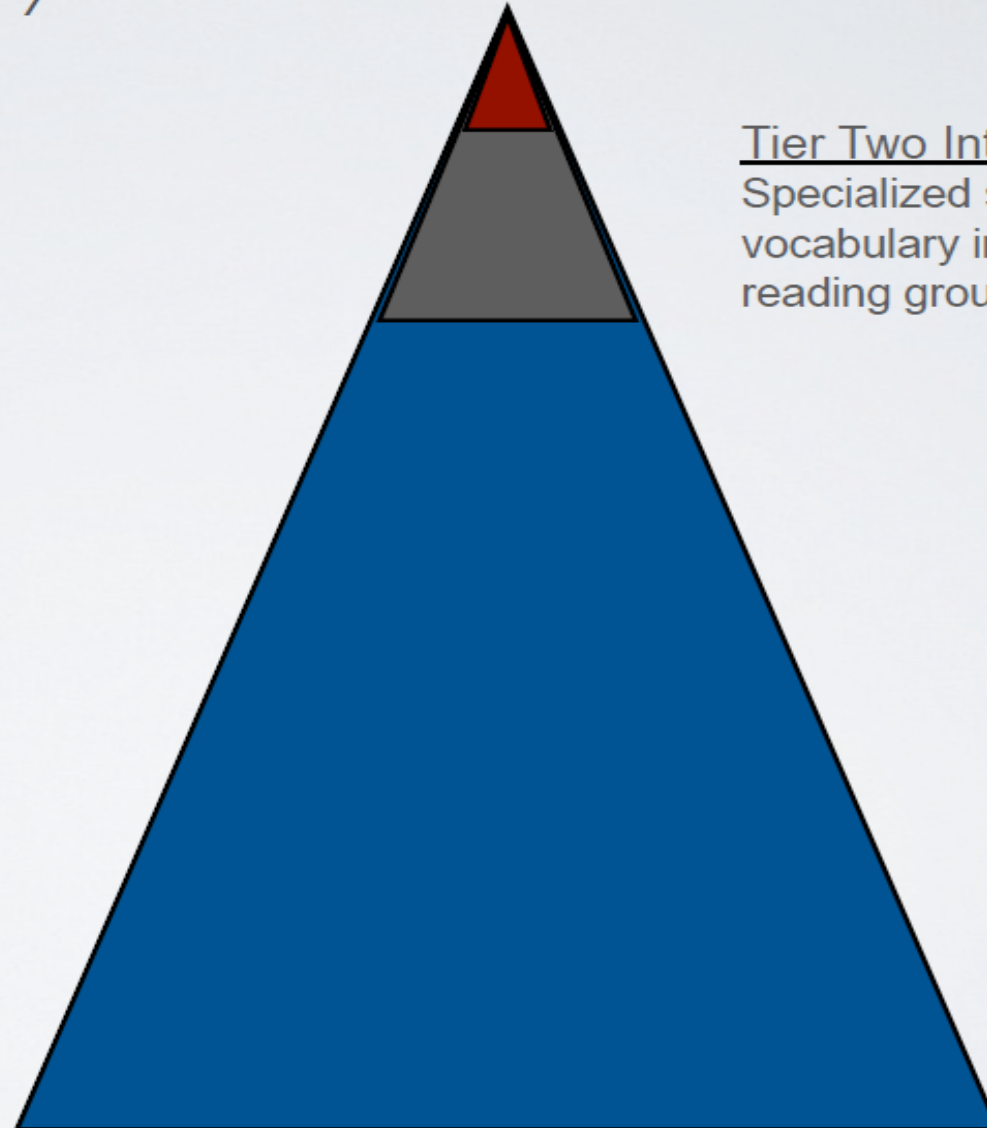


Reading Vocabulary

Tier One: Instruction

- Additive vocabulary instruction: explicit instruction and guided practice with new words
- Generative vocabulary instruction building on relatedness of words and classes of words
- Academic vocabulary instruction

Wide reading in literature circles, content and informational text



Tier Three Intervention

- Lindamood/Bell
- Language!
- Individually designed special ed

Tier Two Intervention

Specialized strategies instruction in vocabulary in validated programs, reading groups and mentorships

Academy of Reading,
Accelerated Reader,
Achieve 3000,
Achieving Maximum Potential Reading
System,
Advancement Via Individual Determination,
AfterSchool KidzLit,
America's Choice—Ramp-Up Literacy,
Benchmark Word Detectives,
Concept-Oriented Reading Instruction,
Corrective Reading,
Disciplinary Literacy,
Failure Free Reading,
First Steps/STEPS,
Junior Great Books,
Knowledge Box,
LANGUAGE!,
Learning Upgrade,
Lexia Strategies for Older Students,
Lindamood-Bell,
Lit ART,
My Reading Coach,
Passport Reading Journeys,
Peer-Assisted Learning Strategies,

Phono-graphix,
PLATO Learning,
Project CRISS,
Puente, Questioning the Author READ 180,
READ RIGHT,
Reading Apprenticeship,
Reading Horizons,
Reading Is FAME (Girls and Boys Town),
Reading Power in the Content Areas,
Reciprocal Teaching,
REWARDS,
Saxon Phonics Intervention,
Scaffolded Reading Experience,
Soar to Success,
Spell Read P.A.T.,
Strategic Instruction Model,
Success for All,
Talent Development High Schools,
Thinking Reader,
Transactional Strategies Instruction,
Vocabulary Improvement Program,
Voyager Time Warp Plus,
Wilson Reading System,
Write To Lear

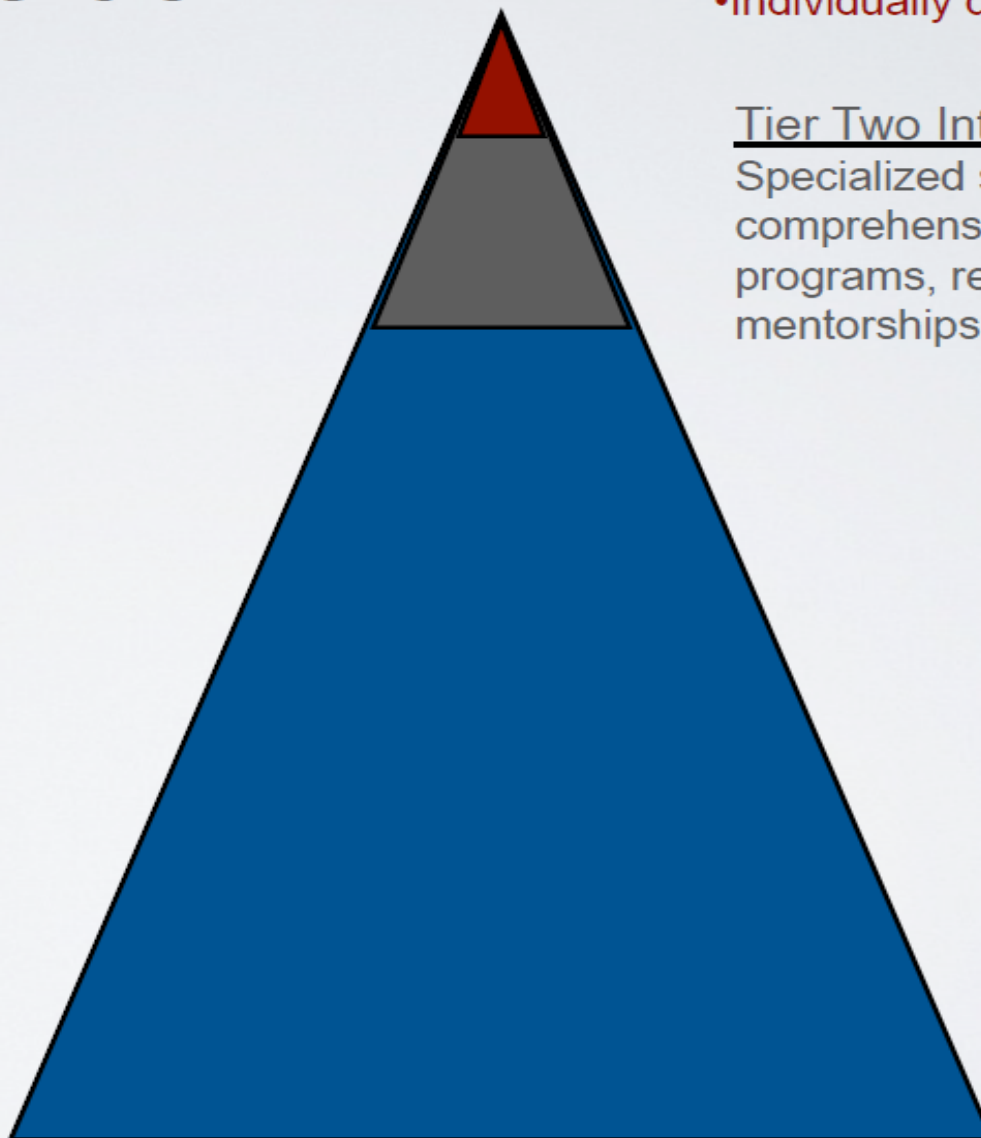
Reading Comprehension

Tier One: Instruction

Explicit comprehension instruction whenever reading is for meaning

- Activate Prior Knowledge
- Use Graphic Organizers
- Teach Comprehension Monitoring Strategies [fix-up]
- Teach Summarization Skills
- Teach Students to Ask and Answer Questions
- Multicomponent Comprehension Strategy Instruction [mental imagery]

Wide reading in literature circles, content and informational text



Tier Three Intervention

- Corrective Reading
- Reading Success
- Language!
- Individually designed special ed

Tier Two Intervention

Specialized strategies instruction in comprehension in validated programs, reading groups and mentorships

Writing

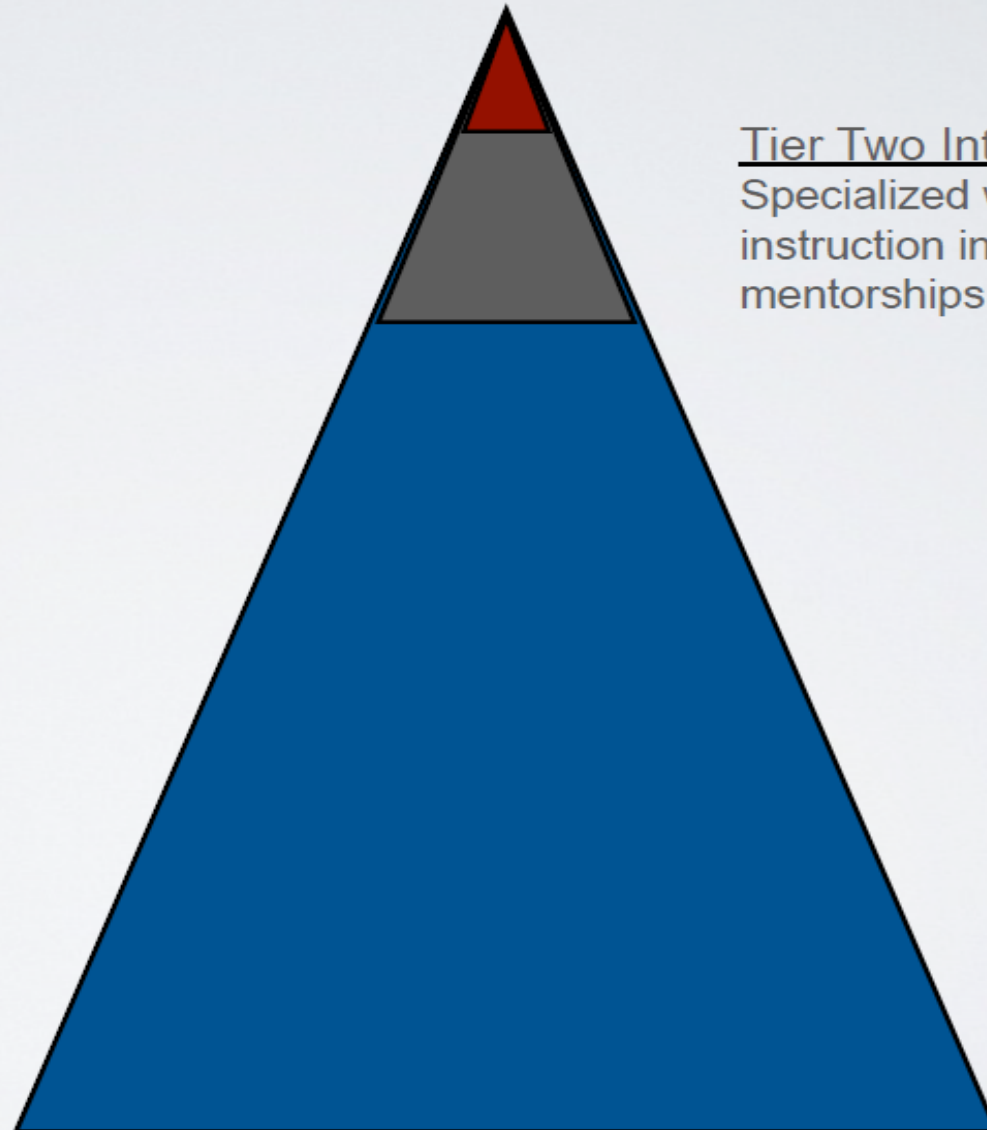
Tier One: Instruction

Standards based differentiated instruction in language arts using validated strategies with coordinated text

Daily reading and writing using transformational prompts with reading and writing benchmarks tied to major products

Explicit language skills instruction

Wide reading in literature circles, content and informational text



Tier Three Intervention!

- Individually designed special ed

Tier Two Intervention

Specialized writing strategies instruction in writing groups and mentorships [CAHSEE remediation]

Social Relationships and Behavior

Tier Three Intervention

- Functional Analysis
- Individually designed special ed

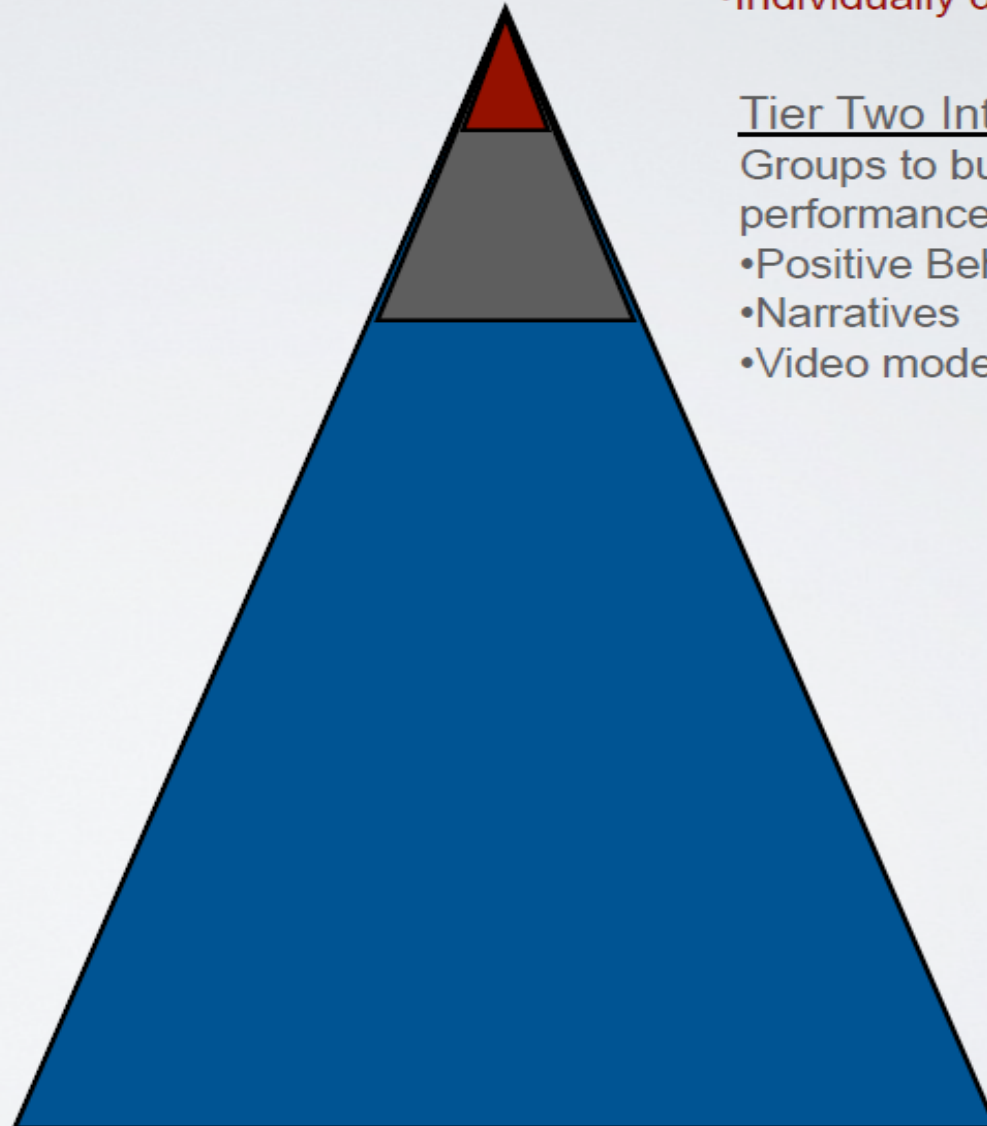
Tier Two Intervention

Groups to build acquisition and performance skill deficits:

- Positive Behavior Support
- Narratives
- Video modeling

Tier One: Instruction

- Explicit instruction and reinforcement of desired school behaviors
- Positive Behavior Support
- Structure learning for social skills and emotional management
- Teach self management
- Student led IEP's, ILP' and Portfolio





Problem Solving Cycle

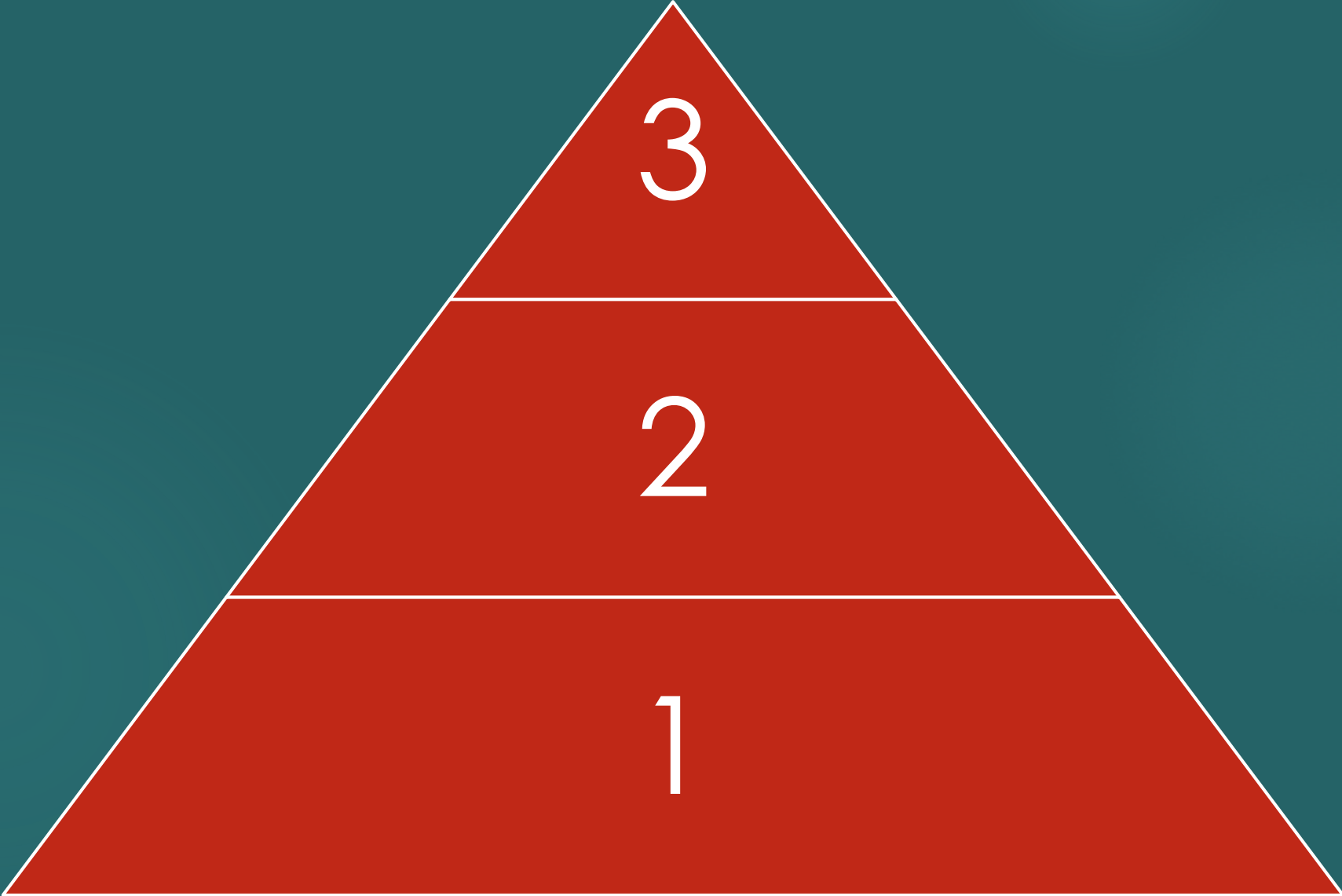
READING HYPOTHESES

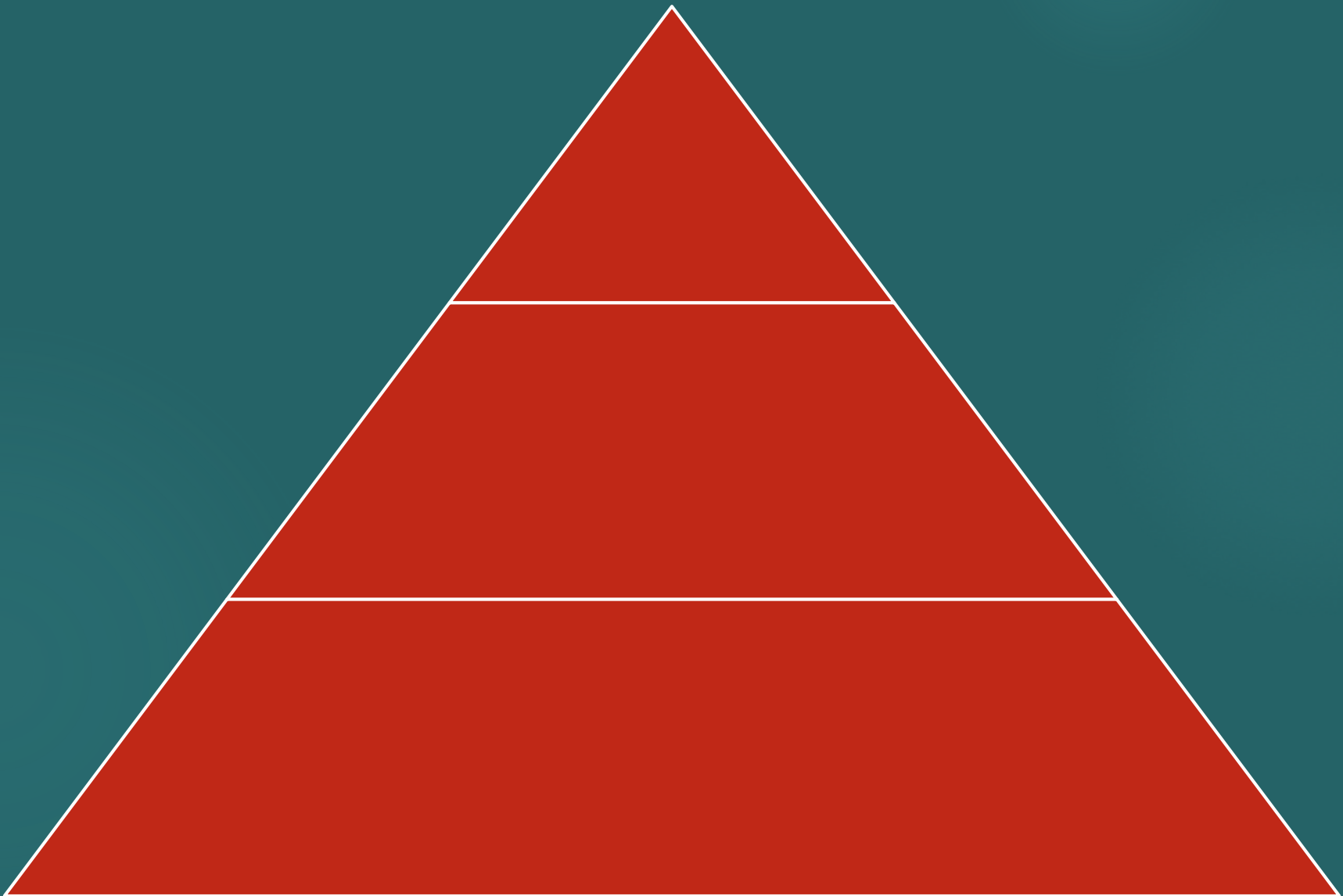
Reading Decoding



Reading Comprehension

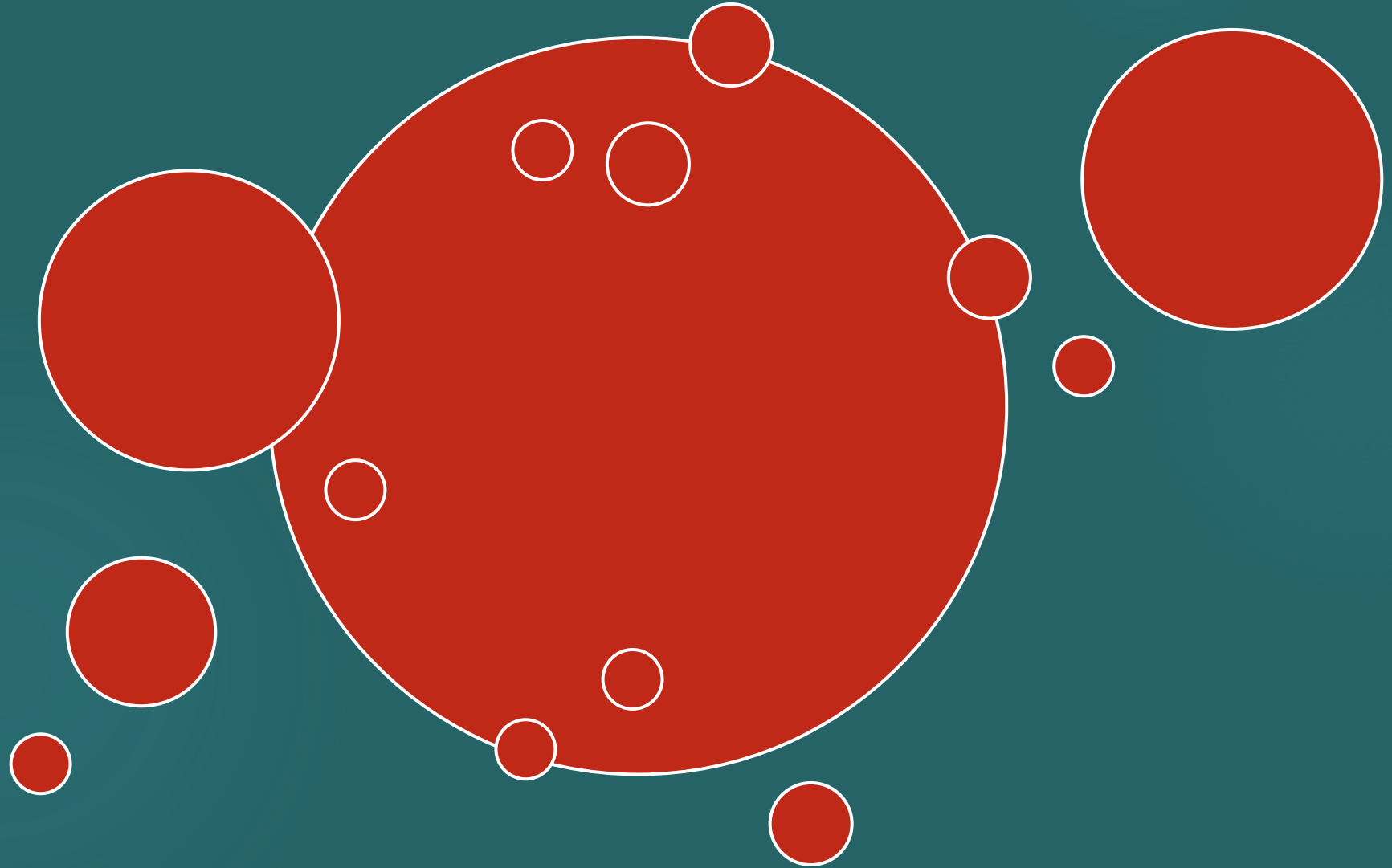
Your Tiers...

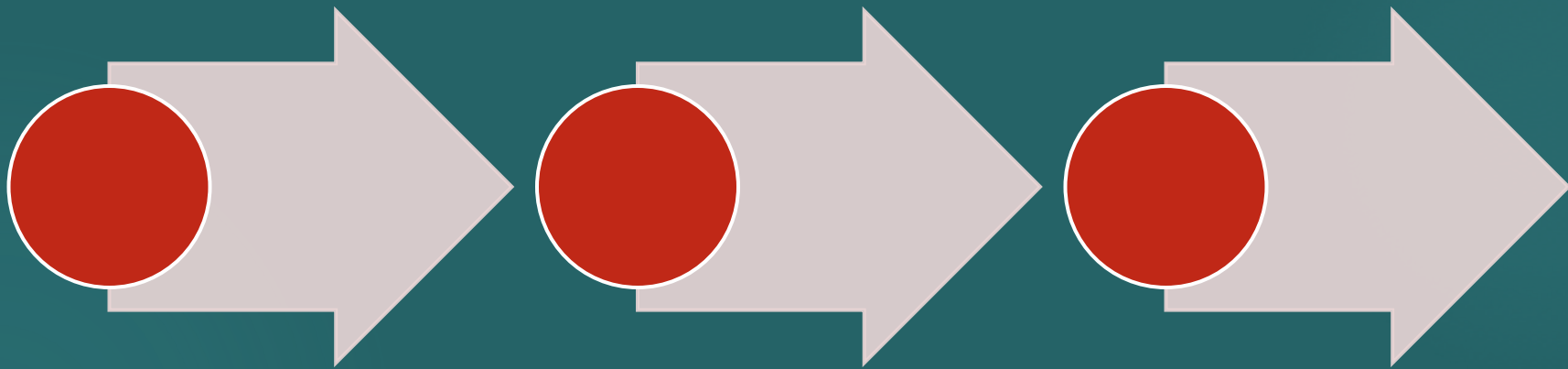


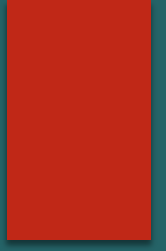
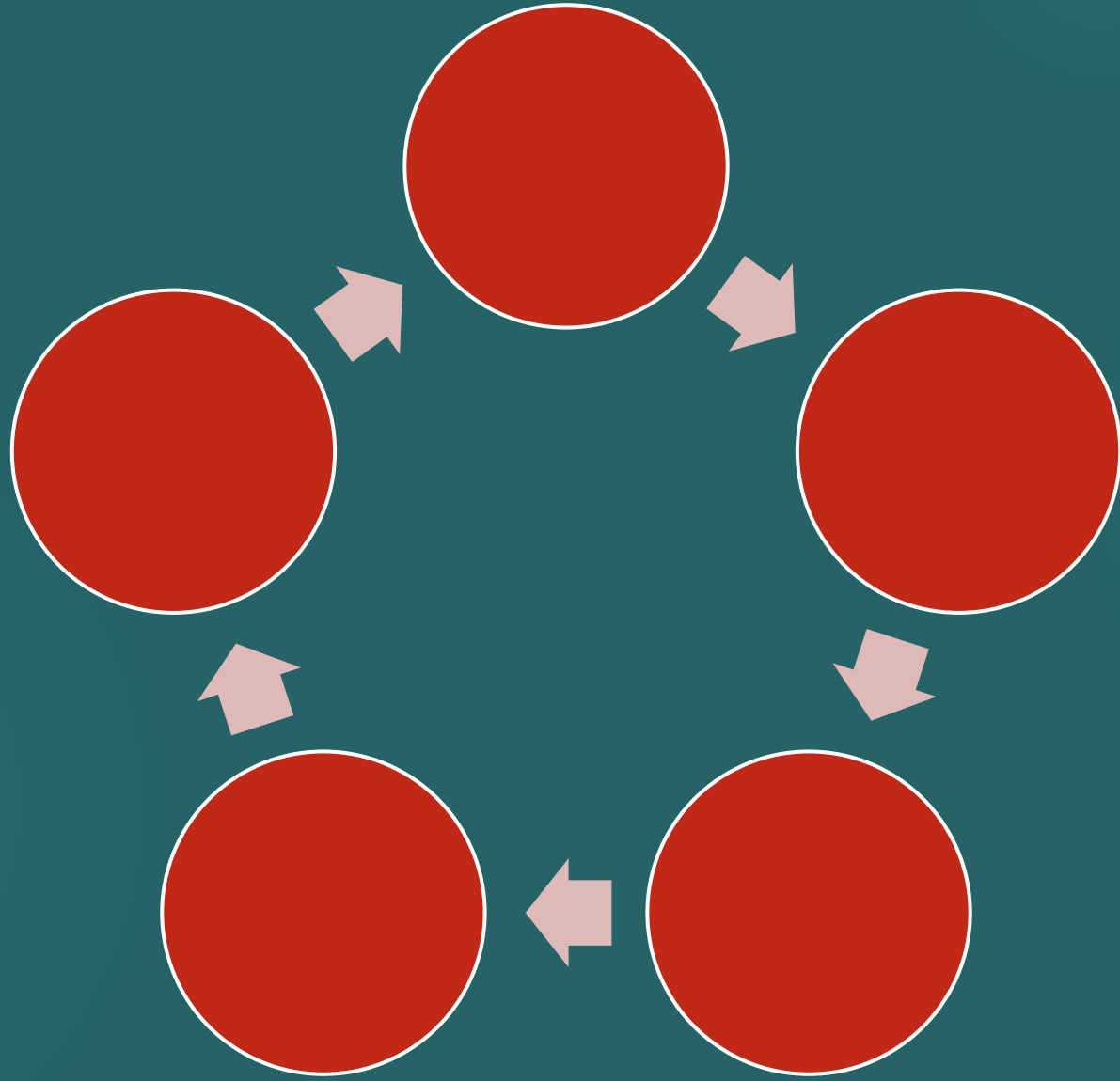


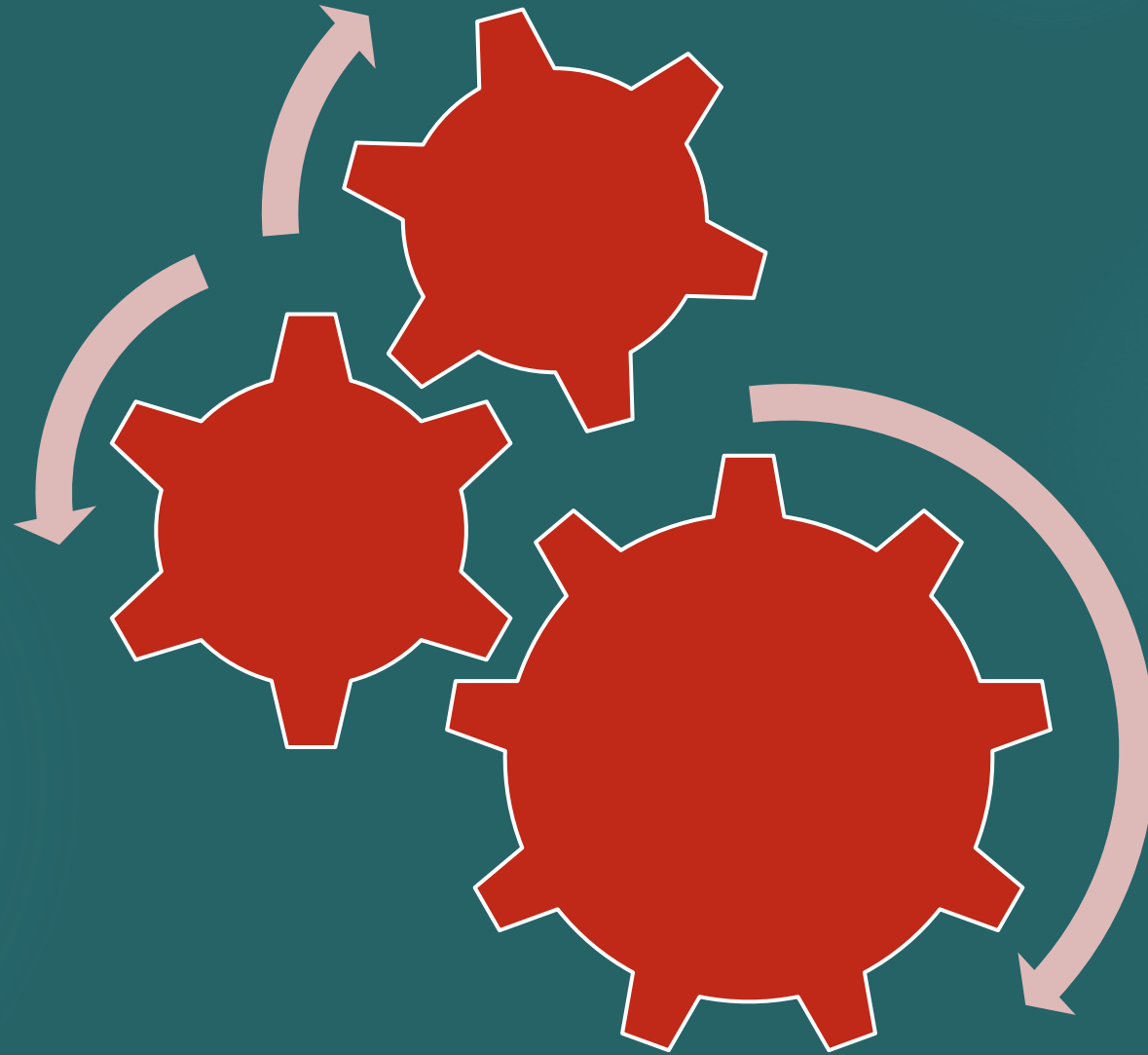


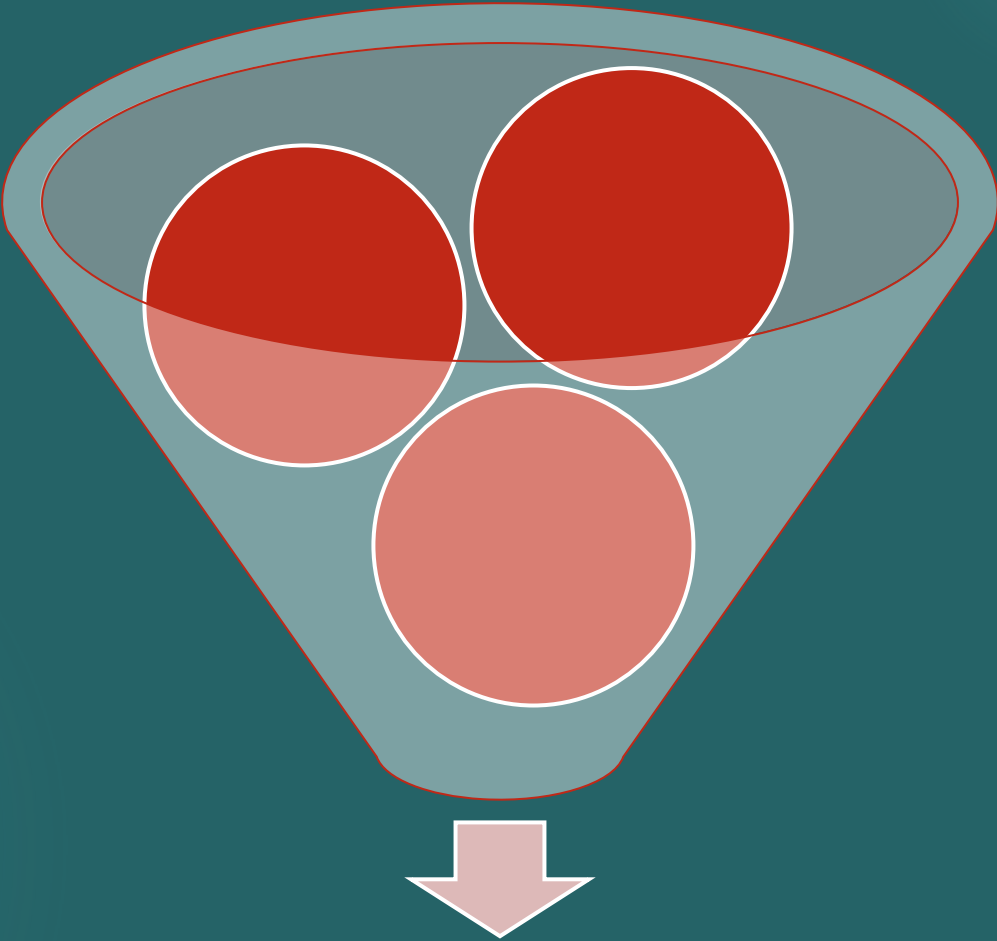
Your Needs...













Thanks

THAT IS ALL – LUNCH IS NEXT