



2018  
INCLUSION  
**WORKS!**

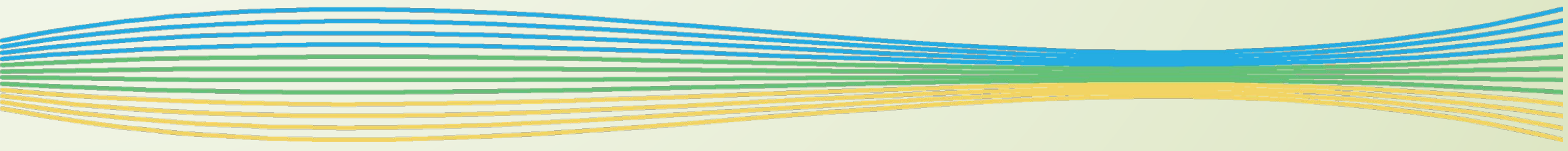


ACCESS  
CURRICULUM  
TOGETHER, LLC

# Mathematics: Including All Students

Patty Callaway, Mathematics Specialist

Kimberly Cook, Special Education Specialist



# Access Curriculum Together



ACCESS  
CURRICULUM  
TOGETHER, LLC

Our mission is to increase access to the curriculum within a community of learners by uniting educators and resources, increasing accountability and maximizing students' learning and quality of life.



# Mathematical Theory

Concrete

Representational

Abstract

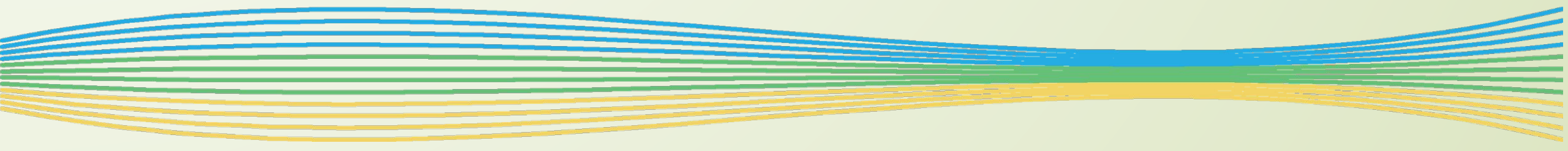
# Meta-cognition Activity



ACCESS  
CURRICULUM  
TOGETHER, LLC

What is meta-cognition?

How can it help teachers and students?

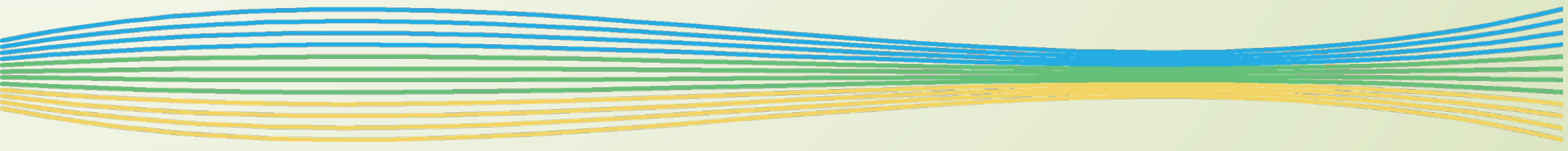


# PROMISE OF UDL



ACCESS  
CURRICULUM  
TOGETHER, LLC

- Foundational concept of UDL: reduce the impact of disability.
- A disability can not be fixed but the environment can be altered – paradigm shift in thought.





# Universal Design in Architecture



ACCESS  
CURRICULUM  
TOGETHER, LLC



# UDL Reduces the Need for Differentiated instruction

- Instruction that is accessible to a wide range of learners from the beginning, requires less individualized instruction, accommodations and modifications. The UDL classroom is accessible to a wide range of diverse learners.





# Every Student Succeeds Act



ACCESS  
CURRICULUM  
TOGETHER, LLC

“(I) stakeholders representing the interests of children with disabilities, English learners, and other vulnerable children;

“(II) teachers, principals, and other school leaders;

“(III) local educational agencies;

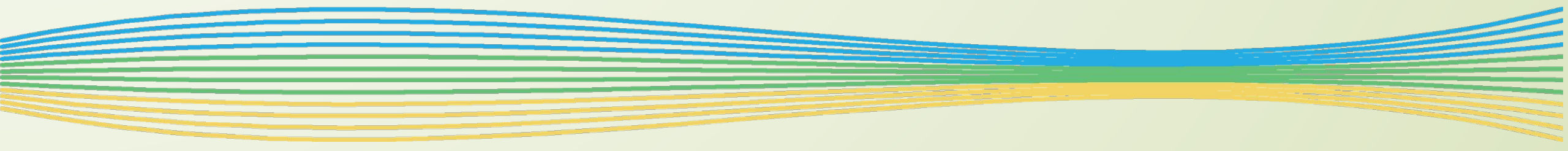
“(IV) parents; and

“(V) civil rights organizations in the State;

“(vi) be accessible to all students, such as by incorporating the principles of universal design for learning;

“(vii) provide teachers, principals, other school leaders, students, and parents with timely data, disaggregated by each subgroup of students described in section 1111(b)(2)(B)(xi), to inform and improve instructional practice and student supports;

Mentions  
Universal Design for  
Learning  
Four Times



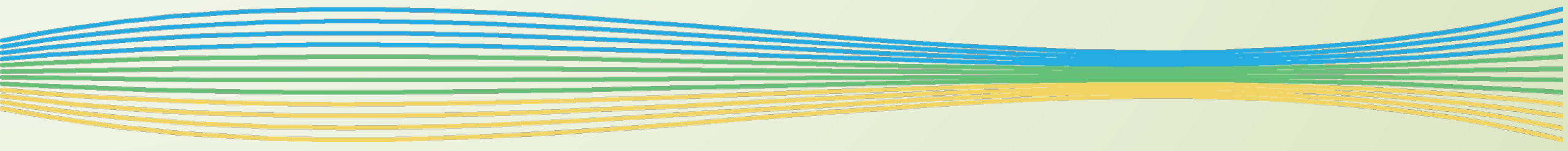


# UDL Guidelines: The Building Blocks



ACCESS  
CURRICULUM  
TOGETHER, LLC

A teacher implementing UDL ***eliminates barriers to learning*** by proactively and deliberately planning a lesson all students can access, while pushing all students to achieve grade level standards.

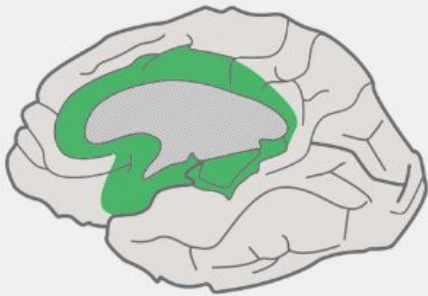


# Universal Design for Learning Guidelines

GO TO THE UDL GUIDELINES



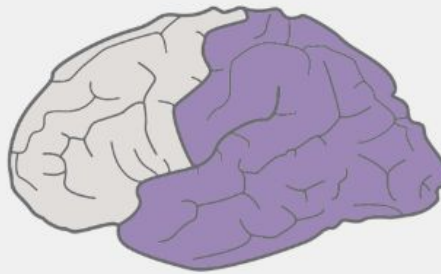
AFFECTIVE NETWORKS:  
THE **WHY** OF LEARNING



## Engagement

For purposeful, motivated learners, stimulate interest and motivation for learning.

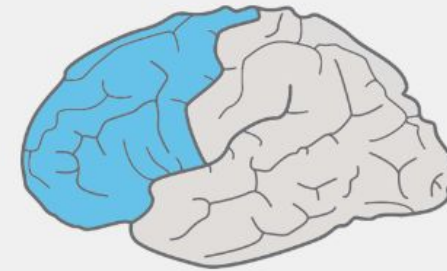
RECOGNITION NETWORKS:  
THE **WHAT** OF LEARNING



## Representation

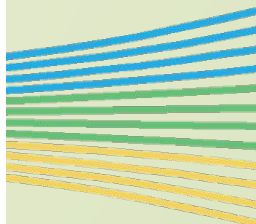
For resourceful, knowledgeable learners, present information and content in different ways.

STRATEGIC NETWORKS:  
THE **HOW** OF LEARNING



## Action & Expression

For strategic, goal-directed learners, differentiate the ways that students can express what they know.



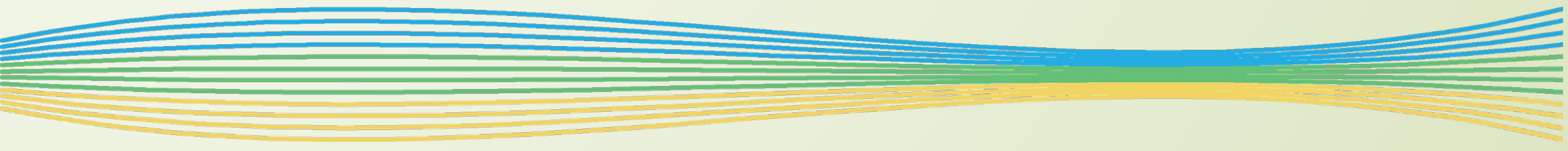
# Differentiated Instruction as a Foundation for UDL



ACCESS  
CURRICULUM  
TOGETHER, LLC

DI and UDL are ways to differentiate curriculum to meet the needs of learners:

- DI is more reactive and teacher directed
- UDL is proactive and student directed



# Universal Design for Learning



ACCESS  
CURRICULUM  
TOGETHER, LLC

Design instructional activities to address unique learning differences.

Reading is often the largest barrier to learning math.





# Special Education Supports

To be successful in the general education class, students must be given access to supports:

- visual schedules
- task analysis of complex processes
- communication supports
- supplemental aids
- assistive technology

# Vertically Aligned Vocabulary - Word Walls



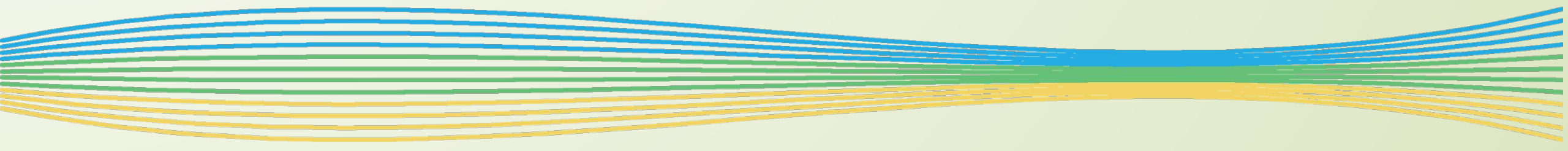
ACCESS  
CURRICULUM  
TOGETHER, LLC

Build teacher capacity

Accessible entry points - visual scaffolding

Close performance gaps

Build confidence





# Brain Based Learning



# Brain Based Learning

Movement

Discussion

Exploration

Socialization

Changing states

Validate learning differences





**Patty Callaway**  
**Math Specialist**  
**(361) 537-3665**  
**[patty@accesscurriculumtogether.com](mailto:patty@accesscurriculumtogether.com)**



ACCESS  
CURRICULUM  
TOGETHER, LLC



**Kimberly Cook**  
**Special Education Specialist**  
**(361) 960-0730**  
**[kimberly@accesscurriculumtogether.com](mailto:kimberly@accesscurriculumtogether.com)**

