

CompetencyWorks

Meeting Students Where They Are

*Antonia Rudenstine, reDesign
Sydney Schaef, reDesign
and Chris Sturgis, Learning Edge*

November 7, 2018
3:00-4:00 PM ET



10 Distinguishing Features of CBE

Purpose & Culture



Student success outcomes are designed around preparation for college, career and lifelong learning.



Districts and schools make a commitment to be responsible for all students mastering learning expectations.



Districts and schools nurture empowering, inclusive cultures of learning.

10 Distinguishing Features of CBE

Pedagogy



Students receive timely and differentiated instruction and support.



Research-informed pedagogical principles emphasize meeting students where they are and building intrinsic motivation.



Assessments are embedded in the personalized learning cycle and aligned to outcomes including the transfer of knowledge and skills.

10 Distinguishing Features of CBE

Structure



Mechanisms are in place to ensure consistency in expectations of what it means to master knowledge and skills.



Schools and districts value transparency with clear and explicit expectations of what is to be learned, the level of performance for mastery and how students are progressing.



Strategies for communicating progress support the learning process and student success.



Learners advance based on attainment of learning expectations (mastery) through personalized learning pathways.

Meeting Students Where They Are

Courtesy of Allison Shelley/The Verbatim Agency for American Education: Images of Teachers and Students in Action.



Antonia Rudenstine
antonia@redesignu.org
[@reDesignLLC](https://www.instagram.com/reDesignLLC)



Sydney Schaefer
sydney@redesignu.org
[@sydneyschaefer](https://www.instagram.com/sydneyschaefer)





What do you want to explore together today?

How do we know where students are?

What to do we do, once we know?

How do we navigate system constraints?

RELATIONAL

PEDAGOGICAL

STRUCTURAL

Meeting Students Where They Are

- Centralize identities and social context.
- Reposition learners as developing experts.
- Nurture and sustain “anchored” connections.

RELATIONAL

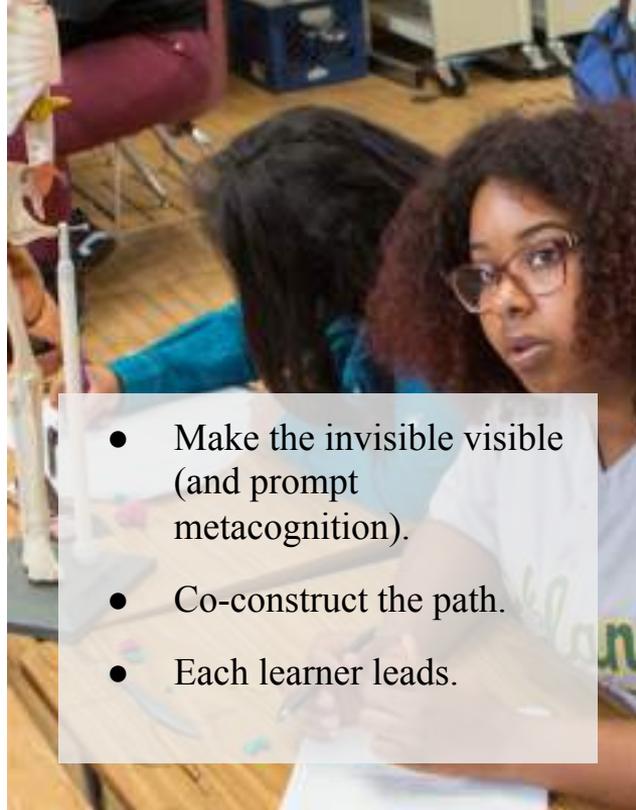
PEDAGOGICAL

STRUCTURAL

Meeting Students Where They Are



RELATIONAL



- Make the invisible visible (and prompt metacognition).
- Co-construct the path.
- Each learner leads.

PEDAGOGICAL

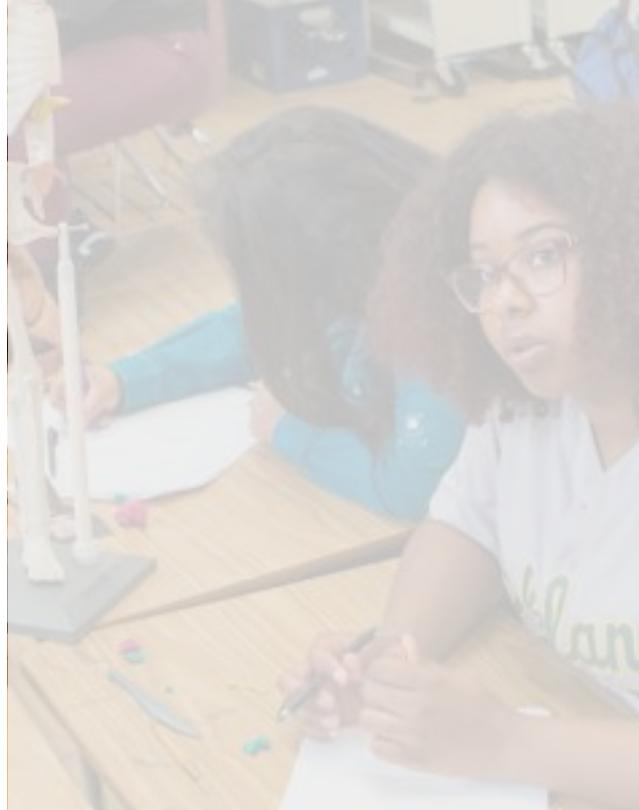


STRUCTURAL

Meeting Students Where They Are



RELATIONAL



PEDAGOGICAL



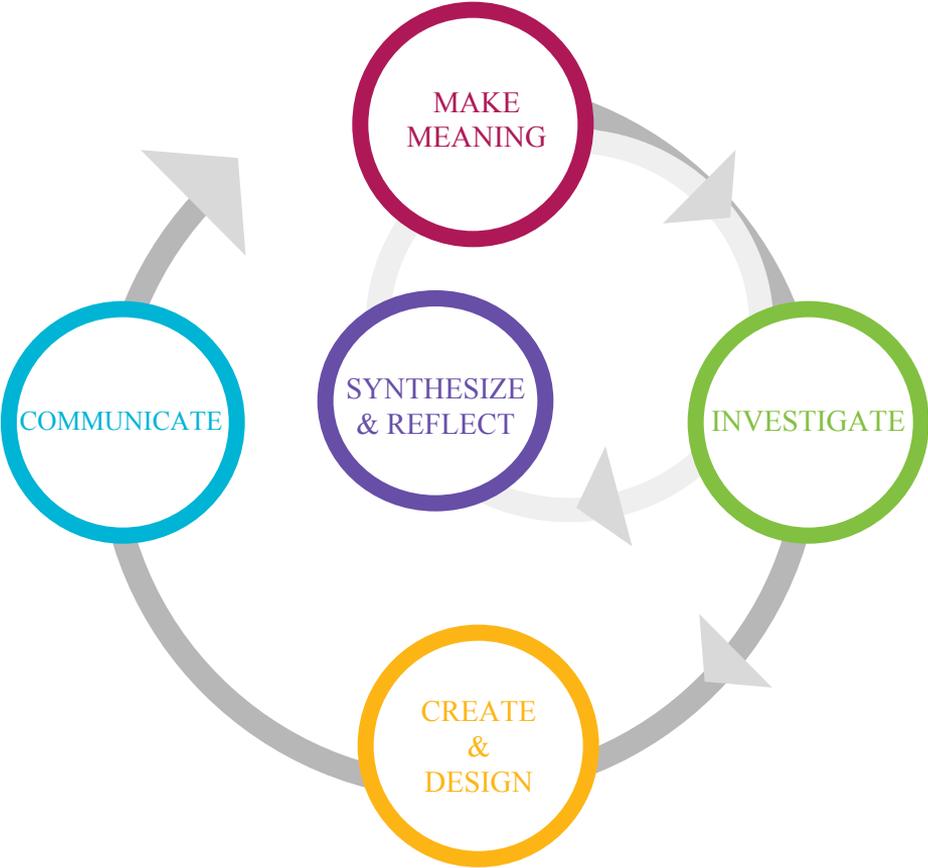
- Flexible time, space and pathways.
- Ensure purposeful coordination.
- Optimize responsiveness.

STRUCTURAL

CASE STUDY #1

How does the inquiry-based learning cycle

impact the relational and pedagogical?



I made this choice because...

Choice Rationale

1.0 Relevance	14
1.1 Relevance: Background knowledge	6
1.2 Relevance: Life experience	4
1.3 Relevance: general interest	4
2.0 Situational interest	11
3.0 Random	5
4.0 No Choice	4
5.0 Other: (e.g., text length, grouping, “I felt like it”)	3

References

Participants

N=37

%

14	14	38
6	6	
4	4	
4	4	
11	11	30
5	5	14
4	4	11
3	3	8

If I had more choices in my learning...

Negatively because too many choices are overwhelming

Negative because if I had a choice I wouldn't do anything

Yeah because I might make the wrong choice

I think it would have a negative affect in my learning because I don't know all the subjects and topics I need to increase my knowledge and help in my future career

It will negatively affect me because I feel like it won't help me increase my knowledge

“I like having the choices but I feel like it would have been easier or better or more constructive if the teacher gave the choice because then, like, if the teacher gave you the choice you would have, like, a set focus on what you gonna do. Like, if she gave the option, I feel like you might think about the difference choices you could make too much or longer.”



CASE STUDY REFLECTION

- What does this mean for my **relationship with Chris**? My next **pedagogical steps**?
- What if we had **never asked Chris to reflect on his choice**?
- What if we had never **paused to make meaning** of his response?





What are your
questions so far?



What if we reimagined our tools for measuring where students are?



How do we know where students are?

What to do we do, once we know?

How do we navigate system constraints?

RELATIONAL

PEDAGOGICAL

STRUCTURAL



HIGH SCHOOL

Science Academic Standards and Performance Indicators for Science:

Standard H.E.3: The student will demonstrate an understanding of the internal and external dynamics of Earth's geosphere.

- **H.E.3A.7 Plan and conduct controlled scientific investigations to determine the factors that affect the rate of weathering.**



KINDERGARTEN

Science Academic Standards and Performance Indicators for Science:

Standard K.L.2: The student will demonstrate an understanding of organisms found in the environment and how these organisms depend on the environment to meet those needs.

- **K.L.2A.2 Conduct structured investigations to determine what plants need to live and grow (including water and light).**

Academic Standards for Science Investigation

Kinder	Grade 3	Grade 6	Grade 8	BIOLOGY
<p>K.L.2A.2 Conduct structured investigations to determine what plants need to live and grow (including water and light).</p> <p>K.P.4A.3 Conduct structured investigations to answer questions about which materials have the properties that are best suited to solve a problem or need.</p>	<p>3.P.2A.3 Plan and conduct scientific investigations to determine how changes in heat (increase or decrease) change matter from one state to another (including melting, freezing, condensing, boiling, and evaporating).</p> <p>3.P.3B.2 Plan and conduct scientific investigations to determine the factors that affect the strength of an electromagnet.</p> <p>3.E.4B.2 Plan and conduct scientific investigations to determine how natural processes (including weathering, erosion, and gravity) shape Earth's surface.</p>	<p>6.P.3B.1 Plan and conduct controlled scientific investigations to provide evidence for how the design of simple machines (including levers, pulleys, inclined planes) helps transfer mechanical energy by reducing the amount of force required to do work.</p> <p>6.L.5B.4 Plan and conduct controlled scientific investigations to determine how changes in environmental factors (such as air, water, light, minerals, or space) affect the growth and development of a flowering plant.</p>	<p>8.P.2A.1 Plan and conduct controlled scientific investigations to test how varying the amount of force or mass of an object affects the motion (speed and direction), shape, or orientation of an object.</p>	<p>H.B.2A.2 Plan and conduct investigations to determine how various environmental factors (including temperature and pH) affect enzyme activity and the rate of biochemical reactions.</p> <p>H.B.3A.5 Plan and conduct scientific investigations or computer simulations to determine the relationship between variables that affect the processes of fermentation and/or cellular respiration in living organisms and interpret the data in terms of real-world phenomena.</p>

5.0 INVESTIGATING THROUGH INQUIRY

5.1 Frame a research question

	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6
	With guidance, I can notice things around me and then come up with a question to learn more about a topic or about the way something works.	I can use my observations to come up with a specific question that relates to a problem or situation that I am exploring.	I can use observations to come up with a testable/researchable question that addresses a problem or topic I am investigating.	I can use observations to come up with a testable/researchable question that addresses the problem or issue I am investigating.	I can draw on observational data to formulate a testable/researchable question that addresses the problem or issue I am investigating.	I can draw on diverse sources, including observational data, to formulate a testable/researchable question that addresses an enduring problem or issue in the field.
			I can cite one or more relevant sources that I've used to explore the problem or topic.	I can cite one or more relevant sources that I've used to explore the problem or topic, and provide a rationale for the inquiry in a way that shows my depth of knowledge on the topic.	I can provide a compelling rationale for the inquiry, citing current academic research, relevant scientific theories/models, and/or my own observations.	I can provide a compelling rationale for the inquiry, citing relevant scientific theories/models, current academic research (including it's limitations), and my own observations.
						My question challenges or advances current thinking on the topic or issue.

JOANNA

Why did my bicycle get so rusty last summer?
Why won't the rust come off?



JAMAL

My research question is: How does temperature affect the rate of weathering?
The National Geographic website describes weathering as one of the “natural forces” that is responsible for the shape of our environment.



What **stands out to you** about each learner's research question?

What does the research question tell you about each learner's **level of understanding**?

What **feedback would you give** to each student to help her move her thinking/work to the next level?



Reading Critically	Using Sources
Expressing Ideas	Learning Independently
Investigating through Inquiry	Leading Teams
Reasoning Quantitatively	Navigating Conflict
Designing Solutions	Sustaining Wellness
Building Networks	Engaging as a Citizen

CASE STUDY REFLECTION

- How does the skill continuum support teachers in **meeting students where they are**?
- How does the continuum help **make the invisible visible** for learners?
- How might **team-wide coordination**, and tracking of **longitudinal growth data** (not locked in courses or grade levels), enable a more **responsive learning system**?

One last round: What are your questions?

- Centralize identities and social context.
- Reposition learners as developing experts.
- Nurture and sustain “anchored” connections.

- Make the invisible visible (and prompt metacognition).
- Co-construct the path.
- Each learner leads.

- Flexible time, space and pathways.
- Ensure purposeful coordination.
- Optimize responsiveness.

RELATIONAL

PEDAGOGICAL

STRUCTURAL

Meeting Students Where They Are

Courtesy of Allison Shelley/The Verbatim Agency for American Education: Images of Teachers and Students in Action.



Antonia Rudenstine
antonia@redesignu.org
[@reDesignLLC](https://www.instagram.com/reDesignLLC)



Sydney Schaefer
sydney@redesignu.org
[@sydneyschaefer](https://www.instagram.com/sydneyschaefer)



FOR MORE INFORMATION AND TO
SHARE IDEAS

STURGIS.CHRIS@GMAIL.COM

CompetencyWorks.org