

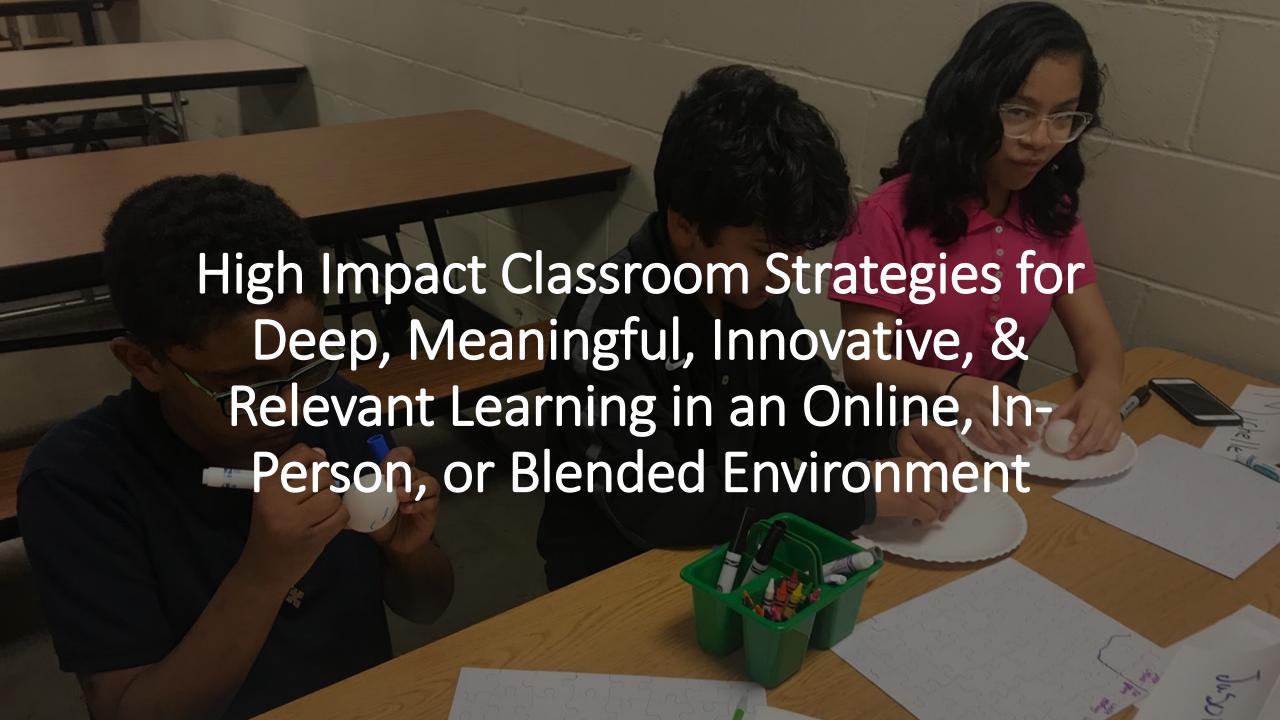
Integrating Project-Based Learning in Online and Blended Courses in Indiana

September 21, 2020



Welcome

- Introduce yourselves.
 - Share who you are, where you are from, and one hope you have for this school year.
- Ask and answer questions.
 - Use the chat function to pose questions of our panelists. All attendees are encouraged to respond.
 - We will leave time for our panelists to answer questions.
- Share your learning.
 - Tell your colleagues what you are learning. Use #Aurora2020 on Twitter and mention @Aurora_Inst.
- We are recording and archiving the webinar.
 - The slides and video will be available on aurora-institute.org.



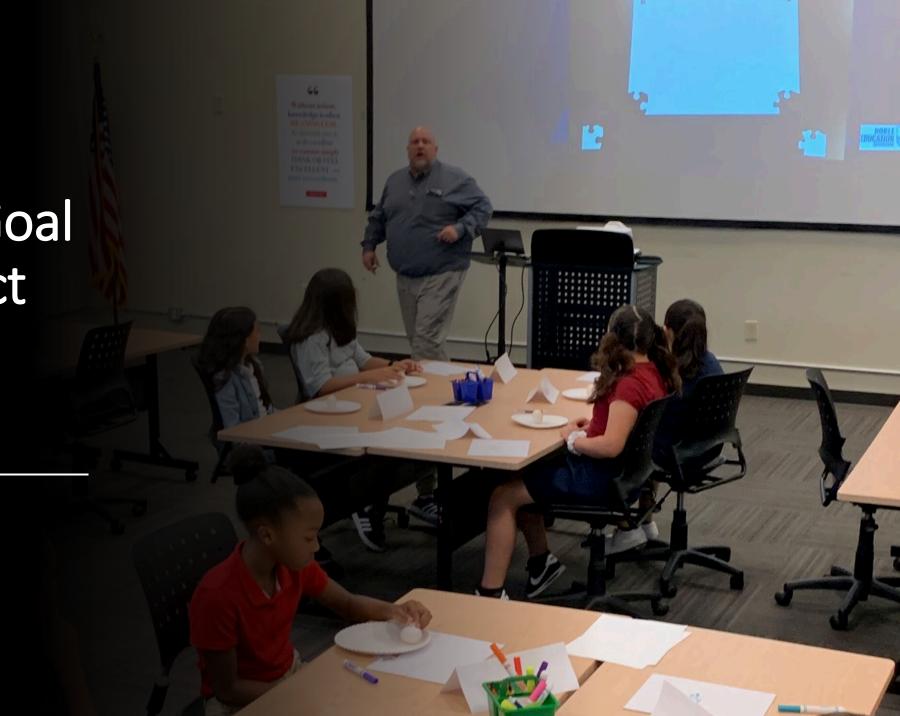


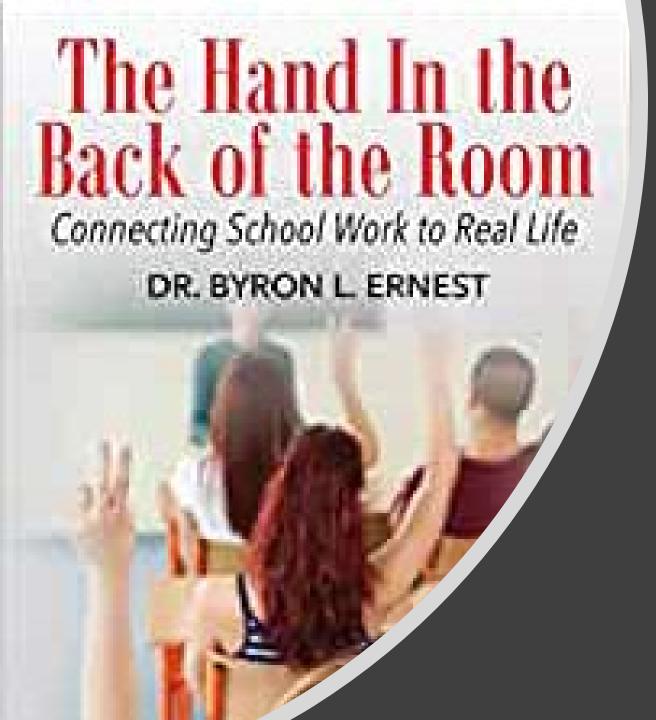




Why Do We Need High **Impact** Classroom Strategies?

What Is The Goal Of High Impact Classroom Strategies?





What Is The Goal Of High Impact Classroom Strategies?

Table 1 – Point-Biserial Correlations For End of Course Assessment

| | | Fund of Ag Science | ECA Score |
|-----------------------|----------------------------|--------------------|-----------|
| Fund of Ag Science | Point-Biserial Correlation | 1 | .364** |
| | Sig. (2-tailed) | | .000 |
| | N | 486 | 486 |
| ECA Score | Point Biserial Correlation | .364** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 486 | 486 |

Using the sample of 486 students there was a statistically significant correlation of .364 for students taking Fundamentals of Agriculture Science and Business and the same students' achievement on the Indiana Biology I End of Course Assessment (see Table 1).

Table 2 – Point-Biserial Correlations For Biology I Grade Percentage

| | | Fund of Ag Science | Biology I Grade |
|-----------------|----------------------------|--------------------|-----------------|
| Fund of Ag | Point-Biserial Correlation | 1 | .351** |
| Science | Sig. (2-tailed) | | .000 |
| | N | 486 | 486 |
| Biology I Grade | Point-Biserial Correlation | .351** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 486 | 486 |

A .351 point-biserial correlation was found and the correlation was significant at the 0.01 level (2-tailed) as seen in Table 2.

Table 3 – Biology I End of Course Assessment Chi-Squared Observed/Expected Data

| | Observed N | Expected N | Residual |
|-------------------|------------|------------|----------|
| 0 Not Passing ECA | 208 | 243.0 | -35.0 |
| 1 Passing ECA | 278 | 243.0 | 35.0 |
| Total | 486 | | |

Agriculture Science and Business, as seen in Table 5. The percentage of participants that passed the Indiana Biology I End of Course Assessment was higher for those who had successfully completed the Fundamentals of Agriculture Science and Business course, $c^2(1, N=486) = 10.08$, p=.001.

Table 4 – Biology I End of Course Assessment Chi-Squared Test Statistics

| | Biology I ECA |
|------------|---------------------|
| Chi-Square | 10.082 ^a |
| df | 1 |
| P - value | .001 |

0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 243.0.

Agriculture Science and Business, as seen in Table 4. The percentage of participants that passed the Indiana Biology I End of Course Assessment was higher for those who had successfully completed the Fundamentals of Agriculture Science and Business course, $c^2(1, N=486) = 10.08$, p=.001.

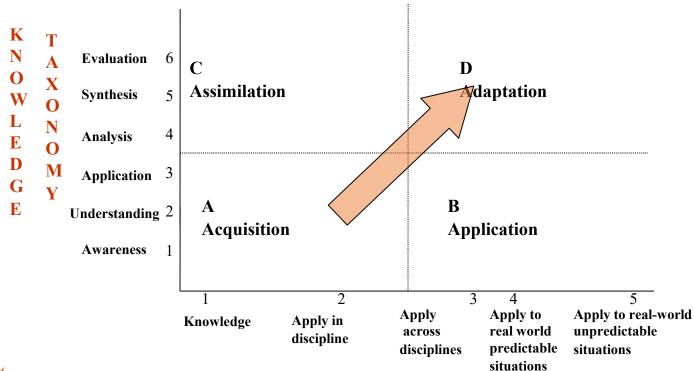
Interpretation of Results

The results for this mixed methods explanatory study were as follows:

- » There was a statistically significant correlation for students taking Fundamentals of Agriculture Science and Business and student achievement on the Indiana Biology I End of Course Assessment;
- » Students who took Fundamentals of Agriculture Science and Business were significantly more likely to score higher on the Biology I course grade percentage;
- » Teachers reported a positive experience and perceived positive student impact from teaching science concepts in the context of agriculture



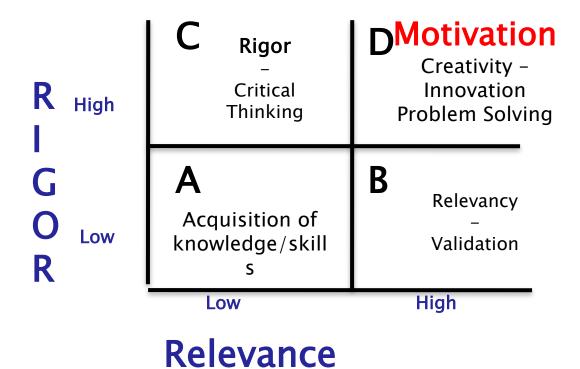
The Rigor/Relevance Framework



APPLICATION MODEL

International Center for Leadership in Education

Motivated Students

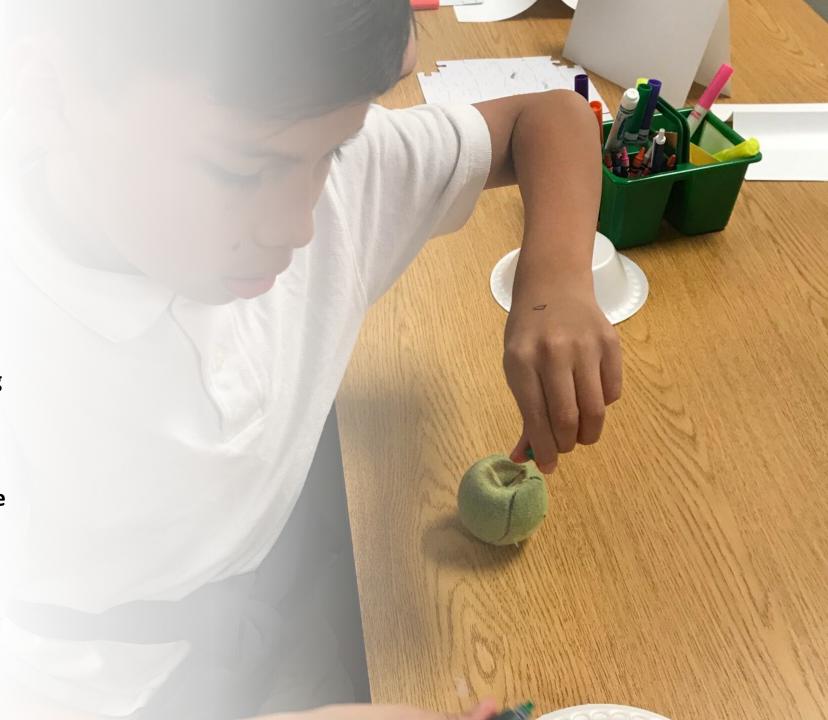


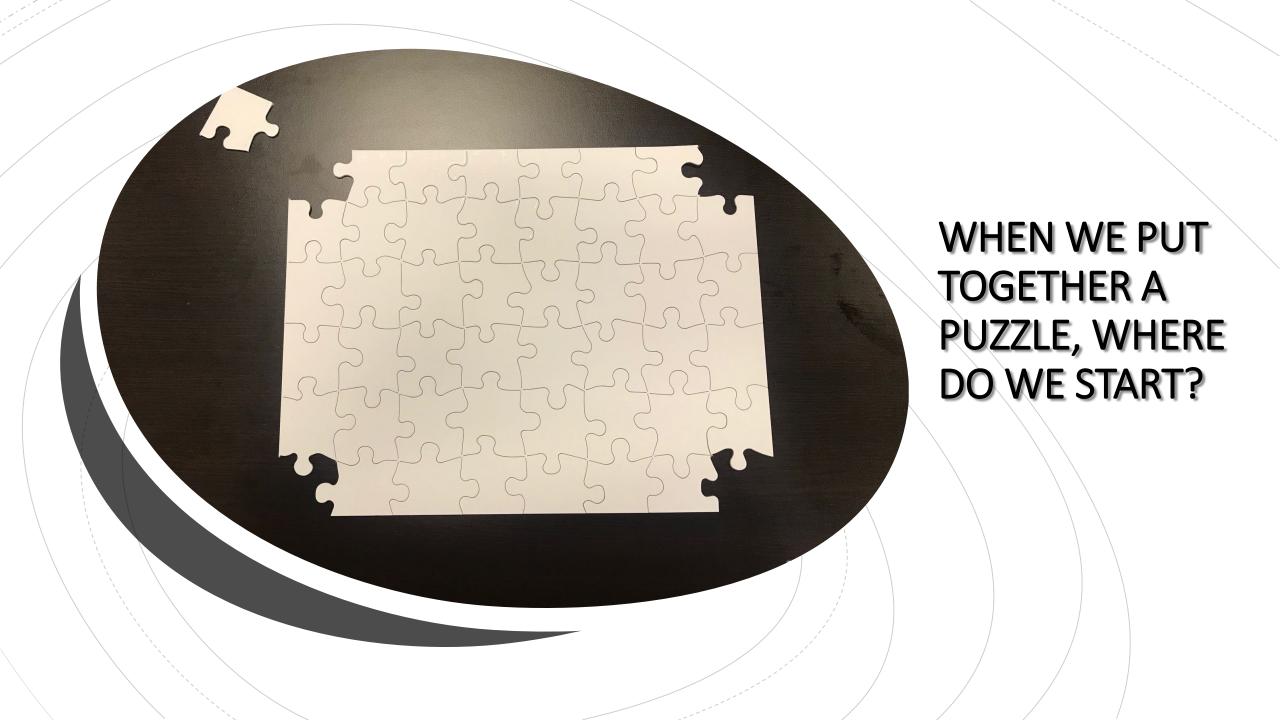


Rigor & Relevance

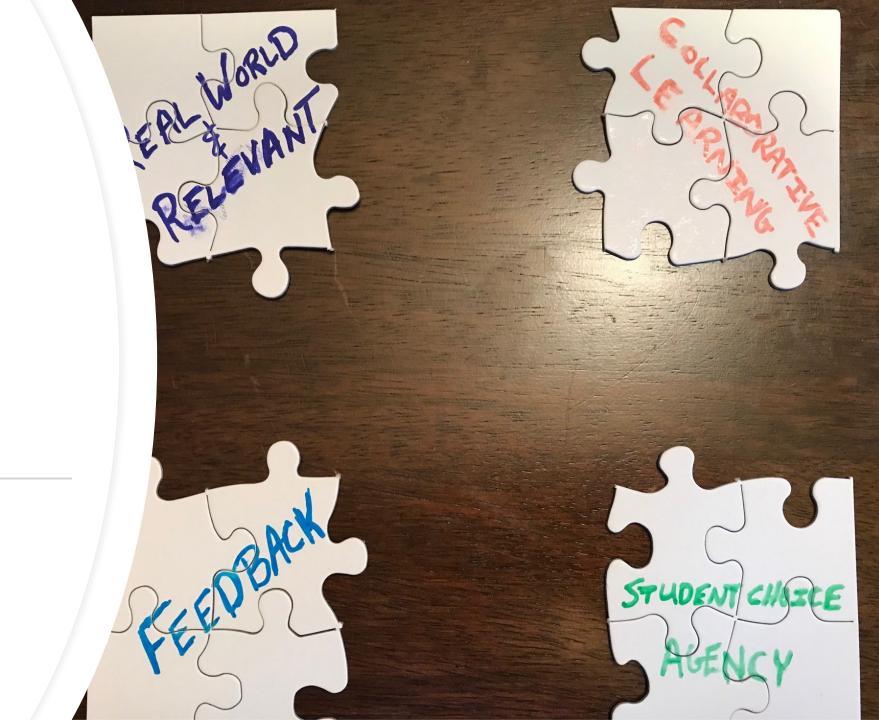
Rigor doesn't simply mean giving students more or harder work. Instead, it's the result of work that challenges students' thinking in new and interesting ways (Briggs, S. 2014, informED).

Relevant learning is accomplished by the student using real world contexts where the student plays an active role.
Understanding why you are learning something is important (Ernest, B. 2016, The Hand In The Back of the Room).





THE CORNER PIECES

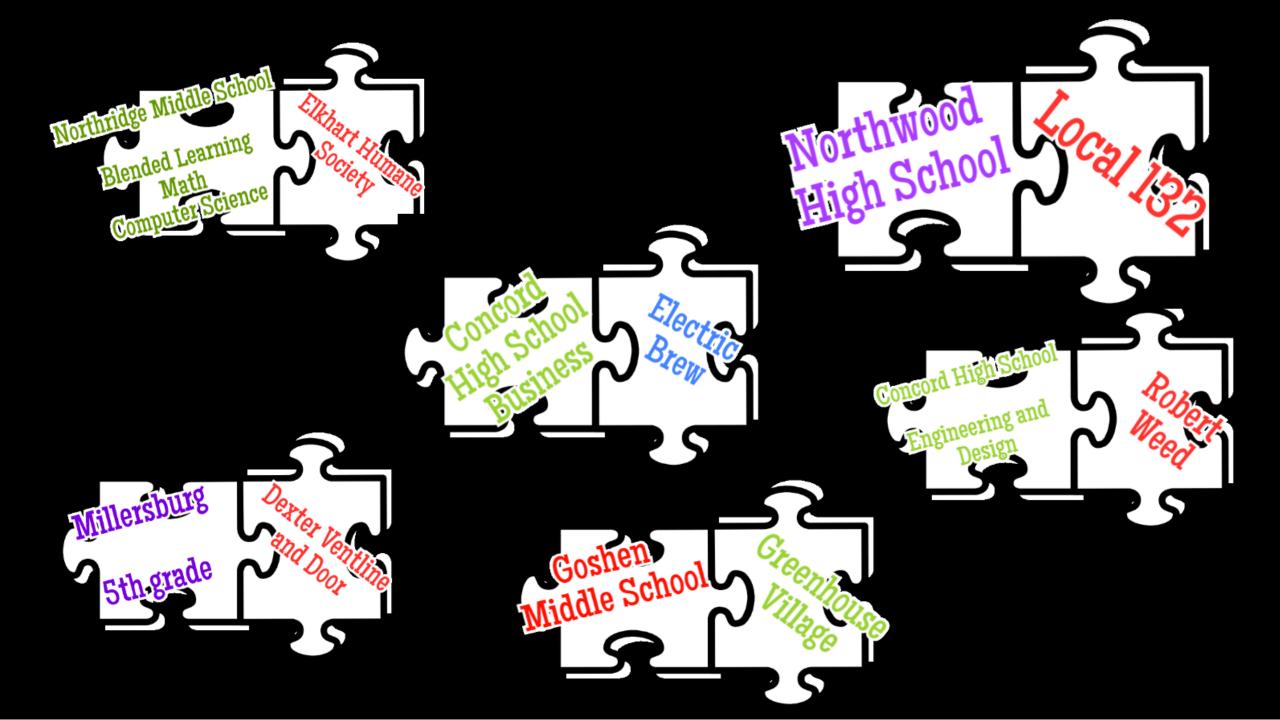


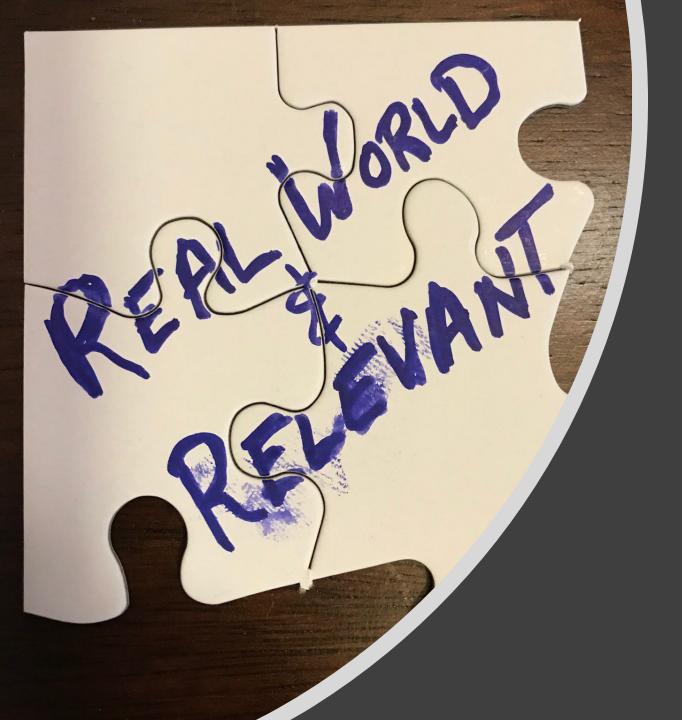
Horizon Education Alliance's Business-Education Roundtables

- Six years of partnerships with businesses and educators
- Professional Development throughout the school year with Dr. Byron Ernest
- Follow ups and support through provided resources and school visits
- Businesses trained
- Speed dating lunch session where businesses shared current needs/problems to be solved
- Teachers chose business partners and developed a project for students

• Questions?







The First Corner Piece



Real World & Relevant Learning With Sabrina Hyden, Northridge High School & Teachers Credit Union



The Second Corner Piece

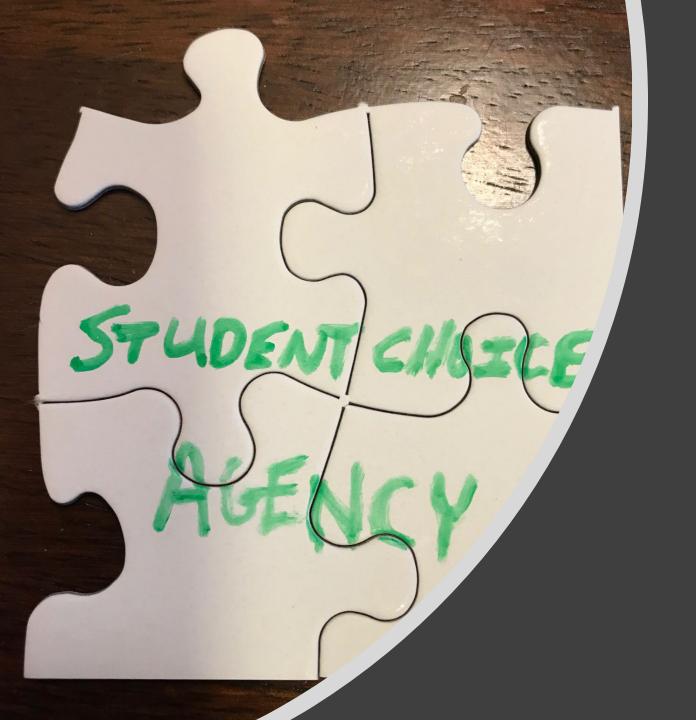
Collaborative Learning
Activity With Bridget
Griffin, Northridge High
School & Cindy Grider,
Robert Weed
Corporation





The Third Corner Piece





The Fourth Corner Piece

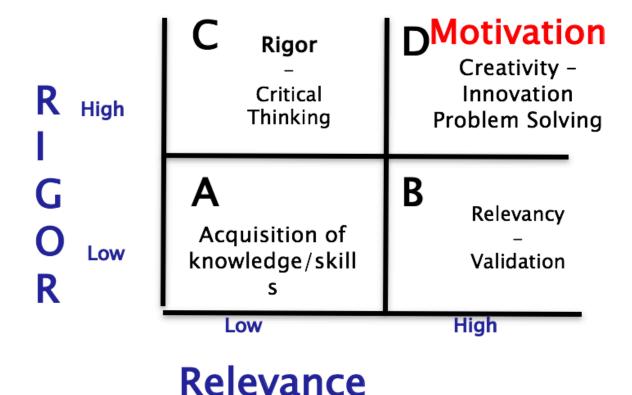


Driving Question for 15minute breakout group discussion: How could you in your role support the implementation of these four high impact strategies?



What Does Mastering The Corner Pieces Get Us?

Motivated Students



Quick Feedback

One-Minute Survey: https://www.surveymonkey.com/r/AuroraWebinar_9-21-20



Pre-Symposium Webinar Series

- 1. Putting Data to Work: Formative Evaluation and Continuous Improvement in Transformative Education Efforts
 September 22, 2020 | 2 pm ET
- 2. NCAA Review Process: Why and How... and What's Different During COVID-19? | September 24, 2020 | 2 pm ET
- 3. Increasing Capacity for Mastery-Based Learning in Washington State | September 28, 2020 | 2 pm ET
- 4. Science of Motivation: 5 Barriers to Student Motivation and How to Fix Them | September 29, 2020 | 2:30 pm ET
- 5. Developing Equity, Efficacy, and Effectiveness in a Competency-Based System | October 1, 2020 | 2 pm ET
- 6. Building Educator Capacity for Equity: Competency-Based Approaches to Professional Learning for Teachers and Administrators | October 5, 2020 | 2 pm ET
- 7. Impact of Personalized Learning through Interest-Based Internships | October 6, 2020 | 2 pm ET
- 8. Improving the Equity in Personalized Learning through a Multi-Tiered System of Support (MTSS) Approach | October 8, 2020 | 2 pm ET
- 9. Implementing Student-Centered Learning: Lessons Learned from Leaders in the Arena | October 13, 2020 | 2 pm ET

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