

# Deeper Learning



# Quadrants of Practice - to - develop Deeper Learning

**Resources**

+

**Expertise**

Theory of Learning  
Theory of Learning

**Technician**



**Professional**



Evidence / Research



Time

Beliefs / Values



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Burlington Edison School District  
2011-2015

It is change, continuing change, inevitable change, that is the dominant factor in society today. No sensible decision can be made any longer without taking into account not only the world as it is, but the world as it will be.

[Isaac Asimov](#)

# Changing Expectations

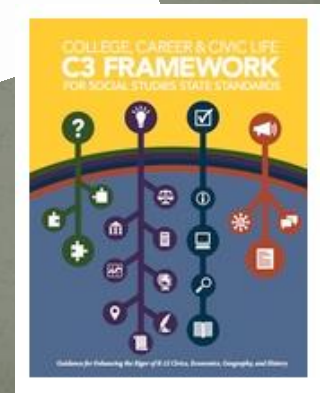
## ARE THEY REALLY READY TO WORK?

Employers' Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21<sup>st</sup> Century U.S. Workforce



## Redefining College Readiness

David T. Conley



## Promoting Grit, Tenacity, and Perseverance: Critical Factors for Success in the 21st Century

February 2013

# Changing Expectations

## Future Work Skills 2020

While all six drivers are important in shaping the landscape in which each skill emerges, the color-coding and placement here indicate which drivers have particular relevance to the development of each of the skills.

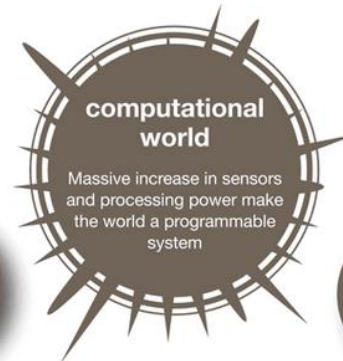
### KEY



Drivers—disruptive shifts that will reshape the workforce landscape

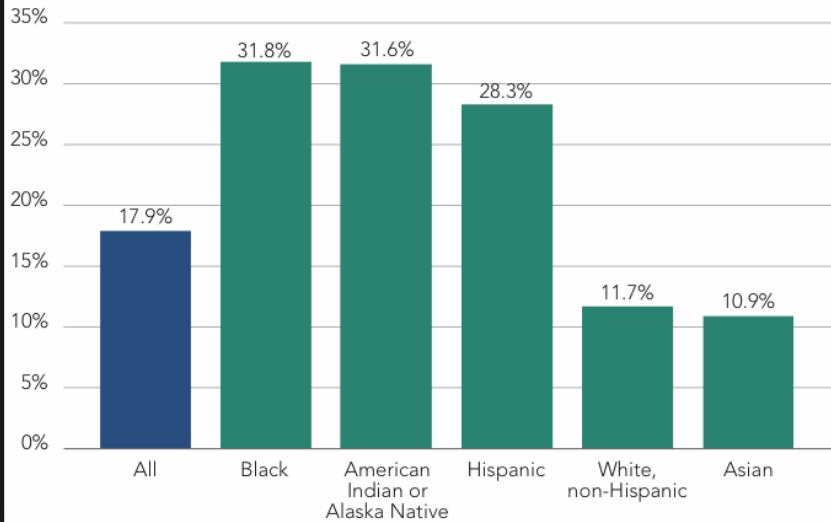


Key skill needed in the future workforce

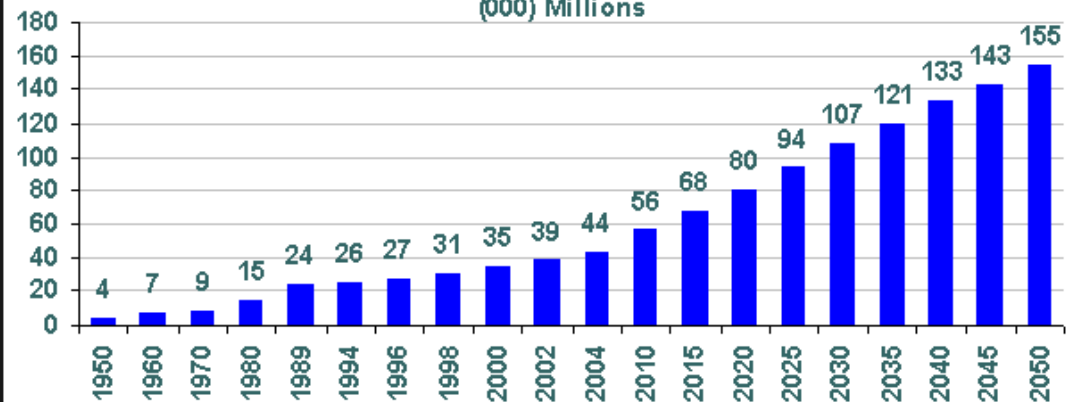


# Changing Demographics

**Figure 1**  
**Percent of Families with Children Under 18 in Poverty in 2010**  
(by race or ethnicity)



**US Hispanic Population and Projections 1950-2050**  
(000) Millions



Source: Synovate, U.S. Census Bureau

# Changing World

Google “deep learning” and this is the first entry:

## Welcome to Deep Learning

Deep Learning is a new area of Machine Learning research, which has been introduced with the objective of moving Machine Learning closer to one of its original goals: Artificial Intelligence.

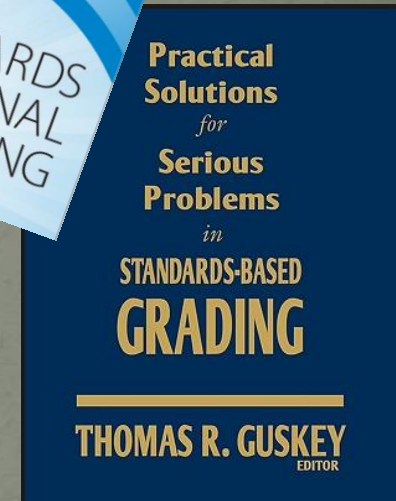
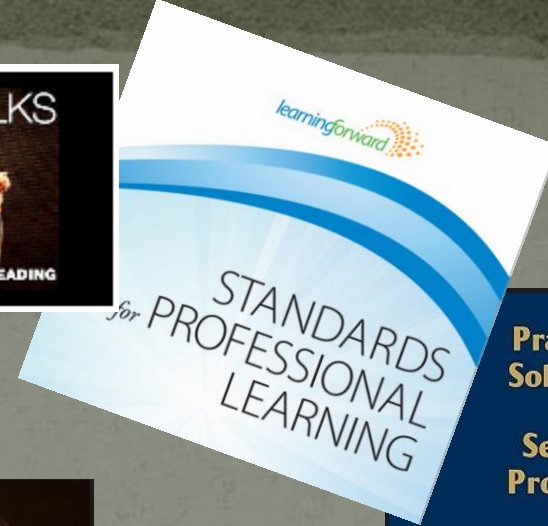
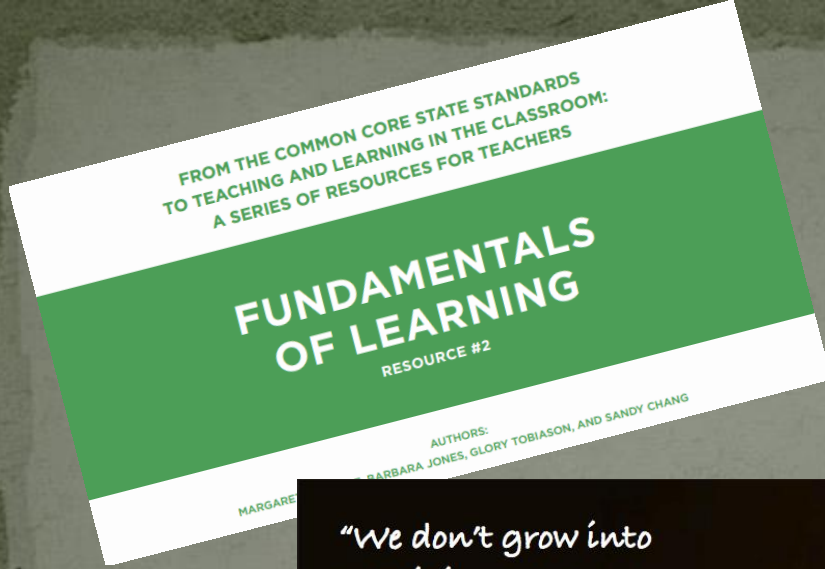
Google “deeper learning” and this is the first entry:

### Why is deeper learning important?

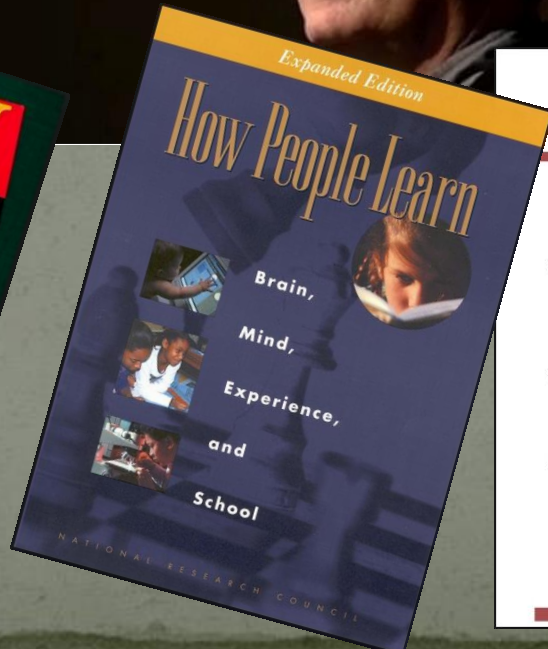
All students deserve the opportunity to succeed in a rapidly changing world. When today’s students graduate, they’ll be asked to fill the jobs of tomorrow—ones we can’t even imagine now. And they’ll be asked to tackle problems like climate change and global poverty.

Unfortunately, too many schools in the United States aren’t preparing the next generation to meet these challenges and seize these opportunities. A global report card, called the 2009 Programme for International Student Assessment, shows that American students—including those from middle-class backgrounds—are lagging far behind their international peers in key subjects. Deeper learning is the key to making our schools more effective, because it prepares students to succeed in the world they will find after school, whatever that might look like.

# Changing Our Minds



*"We don't grow into creativity, we grow out of it. Or rather, we get educated out of it."*  
 Sir Ken Robinson



**"The formulation of the problem is often more essential than the solution." Einstein**

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**Understanding the Impact of A Changing World on Education in the 21st Century:**

- Knowledge has become a free commodity
  - From scrolls to tablets to books to the internet
- Knowledge is constantly changing
  - How many planets are there today?
- "Digital natives" are differently motivated to learn than digital immigrants
  - Googling stuff for fun

# Changing Our Minds



## Q.E.D. Transformational Change Model: School level

Version 5.1 January 2014



	Traditional	Transitional	Transformational
Success	variable standards /expectations	common standards and variable expectations	common standards /expectations
Student Progress	text-driven seat time	standards-based instruction	proficiency based
Learning Pathways	tracking	heterogeneous grouping	open access for all students
Learning Opportunities	scope and sequence	tasks and projects	competency based inquiry
Schoolwide Learning Goals	test results targets	college and career prep	learner aspirations and life options
Learner Motivation	meeting requirements	interest driven engagement	curiosity and wonder, passion
Personalization	group instruction	differentiation	negotiated learning plans
Learner Support	remediation of deficits	intervention for skill gaps	acceleration based on learner profiles
Responsibility for Learning	student	teacher	learning team
Learner Voice	parent/teacher conferences	parent/teacher/student conferences	student-led exhibitions
Behavior Management	rules and punishments	behavioral training	fostering dignity and self-respect
Feedback	correction	reflection	discussion
Assessment	...of learning	...of and for learning	...of, for, and as learning
Certification/Credentials	letter grades/GPA	no-zero grading	proficiency reporting
Learning Culture	based on authority	based on defined roles	based on relationships
Shared Investment in Learning	teacher and student	teacher, student, and family	teacher, student, family, and community
Context for Learning	in school, school hours	beyond school, extended hours	anytime and everywhere
Professional Development	recertification hours	professional learning communities	community of practice/collaborative inquiry
Learning Impact	school relevance	community relevance	global relevance and action
Governance	limited and simulated	moderated and representative	extensive and participatory
Leadership	hierarchy/seniority	designated individuals/groups	everyone takes responsibility
Civic Mission	follow and abide	participate and vote	engage in public action

## Long Term Transfer Goals

*Students will be able to independently use their learning to:*

### Examples within Subject Areas

#### **Economics**

- make economically sound and ethical financial decisions.

#### **History**

- Use knowledge of patterns of history to better understand the present and prepare for the future.
- Critically appraise historical claims and analyze contemporary issues.
- Participate as an active and civil citizen in a democratic society.

#### **Health and Physical Education**

- Make healthful choices and decisions regarding diet, exercise, stress management, alcohol/drug use throughout one's life.
- Play a chosen game skillfully and with good sportsmanship.

#### **Mathematics**

- Make sense of never-before-seen, "messy" problems and persevere in solving them.
- Construct viable arguments involving mathematics and statistics and critique the reasoning of others.

#### **Performing & Fine Arts**

- Find at least one arts discipline in which they develop sufficient competence to continue active involvement in creating, performing, and responding to art as an adult.
- Respond by analyzing and interpreting the artistic communications of others.

#### **Reading**

- Read and respond to text in various genres (literature, non-fiction, technical) for various purposes (entertainment, to be informed, to perform a task).
- Comprehend text by inferring and tracing the main idea, interpreting ("between the lines"), critically appraising, and making personal connections.
- Enjoy reading as a chosen leisure time pursuit.

#### **Science**

- Evaluate scientific claims and analyze current issues involving science or technology.
- Conduct a sound investigation to answer an empirical question.

## Long Term Transfer Goals

*Students will be able to independently use their learning to:*

#### **World Language**

- Effectively communicate with varied audiences and for varied purposes while displaying appropriate cultural understanding.

#### **Writing**

- Write in various genres for various audiences in order to explain (expository), entertain (narrative/poem), argue (persuasive), guide (technical), and challenge (satirical).
- Carefully draft, write, edit, and polish one's own and others' writing to make it publishable.

### Examples beyond Subject Areas

#### **Critical Thinking**

- Think critically about information and claims encountered at school and beyond by seeking clarity, accuracy, sound evidence, good reasons, and fairness.

#### **Communication**

- Effectively communicate for different purposes and varied audiences using appropriate media.

#### **Collaboration**

- Work effectively with, and learn from, others in a variety of situations, in school and beyond.

#### **Research**

- Locate pertinent information from varied sources (print, on-line; primary, secondary).
- Critically evaluate sources and information (e.g., for accuracy, completeness, timeliness, lack of bias, properly referenced).

#### **Special Education**

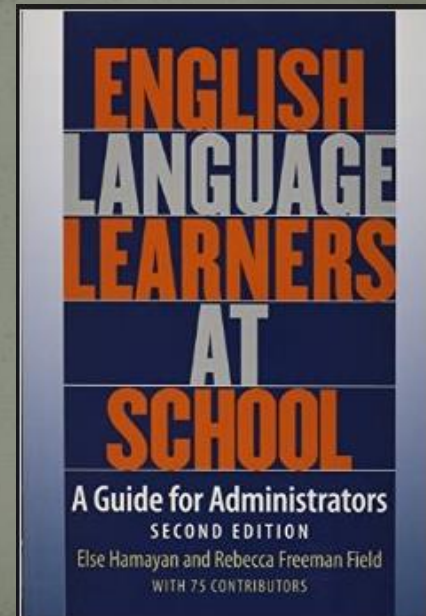
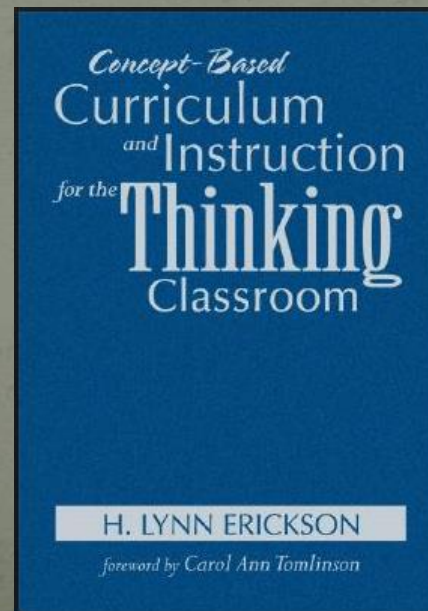
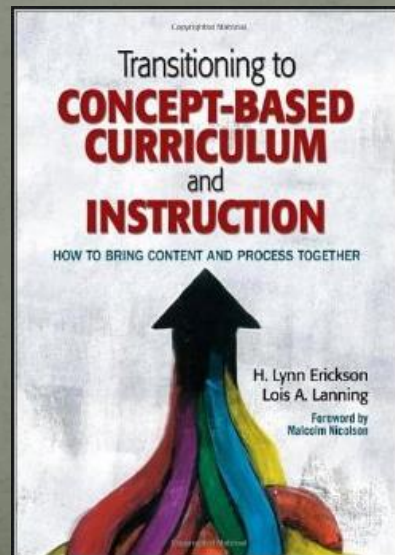
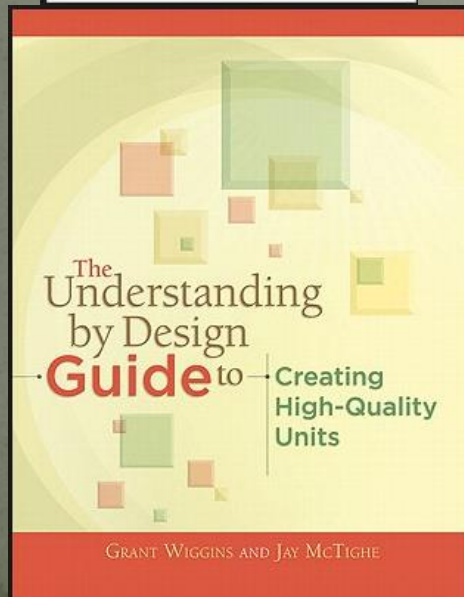
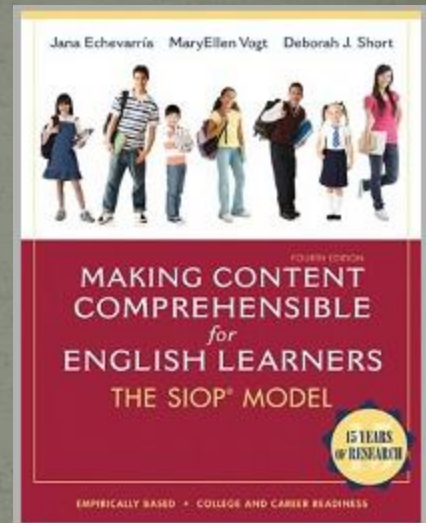
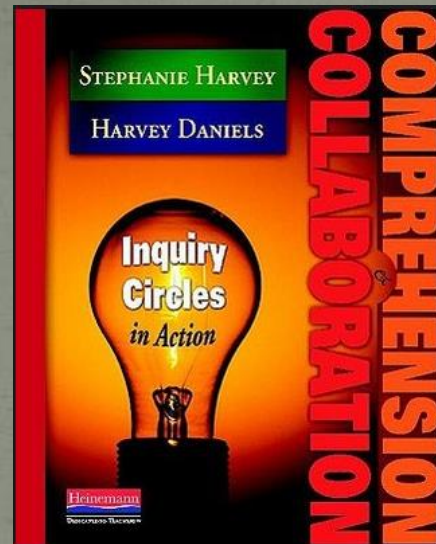
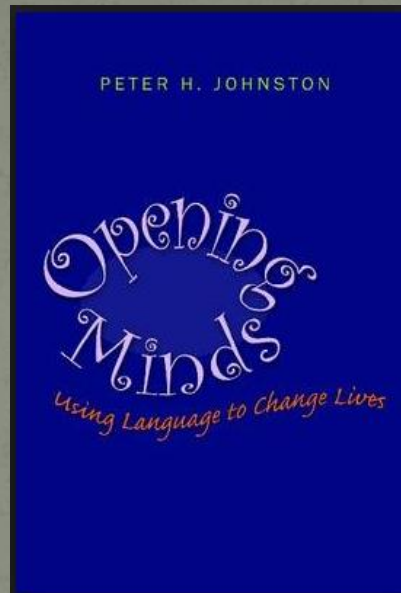
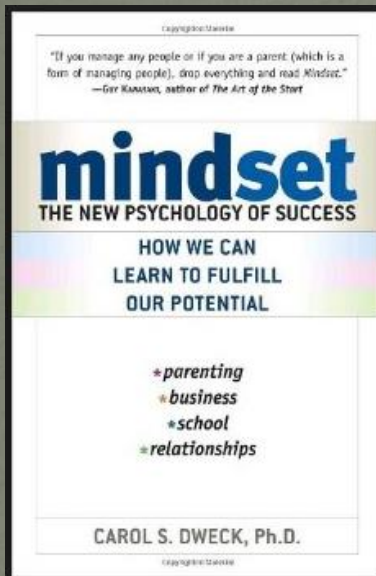
*Students will be able to independently use their learning to:*

- Function in the community while respecting social/cultural norms.
- Advocate for their personal needs – academic, behavioral, emotional, and physical.

#### **Taking Responsible Risks**

- Try something new and different without a paralyzing fear of making mistakes.

# Changing Our Methods



# Changing Our Methods:



## Monte Bridges

Educational Leadership Consultant

Greater Seattle Area | Education Management

Current Bridges Consulting

Previous Puget Sound Educational Service District, Vashon Island School District

Education University of Washington





# Burlington-Edison Public Schools

## DISTRICT ROAD MAP

**Our mission is to educate each student for lifelong success.**

- Each student aspires to learn
- Each student practices thoughtful citizenship
- Each student is equipped to pursue life options, including career and college

<p><b>Early Learning</b> Grades PreK – 3<sup>rd</sup> All Students 4<sup>th</sup> Grade Ready</p>	<p><b>Middle</b> Grades 4<sup>th</sup> – 8<sup>th</sup> All Students High School Ready</p>	<p><b>High School</b> Grades 9<sup>th</sup> – 12<sup>th</sup> All Students College/Career Ready</p>
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### Progress Measures

<ul style="list-style-type: none"> <li>• Percent students are 2<sup>nd</sup> grade ready as measured by DRA</li> <li>• Percent students proficient in 3<sup>rd</sup> grade reading as measured by state assessment and DRA</li> <li>• Percent students proficient in 3<sup>rd</sup> grade mathematics as measured by state assessment and MAP</li> </ul>	<ul style="list-style-type: none"> <li>• Percent students will be high school ready as measured by report card</li> <li>• Percent students proficient in 8<sup>th</sup> grade reading as measured by state assessment and MAP</li> <li>• Percent students proficient in 8<sup>th</sup> grade mathematics as measured by state assessment and MAP</li> </ul>	<ul style="list-style-type: none"> <li>• Percent students proficient on state assessment</li> <li>• Percent students who graduate high school (intentional graduation rate)</li> <li>• Percent high school students who have post-secondary ready transcript (2, 2, 4 or more)</li> <li>• Percent high school students who enroll in post-secondary education</li> </ul>
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### Targeted Strategies (Short-Term—18-month—High Leverage Moves)

<ul style="list-style-type: none"> <li>• P-3 Literacy</li> <li>• English Language Learners</li> <li>• Sound Grading and Reporting Practices</li> <li>• Career and College Readiness</li> <li>• Parent and Family Engagement</li> <li>• Culturally Relevant Instruction</li> </ul>
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### Foundational Elements (Long Term High Leverage Elements):

<ul style="list-style-type: none"> <li>• Create and sustain a climate and culture that supports learning.</li> <li>• Ensure that students achieve beyond the standard with a focus on communication, collaboration, critical thinking, and creativity.</li> <li>• Implement high quality instruction that closes opportunity/achievement gaps and accelerates learning for all students.</li> <li>• Ensure that equity and access are at the heart of our practices.</li> <li>• Value the unique assets and culture that each student and family brings to our schools.</li> <li>• Engage families and community members in achieving student success.</li> </ul>
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**Our Promise (These words define how all must feel within our district, and when interacting with our district.)**

Respected	Empowered	Valued	Connected
Responsible	Engaged	Collaborative	

### Burlington Edison School District Professional Learning Standards

Exposure to new knowledge is not enough to change practice or systems. Learning for change must include ongoing support and collaboration during application and evaluation.

Research indicates that adults do not learn like kids. We must structure effective learning according to the principles of adult learning and based on the needs of the adult learner.

With limited time and resources, our learning options must focus on areas of greatest need as indicated by data. We must close the learning gap with our underperforming students.

We have clear proficiency targets for principals, teachers, and students. All learning must measurably lead to growth relative to these outcomes.

•Our Professional Learning options are designed to lead to sustainable change in individual practice, school programming, and school systems, utilizing effective feedback and monitoring strategies.

•Our Professional Learning options are based on principles of adult learning: valuing prior experience, personal connection, collaboration and the need for multiple ways and times to access content.

•Our Professional Learning options are generated as a result of data-driven collaborative inquiry.

•Our Professional Learning options support growth toward and beyond professional outcomes that directly affect student growth.

Implementation      Learning Design      Data      Outcomes






•Our Professional Learning and student learning needs are the main drivers for how we use our time, money, and resources.

•Our Professional Learning options are led and delivered as close to the students as possible supported by collaboration with peers.

•Our Professional Learning options support the development of leadership capacities in all.

Resources      Learning Communities      Leadership





The needs of the learner must drive how we use time, locations, and resources; an example of this is "early release" in order to increase duty free, kid free time for teachers to collaborate.

The most effective staff learning occurs in the classroom with students present; examples of this include co-teaching, model classrooms, and lesson study.

Leaders move others to action. Leaders help others to learn. Leaders share what they are learning. Leaders advocate for all kids.

**Professional Learning and Collaboration Goals:**

*Together we aspire to learn.*

*Together we enhance individual and collective performance to support all kids.*

*Together we function to create and maintain a climate and culture that supports learning and collaboration.*

Go slow to go fast.

High need for job embedded collaboration. Time added as early release.

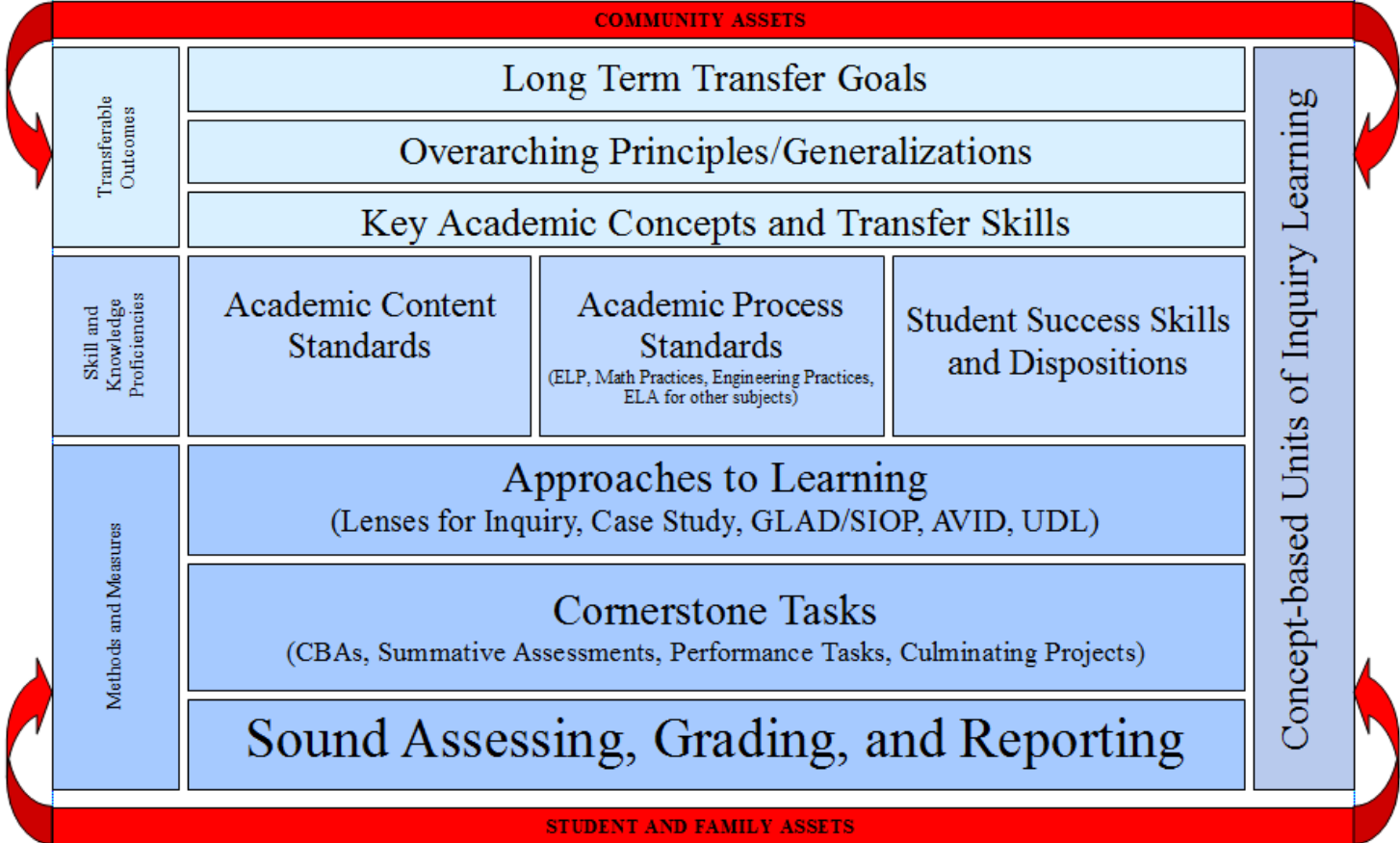
High need to develop teachers as leaders.

High need to prioritize resources and leverage resources by connecting initiatives.

BURLINGTON-EDISON SCHOOL DISTRICT

INSTRUCTIONAL DESIGN MODEL

Mission	<p>Our mission is to educate each student for lifelong success:</p> <ul style="list-style-type: none"> <li>● Each student aspires to learn</li> <li>● Each student practices thoughtful citizenship</li> <li>● Each student is equipped to pursue life options, including career and college</li> </ul>
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COMMUNITY ASSETS

Transferrable Outcomes	Long Term Transfer Goals		
	Overarching Principles/Generalizations		
	Key Academic Concepts and Transfer Skills		

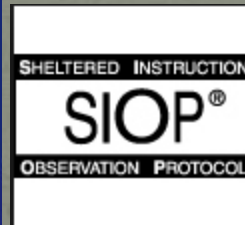
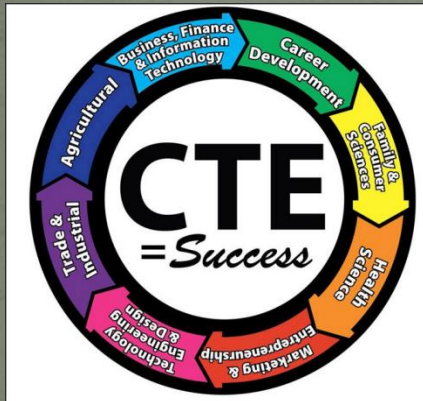
Skill and Knowledge Proficiencies	Academic Content Standards	Academic Process Standards <small>(ELP, Math Practices, Engineering Practices, ELA for other subjects)</small>	Student Success Skills and Dispositions
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Methods and Measures	Approaches to Learning <small>(Lenses for Inquiry, Case Study, GLAD/SIOP, AVID, UDL)</small>		
	Cornerstone Tasks <small>(CBAs, Summative Assessments, Performance Tasks, Culminating Projects)</small>		
	Sound Assessing, Grading, and Reporting		

Concept-based Units of Inquiry Learning

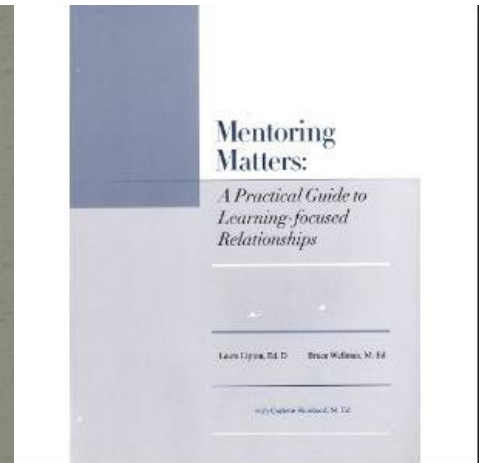
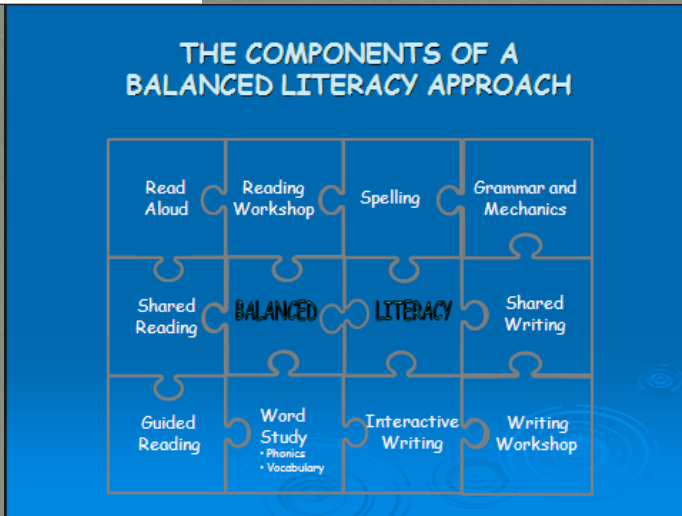
STUDENT AND FAMILY ASSETS

# Is it working? Is it congruent?



*Beginning Educator Support Team*

**GLAD**  
Guided Language Acquisition Design  
Project



# What is next?

“Through learning we re-create ourselves. Through learning we become able to do something we never were able to do. Through learning we re-perceive the world and our relationship to it. Through learning we extend our capacity to create, to be part of the generative process of life”

— [Peter M. Senge](#)

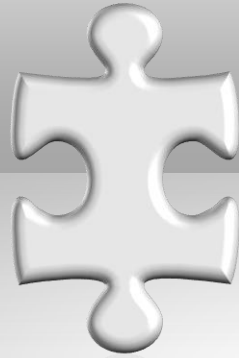
SBAC Results here.....



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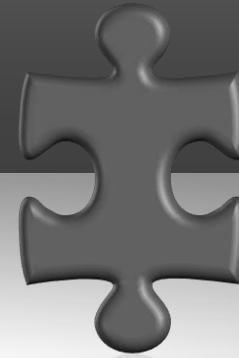
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# 5 Point Puzzle Slide

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Point 5

# Stick Figure 5 LEVEL Puzzle Diagram

