

# RIGOR AND JOY: BUILDING A SYSTEM THAT SERVES ALL LEARNERS

New Mexico Speaker Series Presentation

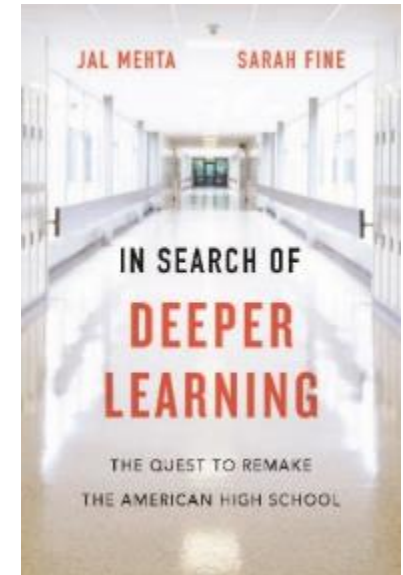
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Harvard Graduate School of Education

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# About me

- Dad
- Professor
- Teacher
- Classrooms
- Systems



# A Brief Preview

- Consider the nature of the choice facing us & learn a framework
- Briefly examine the problems with schools
- Look at some examples of successful classrooms and schools
- Consider what kinds of policy supports and other changes would enable us to make the exception the rule

# High Road vs. Low Road



See Marc Tucker: America's Choice: High Skills or Low Wages (1990)

- Low road:
  - Low investment, high accountability, weak student skills, weak economy, low tax base, low funds, low performance
- High road
  - Invest in teachers and students, stronger student skills, stronger workforce, higher tax base, more funds for schools, higher performance



# Systems Thinking Loops

- Systems thinking: An approach to complex interactive world
- Balancing loops return you back to same equilibrium
- Reinforcing loops create upward or downward spirals
- New loops can be used to break old loops

# Downward Spiral (United States)

1. Hire less than our most talented people...
  2. Into a semi-professional field
  3. Equip them with an underdeveloped knowledge base
  4. Working within a weak welfare state
  5. Plus deindustrialization and collapse of manufacturing
- 
6. Leads to poor performance, especially in urban and rural areas
  7. Leading to declining public confidence
  8. Inspiring policymakers to increase regulation from afar
  9. Calcifying industrial style bargaining
  10. Making the field less attractive to talented people
- 

# Upward Spiral (Finland, Singapore, Canada)

1. Hire among their most talented students
  2. Into a fully professionalized field
  3. Create a knowledge base rooted in practice
  4. Train them well and give them time to develop practice
  5. Support students within strong welfare state
- 
6. Leads to good performance
  7. Leading to increasing public confidence
  8. Inspiring policymakers to increase trust and autonomy in schools
  9. Making the field more attractive to talented people
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# Deeper Learning: Cognitive Perspectives

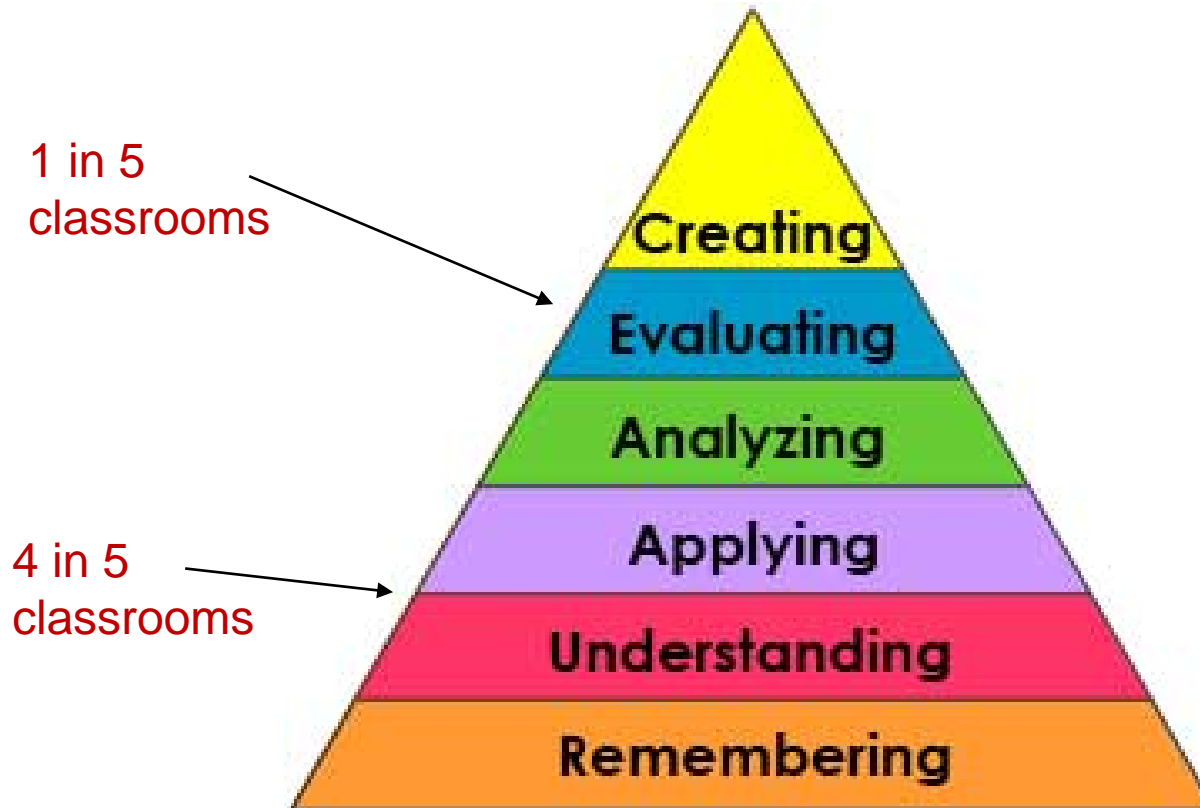
## Bloom's Revised Taxonomy



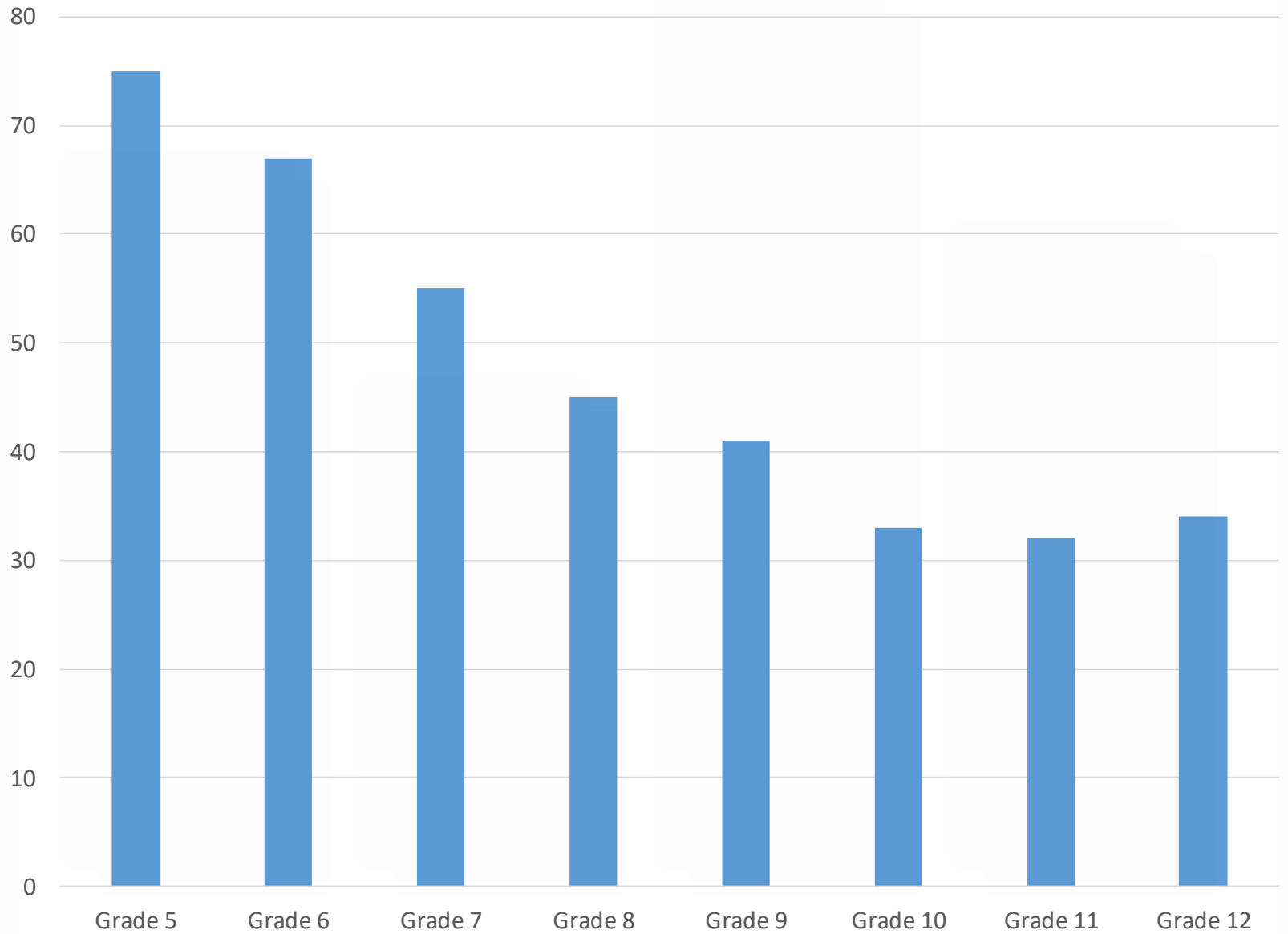


# Challenging Tasks Exception to the Rule

## Bloom's Revised Taxonomy



# Level of Engagement in School, by Grade



# Why Engagement Matters...

“The most immediate and persisting issue for students and teachers is not low achievement but student disengagement. The most obviously disengaged students disrupt classes, skip them, or fail to complete assignments. More typically, disengaged students behave well in school. They attend class and complete the work, but with little indication of excitement, commitment, or pride in mastery of the curriculum. In contrast, engaged students make a psychological investment in learning.”

-- Newmann 1992

# Why Engagement Matters...



“Meaningful learning cannot be delivered to students like pizza to be consumed or videos to be observed. Lasting learning develops largely through the labor of the student, who must be enticed to participate in a continuous cycle of studying, producing, correcting mistakes, and starting over again. Students cannot be expected to achieve unless they concentrate, work, and invest themselves in the mastery of school tasks. This is the sense in which student engagement is critical to educational success; to enhance achievement, one must first learn how to engage students.”

-- Newmann 1992

# Three Examples of Rigor and Joy



# Rigor and Joy I: What Made This Project Go?

- ▣ Authentic audience
- ▣ Design within constraints
- ▣ Expert feedback
- ▣ Integration across disciplines
- ▣ Building collaboration and presentation skills
- ▣ Building content knowledge through project

# Rigor and Joy II: Precious Knowledge



# Belonging and Inclusion: Critical for Learning

- Fundamental human needs: Competence, autonomy, relatedness (Deci and Ryan 2000)
- Scholars depict U.S. schools as “subtractive schooling” for black, Latino & Native American youth (Valenzuela 1999)
- Create spaces where students can express full selves and identities, will enable better work
- Good teachers integrate notions of equity through everything they do



# Rigor and Joy II: Periphery and the Core



Periphery



Core



# What Schools Can Learn from Out of School Activities

- Purposeful arc towards public performance
- Choice
- Community/family
- Interdependent roles
- Apprenticeship learning
- Whole game at junior level



# A Pernicious Myth: Basics Before “Deeper Learning”

- ❑ Some think basics before “deeper learning”
- ❑ Tend to produce “Waiting for Godot”
- ❑ Reproduces inequities by race and class

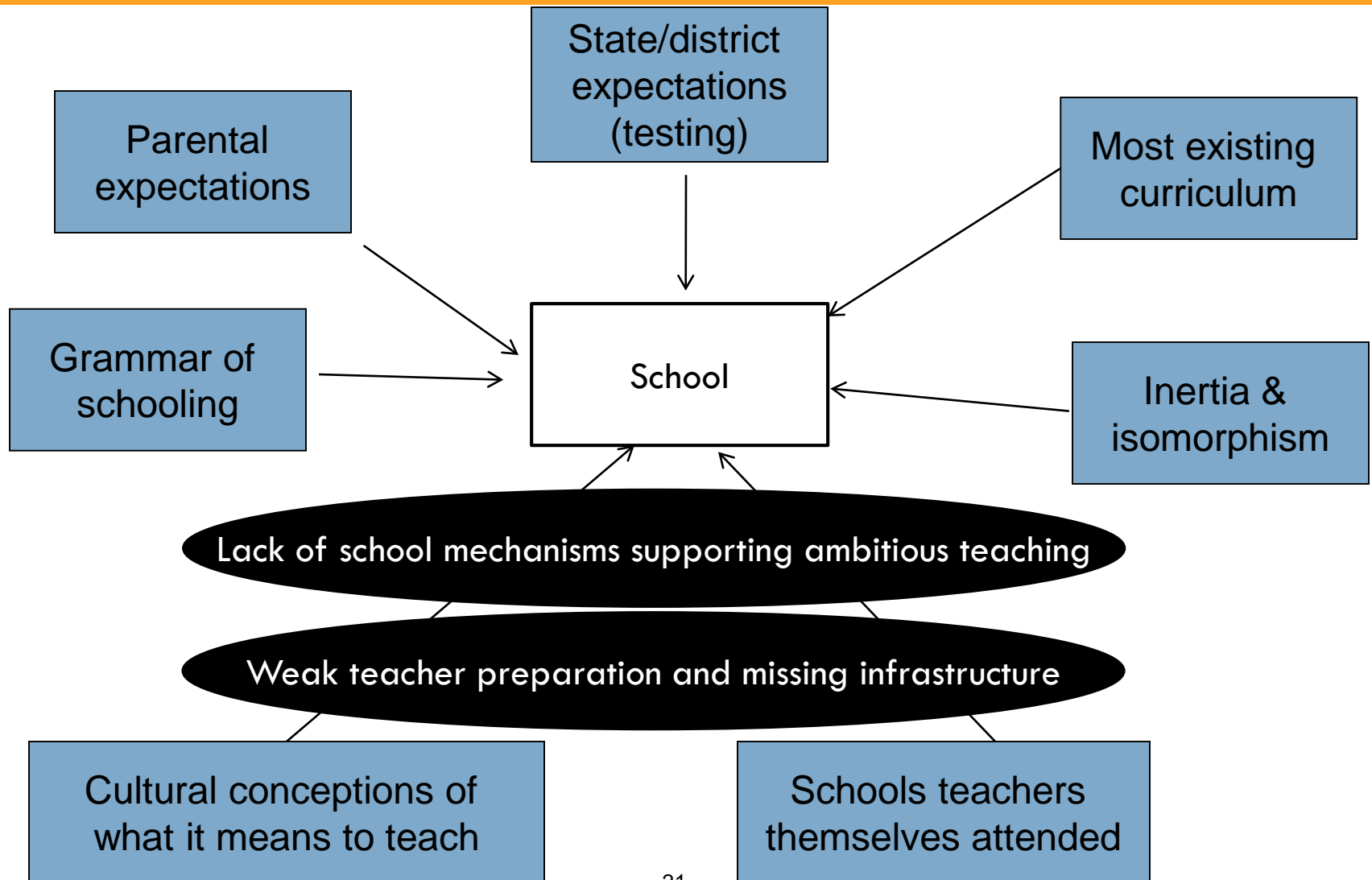
But...

- ❑ The best teachers we witnessed moved back and forth between an authentic task and needed skill building
- ❑ Bloom as web vs. bloom as ladder
- ❑ Whole game at junior level

# Integrating Skill-Building Within a More Complex Task

- ❖ Closing the distance between the school version of the subject and the actual version of the subject
- ❖ Kyle, English teacher, high poverty traditional public school:
  - ❖ Ta-Nehisi Coates article, “In Defense of a Loaded Word.”
  - ❖ Lesson 1: Annotate and decipher
  - ❖ Lesson 2: Debate
  - ❖ Lesson 3: Examine the “form” of the article
- ❖ Equity: Shorter texts, sometimes more scaffolding, but core approach the same; “teaching students to think” even more important for teachers of high poverty students

# Why Not More Classrooms Like Kyle's?





So... how can we make the exception the rule?

# Policy Levers to Support Change

- Portrait of a Graduate
  - Visioning tool
  - What would you like your graduates to know and be able to do?
  - Backward mapping and alignment



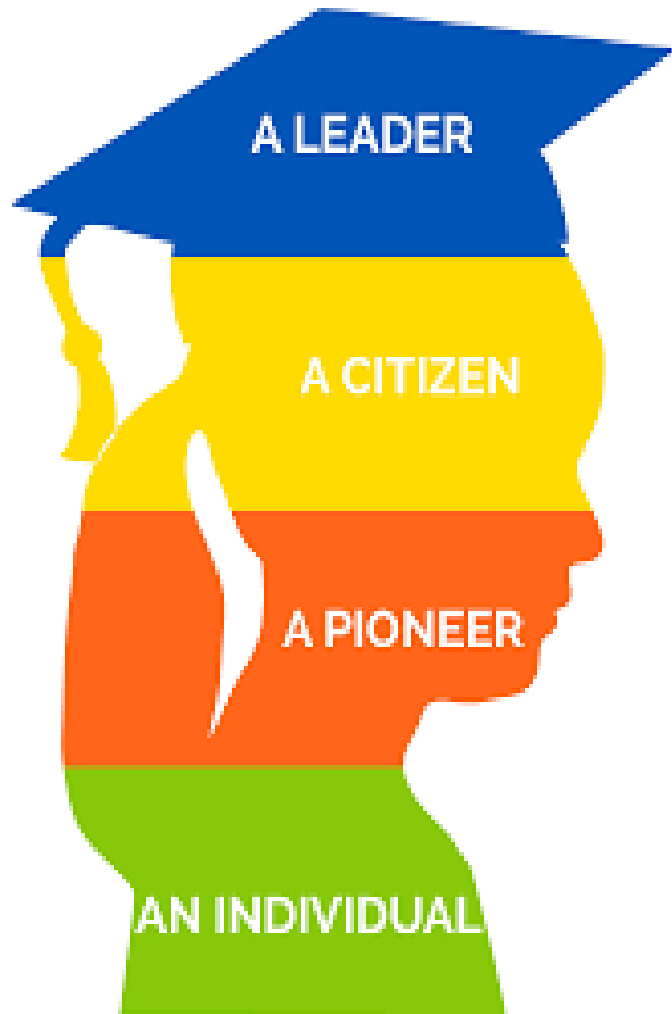
# Portrait of a Graduate



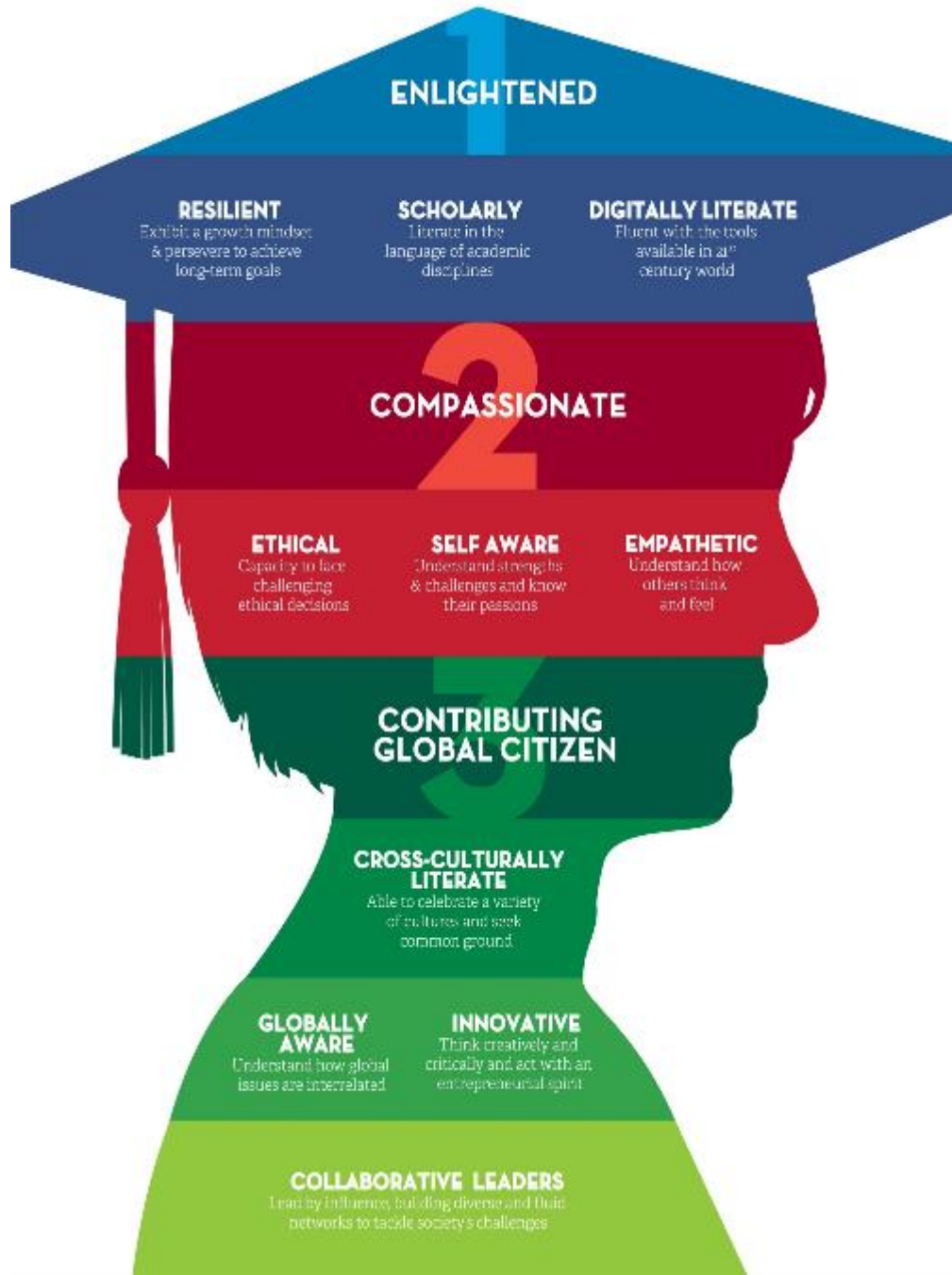
Oxford School District,  
MS



# Portrait of a Graduate



Highlands Middle  
School (AL)



# Maumee Valley School (Ohio)

# Policy levers to support

- Teacher and school learning
  - Key principle: Symmetry between teacher learning & student learning
  - Residencies
    - NCTAF (2016): Every teacher should undergo one year of residency.
    - Better induction → more retention → less need to hire → more selective hiring → stronger initial teachers → easier induction...
  - More teacher co-planning time
  - Break loops of implicit bias
  - Communities and networks of practice, across schools
  - Principals academies

# Policy levers to support

- Standards
  - Key principle: less is more!
  - Power standards – 5 key topics and skills per grade/subject area
  - Should be developed in concert with teachers and also diverse stakeholders from the community (i.e. British Columbia)
  - Aligned standards that govern teacher prep
  
- Curriculum
  - Key principle: more depth, less breadth
  - Curricular supports critical for young/inexperienced teachers
  - More flexibility for older/more experienced teachers
  - Good place to incorporate culturally relevant pedagogy

# Policy levers to support

## □ Assessment

- Key principle – Do not let tail wag dog; align with vision of teaching and learning
- On demand performance tasks
- IB style – interim assessments and external assessments
- Portfolios
- School inspectorates

## □ Time

- Longer blocks
- More interdisciplinary pairings/waivers on Carnegie units
- Varied across year with needs of the learning

# Policy levers to support

- Build on assets
  - Rural schools have dense social capital
  - Farming and the environment
  - The arts, oral histories, documentaries
  - Ethnic and linguistic diversity huge asset
    - Creates opportunities for distributed leadership
    - Cross-cultural exchange

# Policy levers to support

- Space:
  - ▣ Key principle: If we want learning to be dynamic, flexible, and interconnected, space needs to be dynamic, flexible and interconnected:



# Flexible groupings (Norma Rose K-8, Vancouver)





# Flexible groupings (Norma Rose K-8, Vancouver)



# Hands on learning in action...

## (University High School, San Francisco, CA)



# Policy levers to support

- Equalize support for out of school and summer time:
  - Extracurriculars, after school programs, and camps promising spaces
  - Linked to lower crime, higher grades, lower teenage pregnancy, etc.
  - Vastly unequally distributed: in school and out
  
- Offer credits for out of school learning time

# 20<sup>th</sup> Century Theory of Action

## □ If...

- We set standards, create tests that measure them, and impose accountability for those who fail to improve
- And... we grade schools on an A to F scale

## □ Then...

- All schools will improve to meet the standard.

# 20<sup>th</sup> Century Theory of Action

- Reality check:
  - No improvement in PISA
  - Teacher morale way down; significant teacher shortages
  - Curricular narrowing; teaching to the test
  - Student disengagement high
  - Consequences more pronounced in poorer schools and districts
  - Doubling down on industrial model of schooling

# 21st Century Theory of Action

- If...
  - In concert with our teachers, we thin our standards to focus only on essential knowledge and skills
  - And we build a culture and a set of structure that supports teacher learning and adaptation
  - And we connect students experiences and aspirations to their formal schooling
  - And we break down some of the silos between self and subject, subject and subject, subject and the world...
  
- Then...
  - Students will experience challenging, purposeful and meaningful educations;
  - Student truancy will go down, retention will go up, performance will go up
  - Teachers will want to stay in such schools;
  - And our system will be a sustainable and growing one over the years.

# Unlearning is Key

- Changing mindsets and roles will be tough but worth it:
  - Teachers: From instructor to coach
  - Principals: Less hierarchy, more distributed leadership
  - Districts and state officials: from control and compliance to empower, catalyze, fertilize, and network
  - Student and communities: From acted on to partners with

Creating a different kind of system is  
hard to achieve....





...but worth striving for!



# Extra stuff



# Deeper Learning in the Long Run

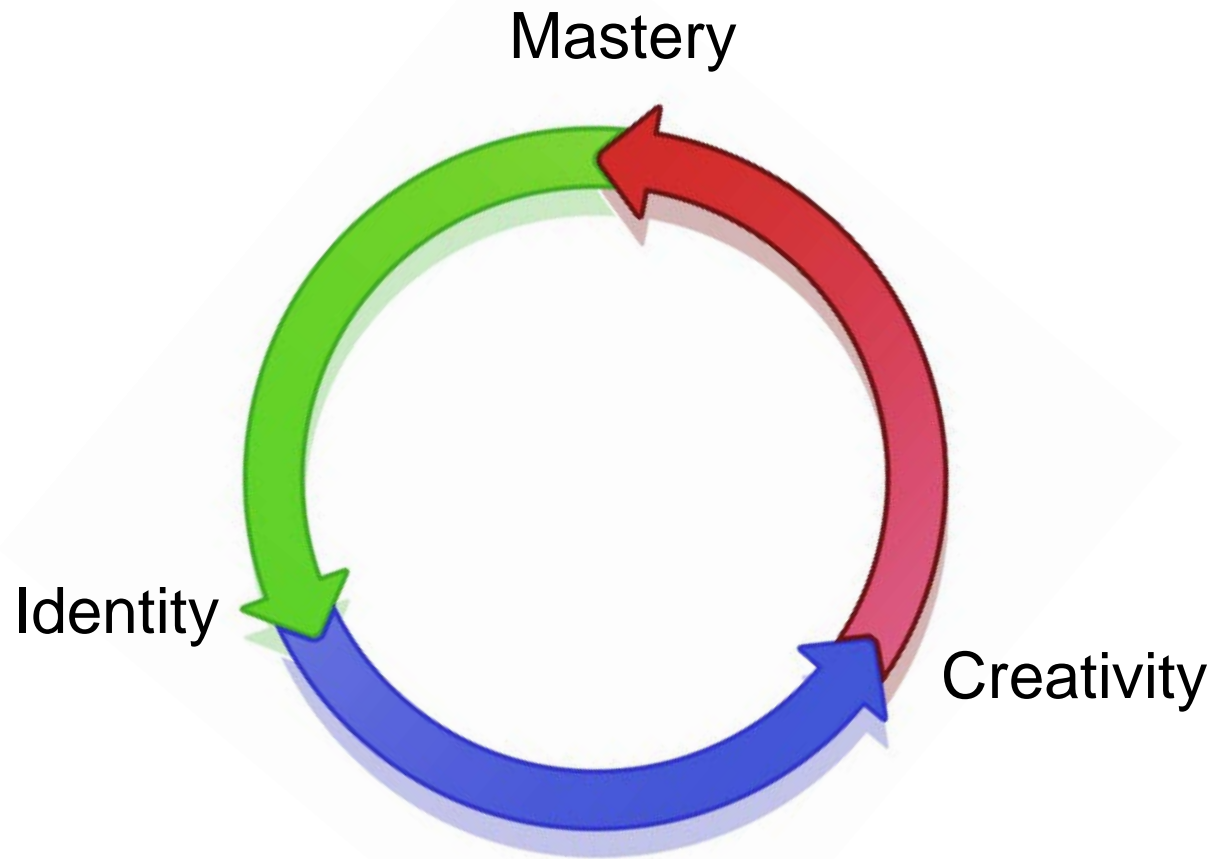
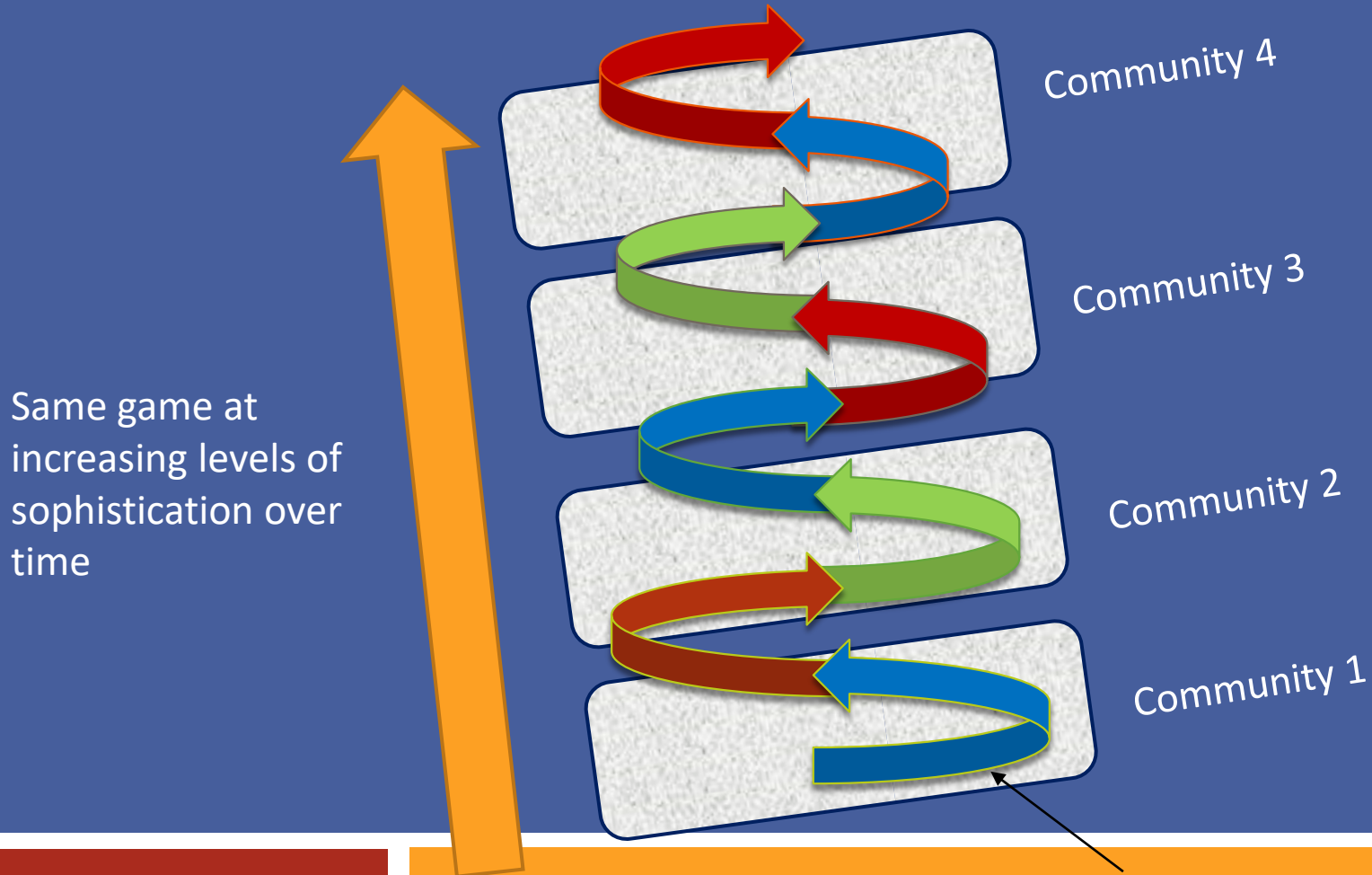


Figure 2:  
A Theory of Deeper Learning Over Time



Cycles of mastery, identity, creativity

# Philosophy as Literature



THE PRINCIPLES  
OF PHILOSOPHY  
*Rene Descartes*



# Whole Game Teachers: The Stance

	<b>Most Teachers</b>	<b>“Whole game” teachers</b>
Educational goal	Cover the material	Inspire to become a member of the field
Pedagogical priorities	Breadth	Depth
View of knowledge	Certain	Uncertain
Role of student	Receiver of knowledge	Creator of knowledge
View of failure	Something to be avoided	Critical for learning
Ethos	Compliant	Purpose + play

# Opening up the Grammar of Schooling

	<u>Existing grammar of schooling</u>	<u>New grammar of schooling</u>
<b>Purpose</b>	Assimilate pre-existing content	Engage student as producer in variety of fields and worthy human pursuits
<b>View of knowledge</b>	Siloed and fixed	Interconnected and dynamic
<b>Learning modality</b>	Teaching as transmission	Learning through doing; apprenticeship; whole game at junior level
<b>Roles</b>	One teacher, many students	Vertically integrated communities: teachers, students as teachers, and field members providing expertise
<b>Boundaries between disciplines</b>	Strong	Permeable
<b>Boundaries between school and world</b>	Strong	Permeable
<b>Boundaries between academic and practical</b>	Strong	Permeable
<b>Places where students learn</b>	Schools	Various, including schools, community centers, field sites, online
<b>Choice</b>	Limited	Open, multiple
<b>Time</b>	Short blocks of fixed length	Longer blocks, space for immersive experiences
<b>Assessment</b>	Seat time, standardized	Creation of worthy products in the domain: projects,