

Presentation to SC EOC Cyclical Review Panel

Public Education Innovation Initiative

Gerrita Postlewait

Wednesday, February 13 2013

A woman with dark hair pulled back, wearing a striped shirt, is smiling and holding a large grey sign in front of her. The sign contains the text 'Why a Public Education Innovation Initiative?'. The background is a light blue gradient.

Why a Public Education
Innovation Initiative?

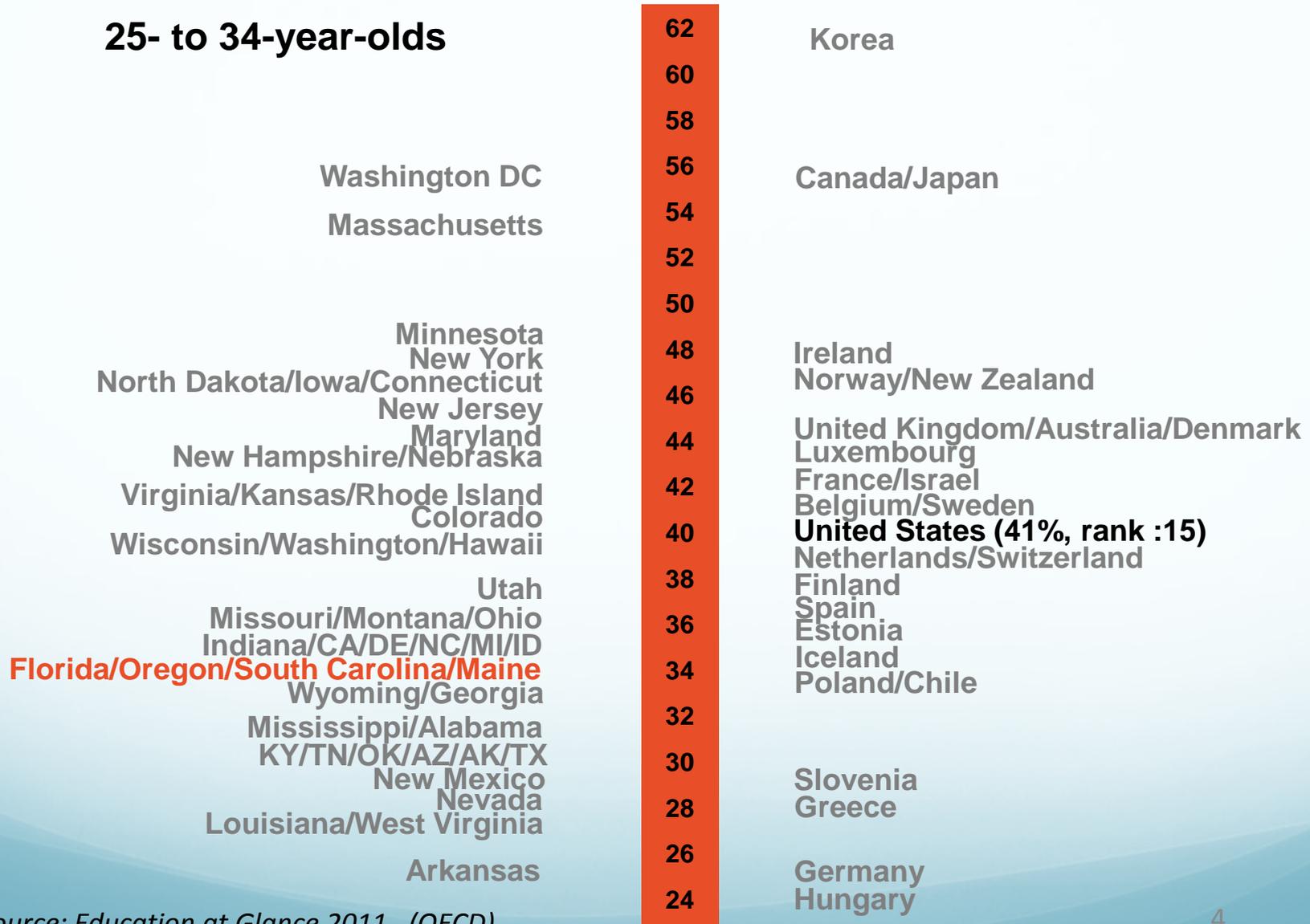
\$1 Billion in Scholarships



- South Carolina's Class of 2012 is the first to break the billion-dollar mark in scholarship winnings.
- This year's senior class earned \$1.06 billion in scholarships. The figure has risen steadily since 2007 when it was \$684 million.
- But, these accomplishments are not translating into post-secondary success for enough students

EDUCATIONAL ATTAINMENT

25- to 34-year-olds

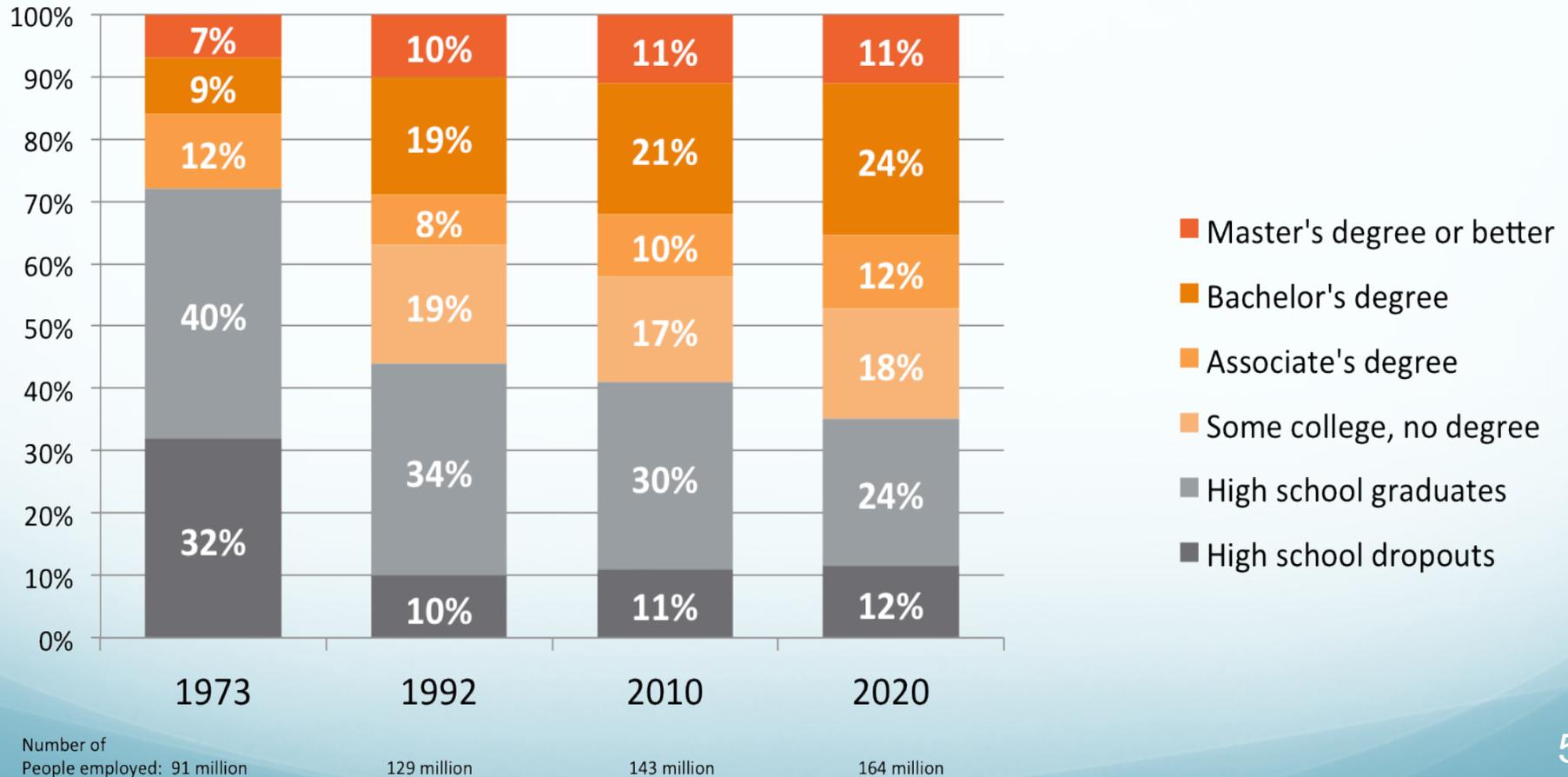


Source: Education at Glance 2011, (OECD)

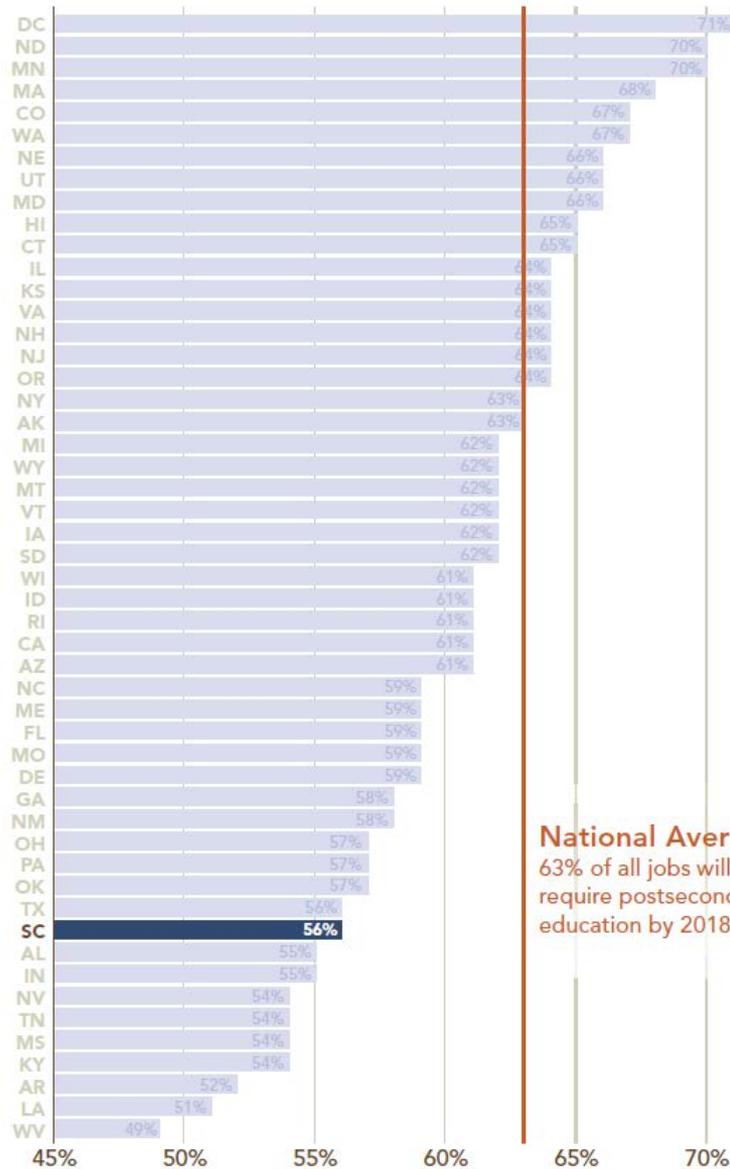
Dr. Anand Gramopadhye, Professor, Department of Industrial Engineering, Clemson University

2020 NATIONAL EDUCATIONAL REQUIREMENTS

BY 2020, 65% OF ALL JOBS WILL REQUIRE POSTSECONDARY EDUCATION AND TRAINING



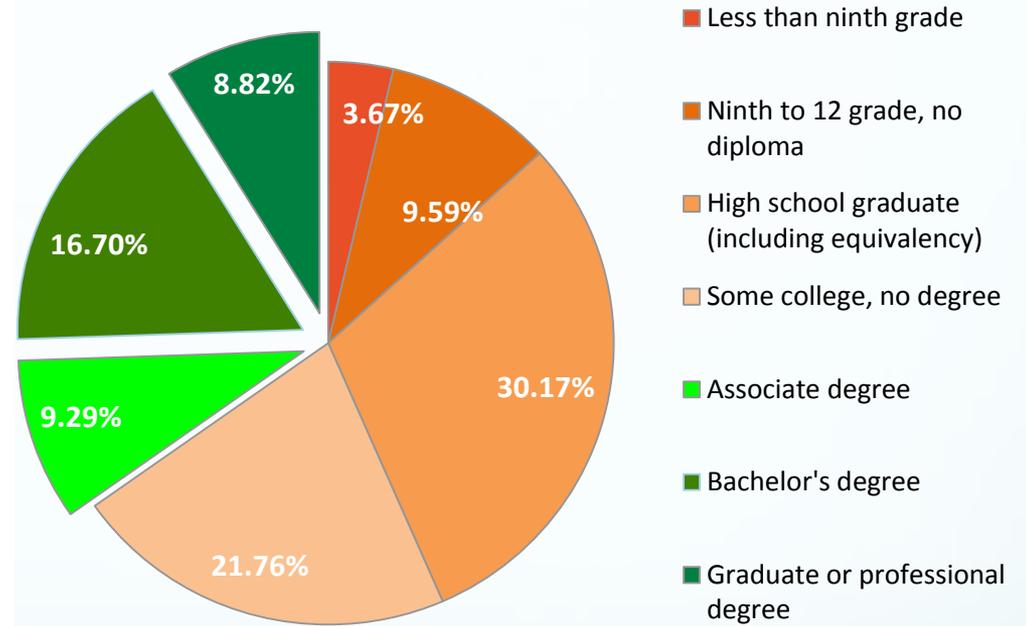
56% OF SC JOBS REQUIRE POST-SECONDARY ED.



National Average
63% of all jobs will require postsecondary education by 2018

**SC
2018
=
56%**

2010 Levels of education for South Carolina residents

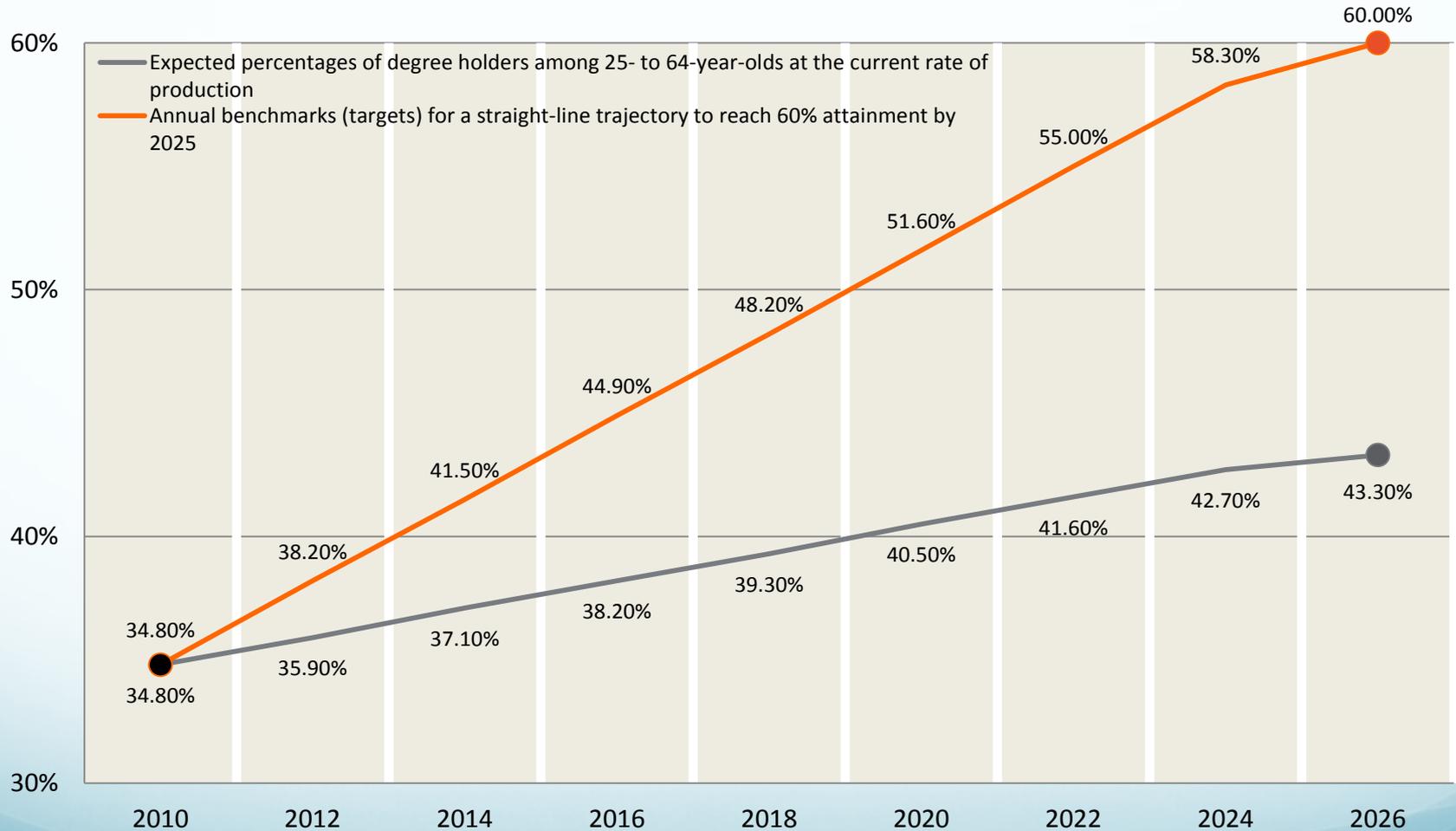


Source: U.S. Census Bureau, 2010 American Community Survey

Percentage of SC working-age population with at least an associate degree

**SC
2010
=
34.8
%**

Path to 60% Degree Attainment in SC – We MUST accelerate our progress

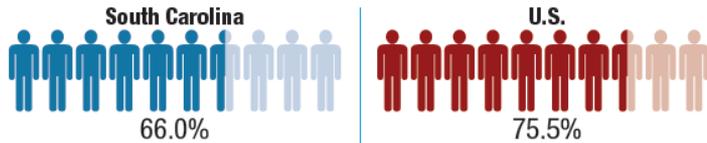


Source: U.S. Census Bureau, 2000 Census and 2010 American Community Survey

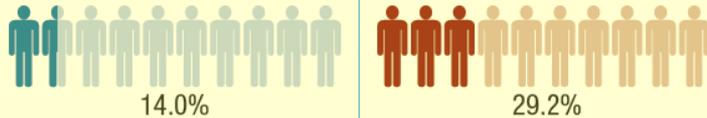
SC JOB OPPORTUNITIES

South Carolina must plug gaps in the STEM pipeline from high school through college

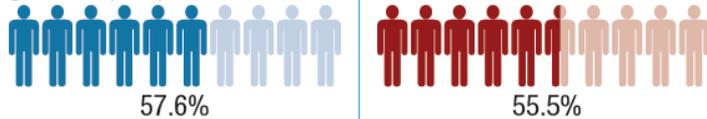
What percentage of high school students graduate? (2009)



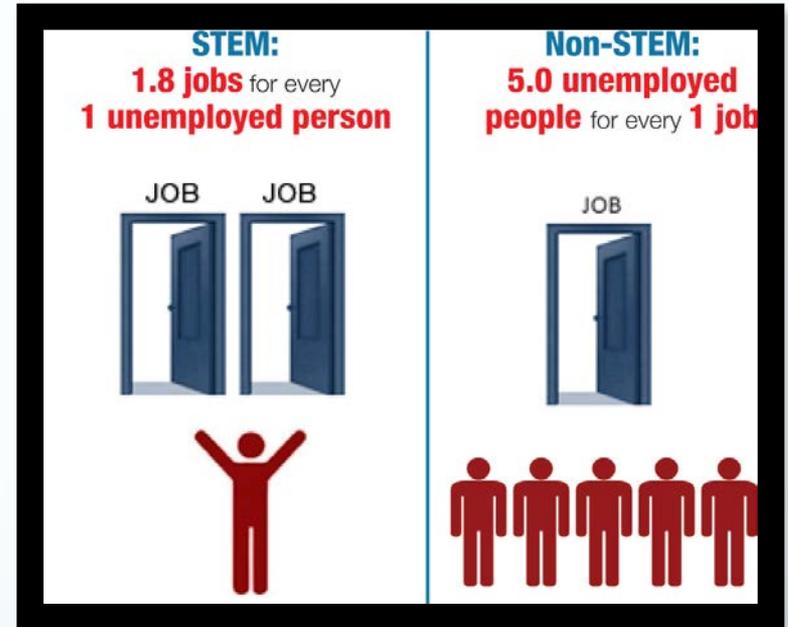
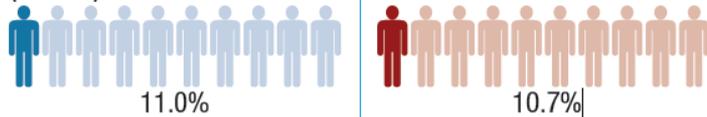
Of students who enter a two-year degree program, what percentage graduate? (2009)



Of students who enter a four-year degree program, what percentage graduate? (2009)

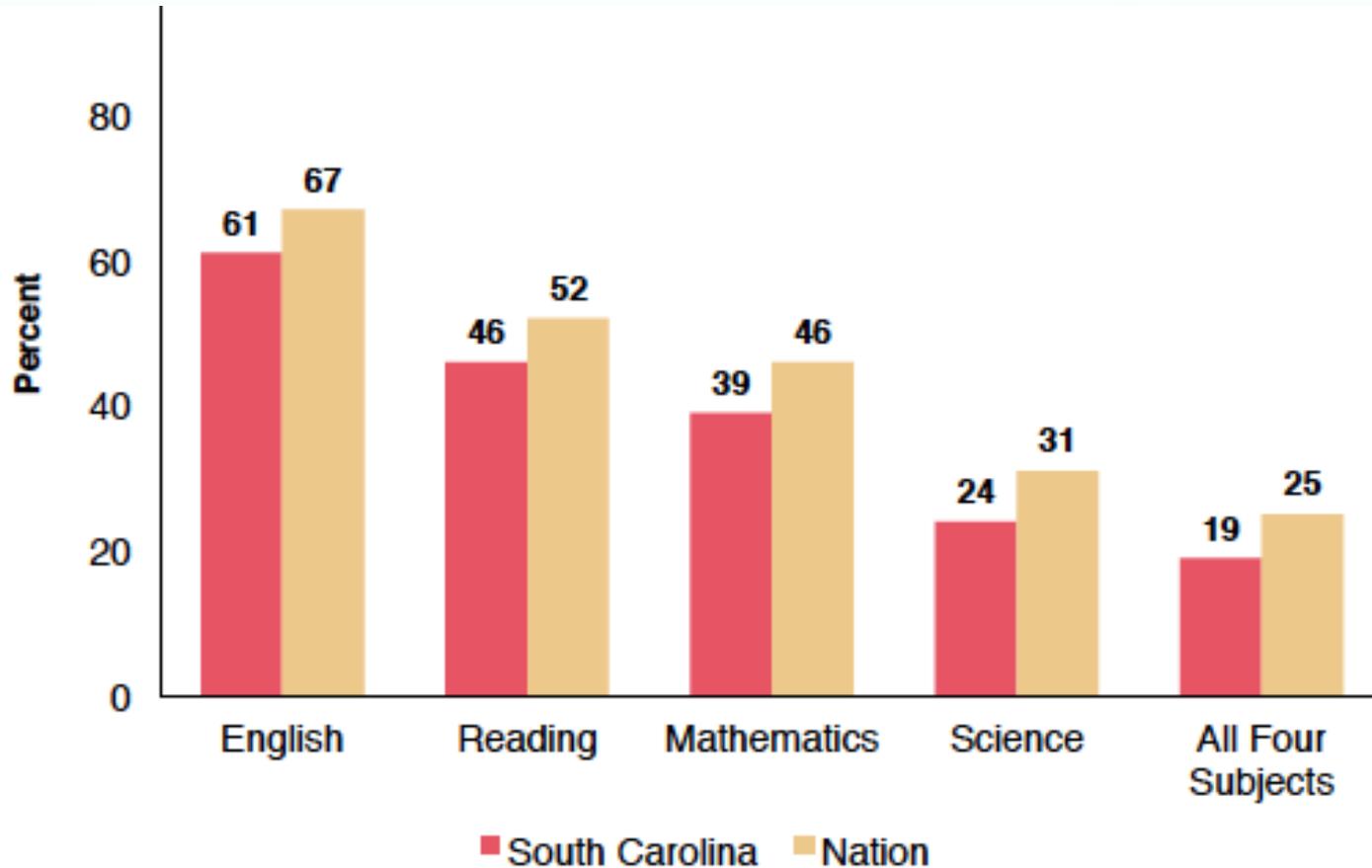


What percentage of college degrees and certificates are in STEM fields? (2008-09)



Source: STEM, Center on Education and the Workforce Analysis

Percent of SC Seniors Taking ACT Who Score Ready for College Coursework

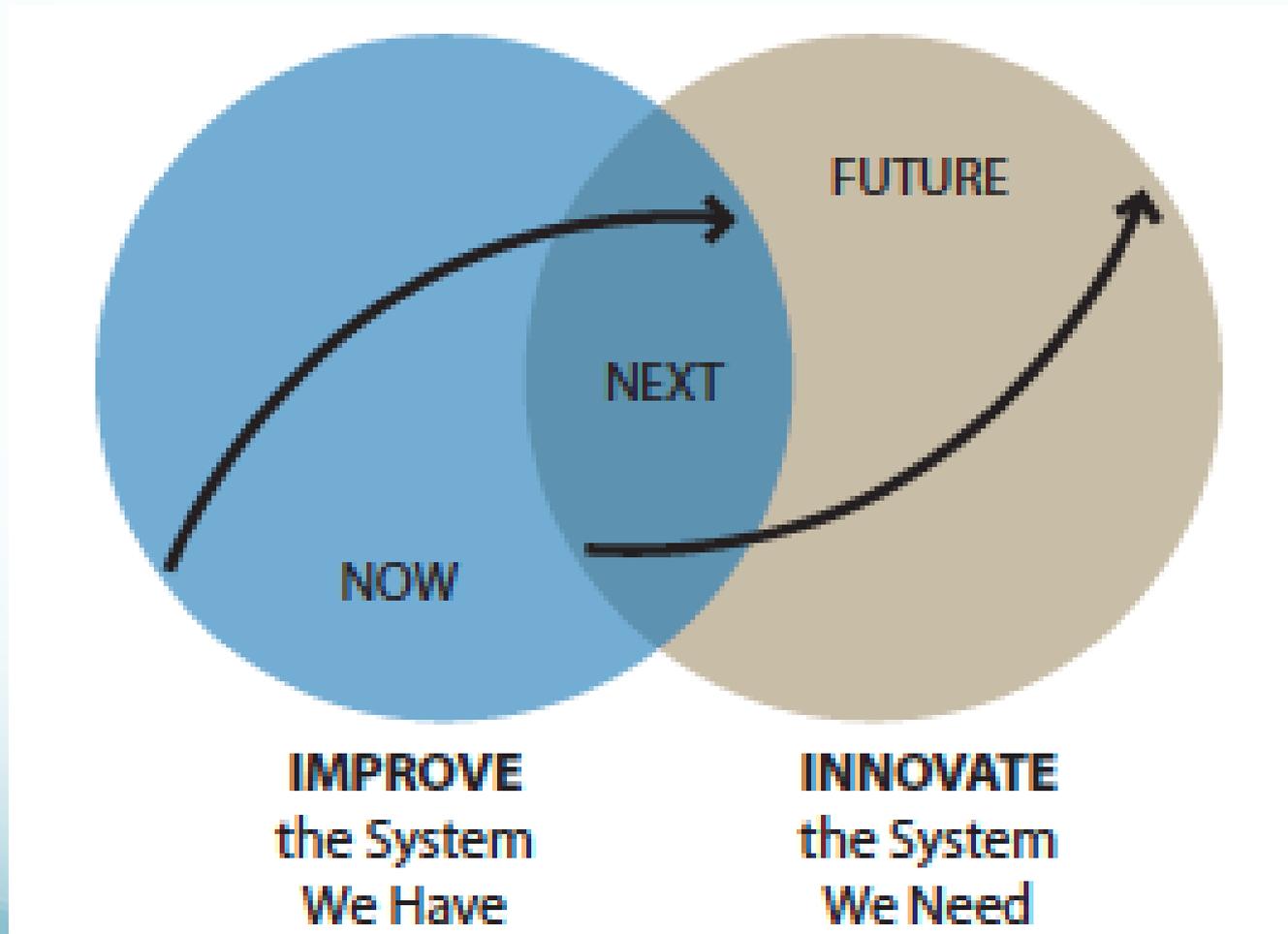


What if . . .

- **Community leaders wanted to commit to the success of all their children, PK-14? What would it take to create a seamless PK-14 system of learning?**
- **They created a continuum of essential knowledge, skills?**
- **They developed a competency-based system of assessment and accountability, and students moved through levels along the continuum when they were ready?**
- **They used measures and indicators of success to inform teaching all year long? What if high school exit criteria and tech college entrance criteria were the same?**
- **They could use existing resources more flexibly?**
- **They were supported in creating more effective**

SC Public-Private Partnership for Innovation in Education

~ Helping communities create the schools SC needs ~



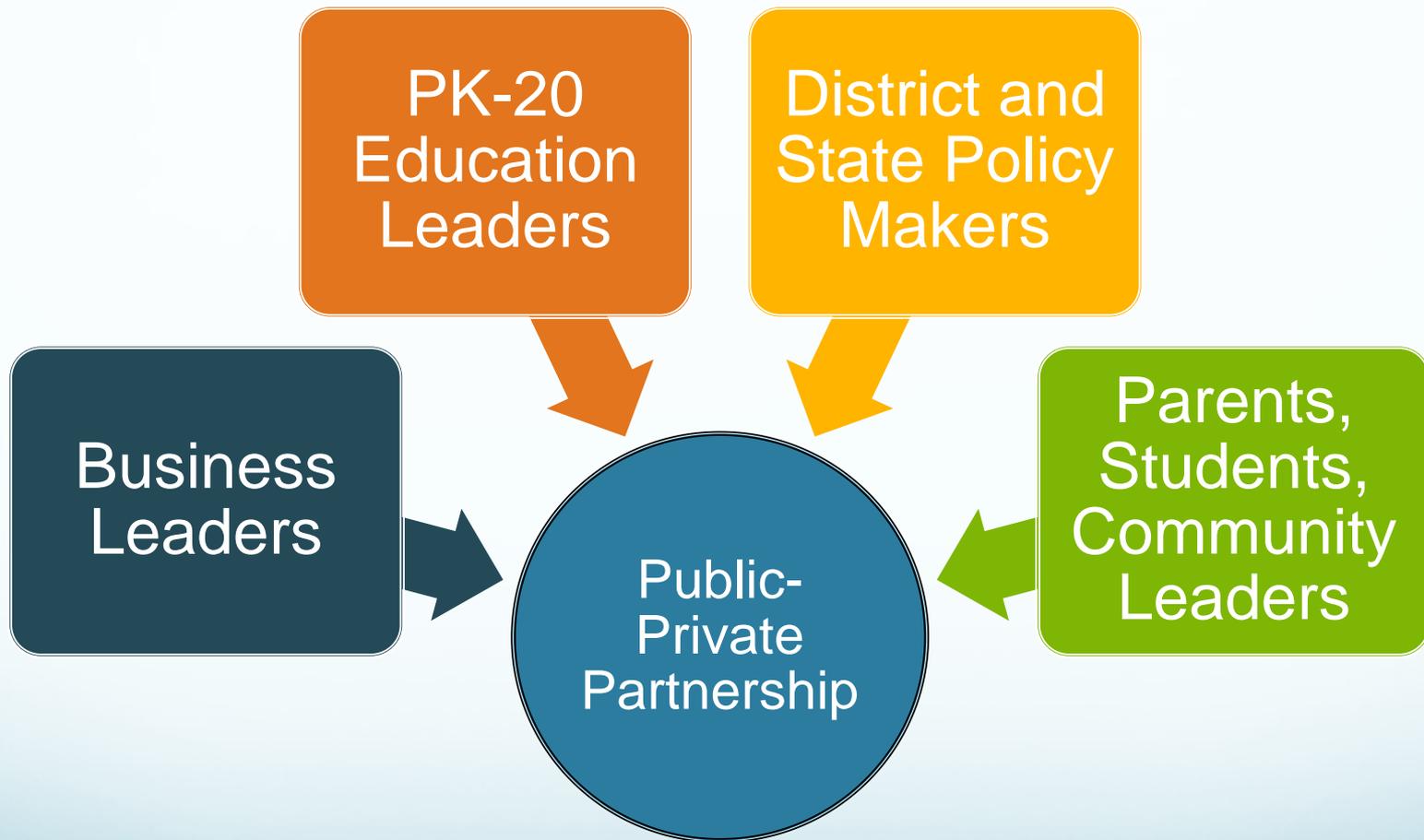
Pam Lackey
President, SC AT&T

Mike Brennan
President, SC BB&T

Co-chairs, SC Innovation Initiative



A Coalition of Visionary Leaders



Coming together under the auspices of New Carolina

Supporting this Effort

New Carolina

SC Chamber of
Commerce

SC Future
Minds

Higher
Education

The Riley
Institute

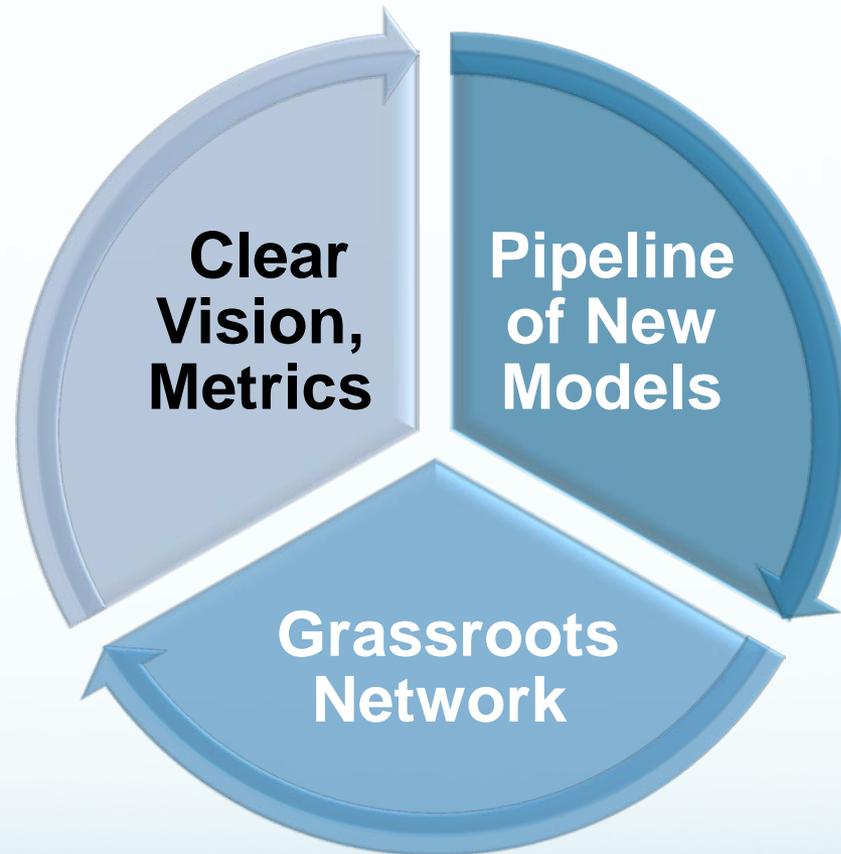
SC Board of
Education

SC
Administrators
Association

SC School
Boards
Association

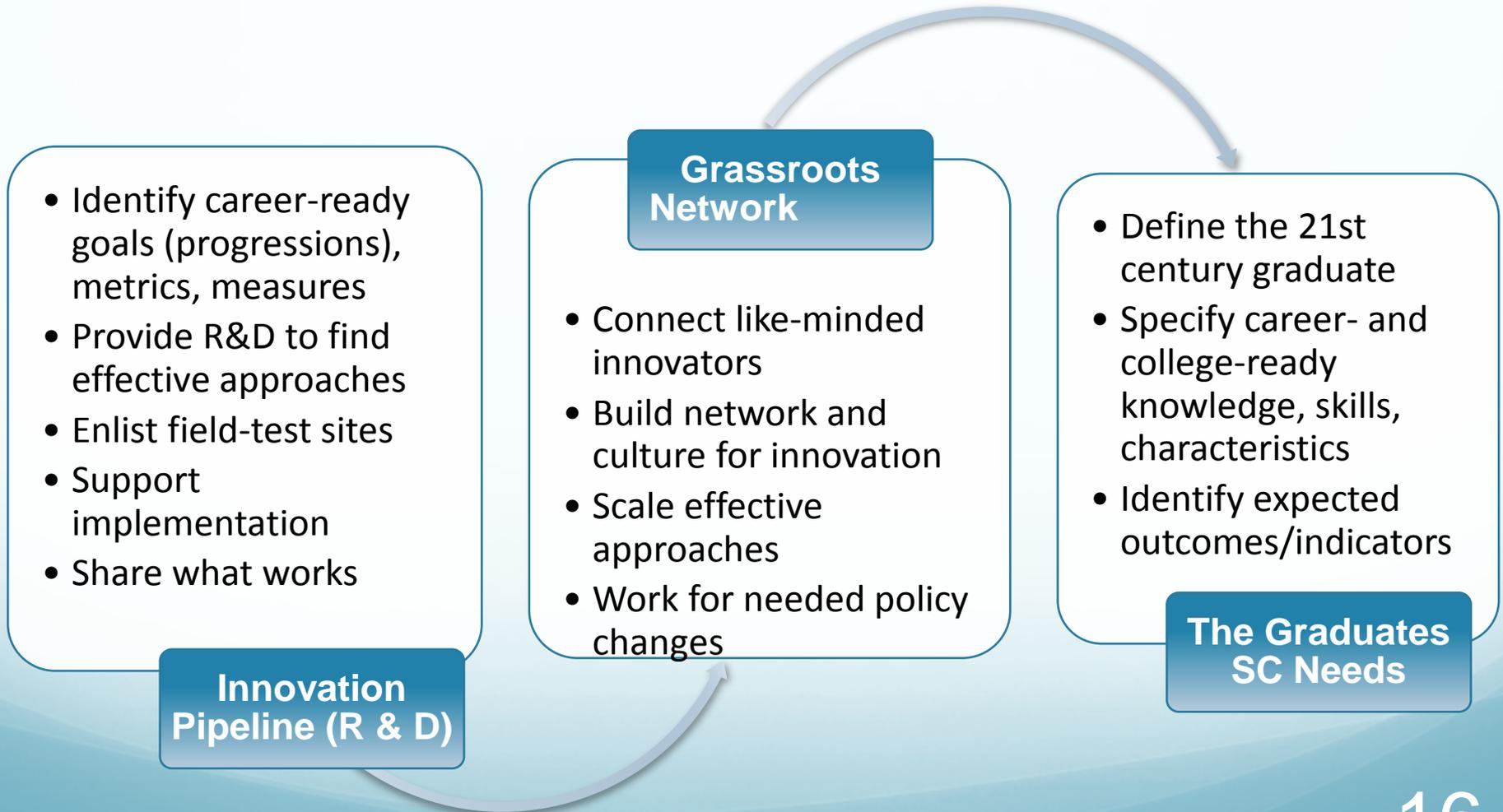
Currently
meeting with
other groups

Innovation Initiative Steering Committee Recommendations

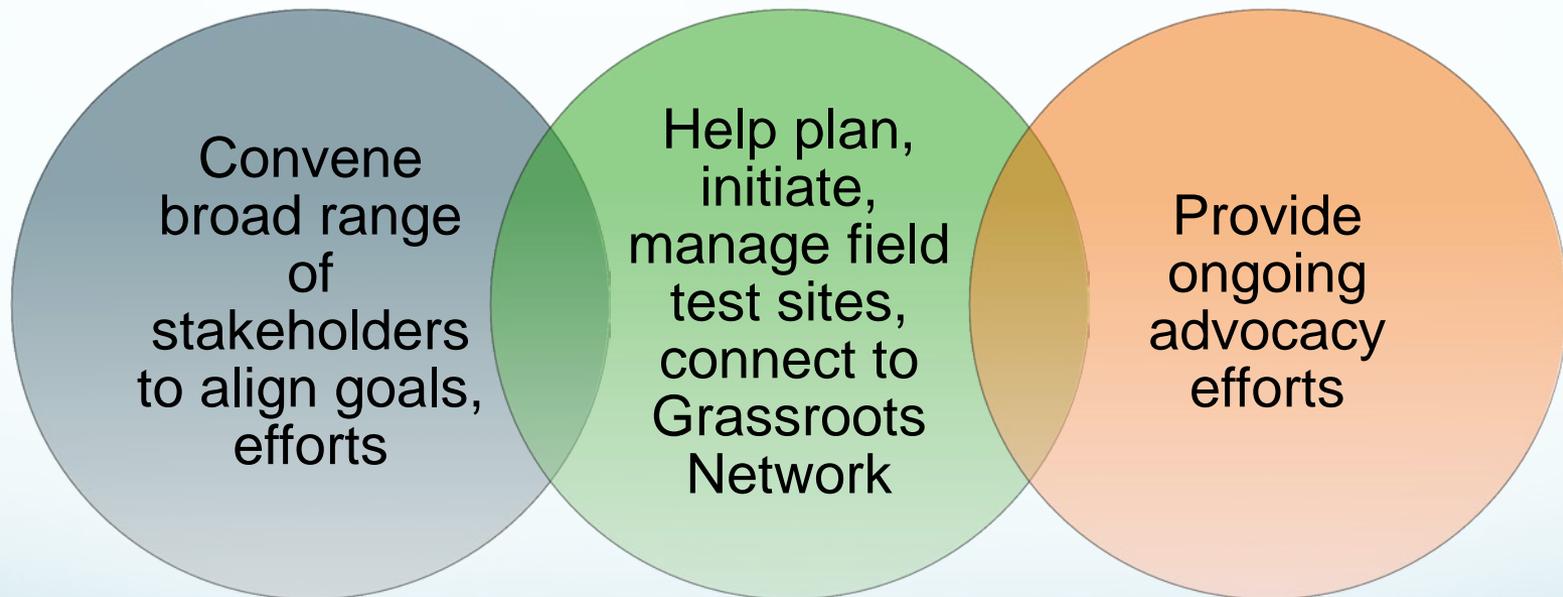


Innovation Effort Coordinated by Public-Private Partnership

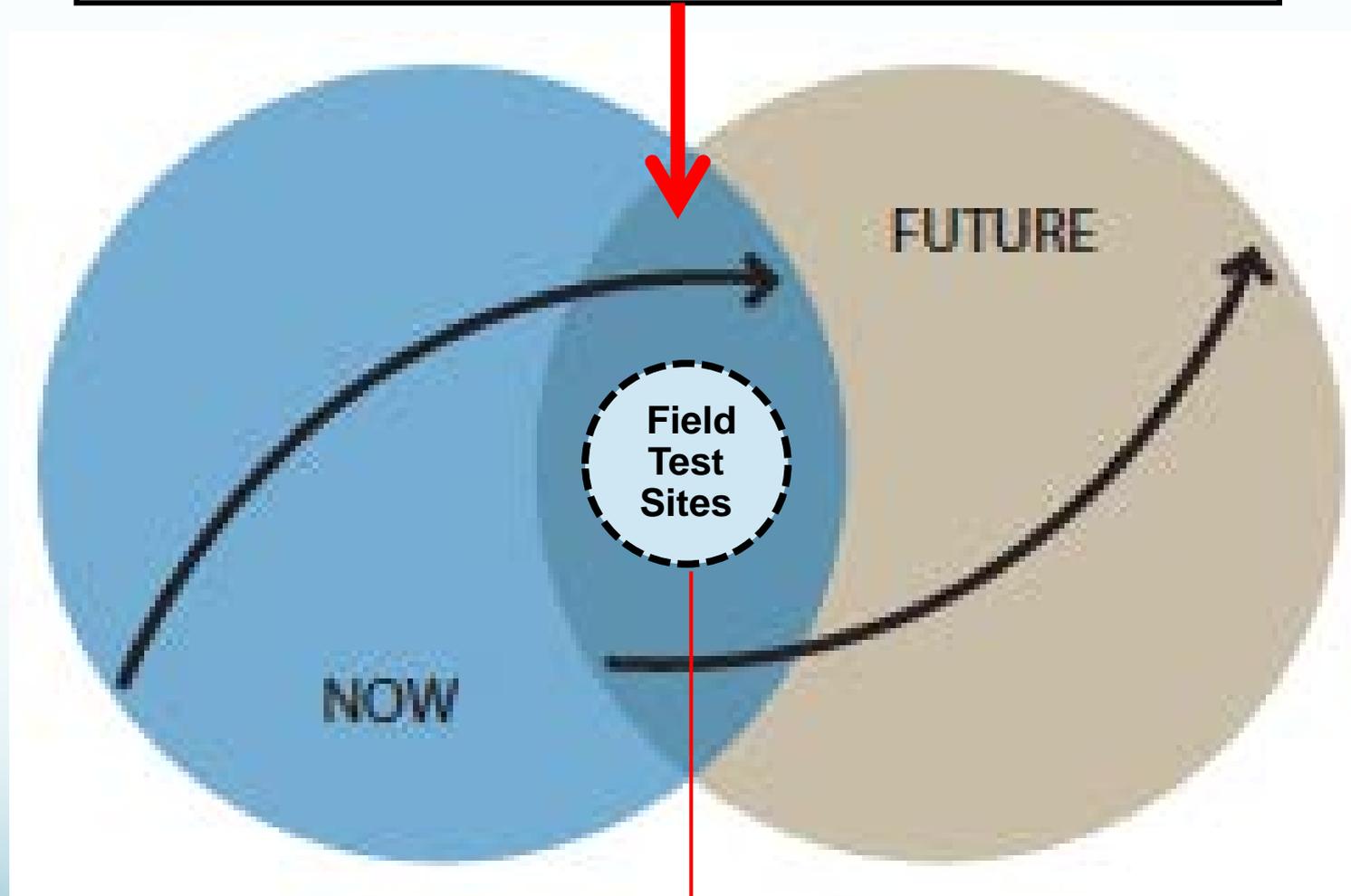
A Public-Private Partnership to Support Education Innovation



The Public-Private Partnership's Primary Roles



Grassroots Innovation Network

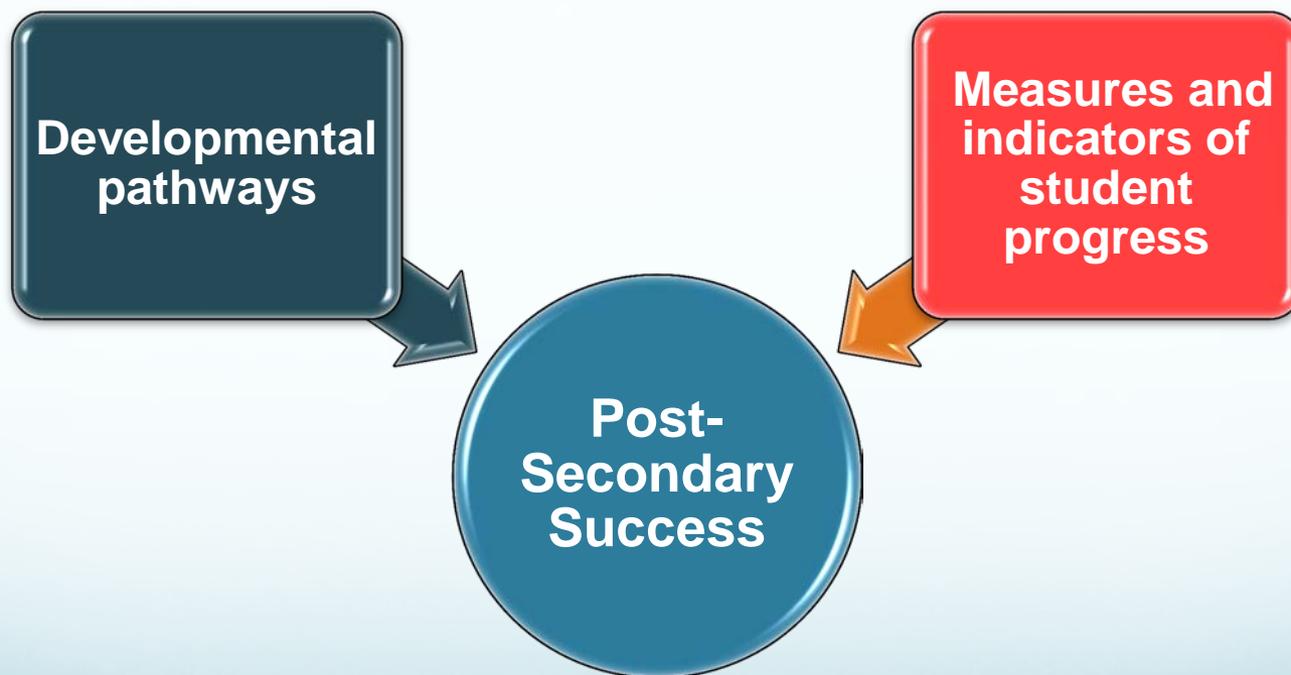


Intensive Design, Develop, Test Effort



We need

better metrics



A "GPS" System to Guide Each Student's Journey

FORTUNE 500 MOST VALUED SKILLS

1970		1999
Writing	1	
Computational Skills	2	
Reading Skills	3	
Oral Communications	4	
Listening Skills	5	
Personal Career Development	6	
Creative Thinking	7	
Leadership	8	
Goal Setting/Motivation	9	
Teamwork	10	
Organizational Effectiveness	11	
Problem Solving	12	
Interpersonal Skills	13	

What if the greatest predictor of *Career, College, Citizenship* readiness is strength of character?

Character traits – Keys to Success

1. **Grit**
2. **Curiosity**
3. **Self-control**
4. **Social intelligence**
5. **Zest**
6. **Optimism**
7. **Gratitude**



How might we design an accountability system that values these outcomes?

Paul Tough: *How Children Succeed—Grit, Curiosity, and the Hidden Power of Character*

Gallup: “Monumental” Drop in Student Engagement, K → 12

Engagement

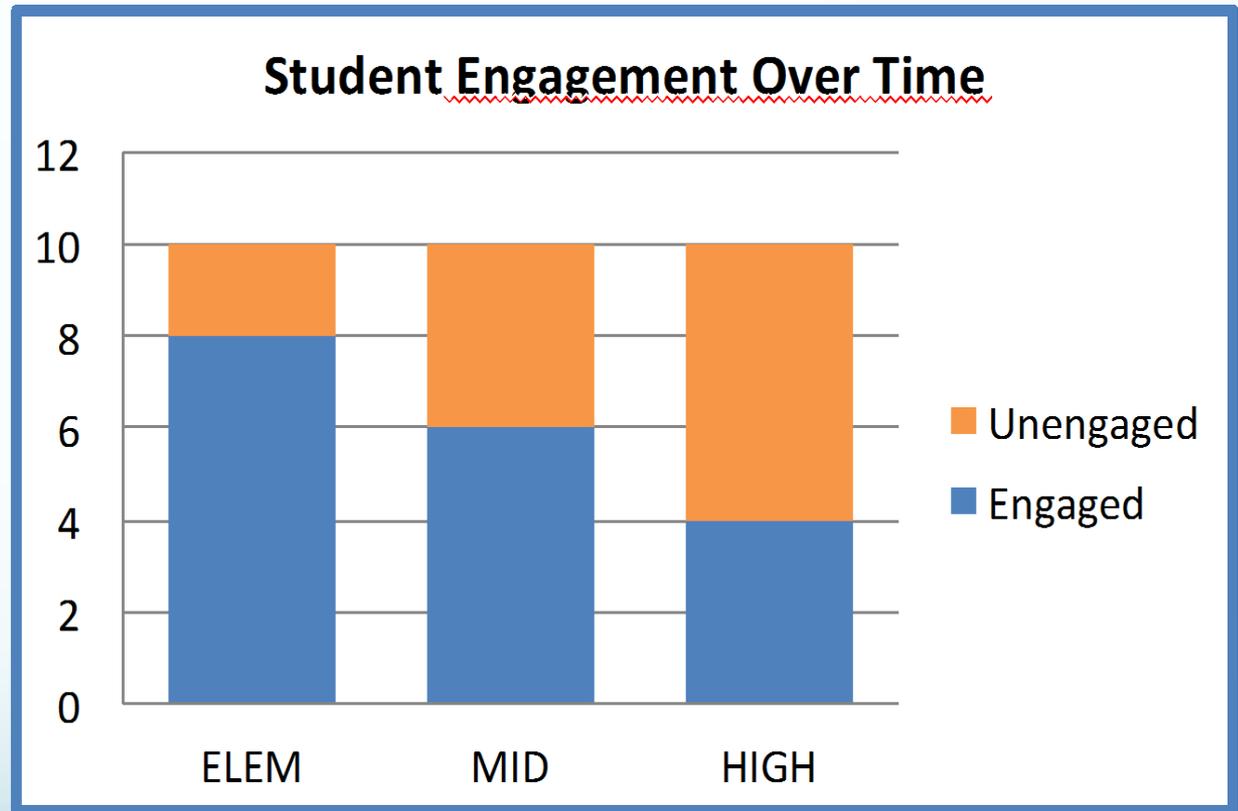
Hope

Well-being



Count for 1/3
of variance

(Gallup, 2012)



Source: Teacher blogs > *Teaching Now* Francesca Duffy

Achieving and Assessing Deeper Learning:

- An ability to apply core concepts and modes of inquiry to complex real-world tasks
- An understanding of the meaning and relevance of ideas to concrete problems
- A capacity to transfer knowledge and skills to new situations, to build on and use them
- Abilities to communicate ideas and to collaborate in problem solving.
- An ongoing ability to learn to learn

We must have a **very clear picture** of what our graduates need when they leave us and what our communities state and nation need for prosperity and an effective democracy

And then plan backwards....





2012 Vision Committee Superintendents' Roundtable

Co-Chairpersons:

Dr. Cynthia Elsberry
Dr. Lynn Moody

Ms. Cynthia Wilson
Dr. Karen Woodward

Members:

Dr. Allie Brooks, Jr.
Dr. Cynthia Cash-Greene
Ms. Meda Cobb
Dr. Elizabeth Everitt
Dr. Venus Holland
Dr. John Kirby

Dr. Rainey Knight
Mr. Harold McClain
Dr. Teresa Pope
Dr. Cleo Richardson
Dr. Marc Sosne
Dr. Fay Sprouse
Dr. Rodney Thompson



2012 Vision Committee Superintendents' Roundtable (Feb 5, 2013)

The graduate of the K-12 public schools of South Carolina will be equipped for careers and college, life long learning and civic life in a global, digital and knowledge based world.

Our graduates will be:

- Creative
- Critical thinkers
- Problem solvers
- Collaborators
- Capable communicators
- Ethical citizens



2012 Vision Committee *Profile of the Graduate* (Feb 5, 2013)

Knowledge

- Rigorous standards in language arts and math for career and college readiness
- Multiple languages, science, technology, engineering, mathematics (STEM), arts and social sciences

Skills

- Creativity and innovation
- Critical thinking and problem solving
- Collaboration and teamwork
- Communication, information, media and technology
- Knowing how to learn

Personal characteristics

- Integrity
- Self-direction
- Global perspective
- Perseverance
- Work ethic
- Interpersonal skills



Which of these areas do we currently measure and report as part of our accountability system?

Knowledge

- Rigorous standards in language arts and math for career and college readiness
- Multiple languages, science, technology, engineering, mathematics (STEM), arts and social sciences

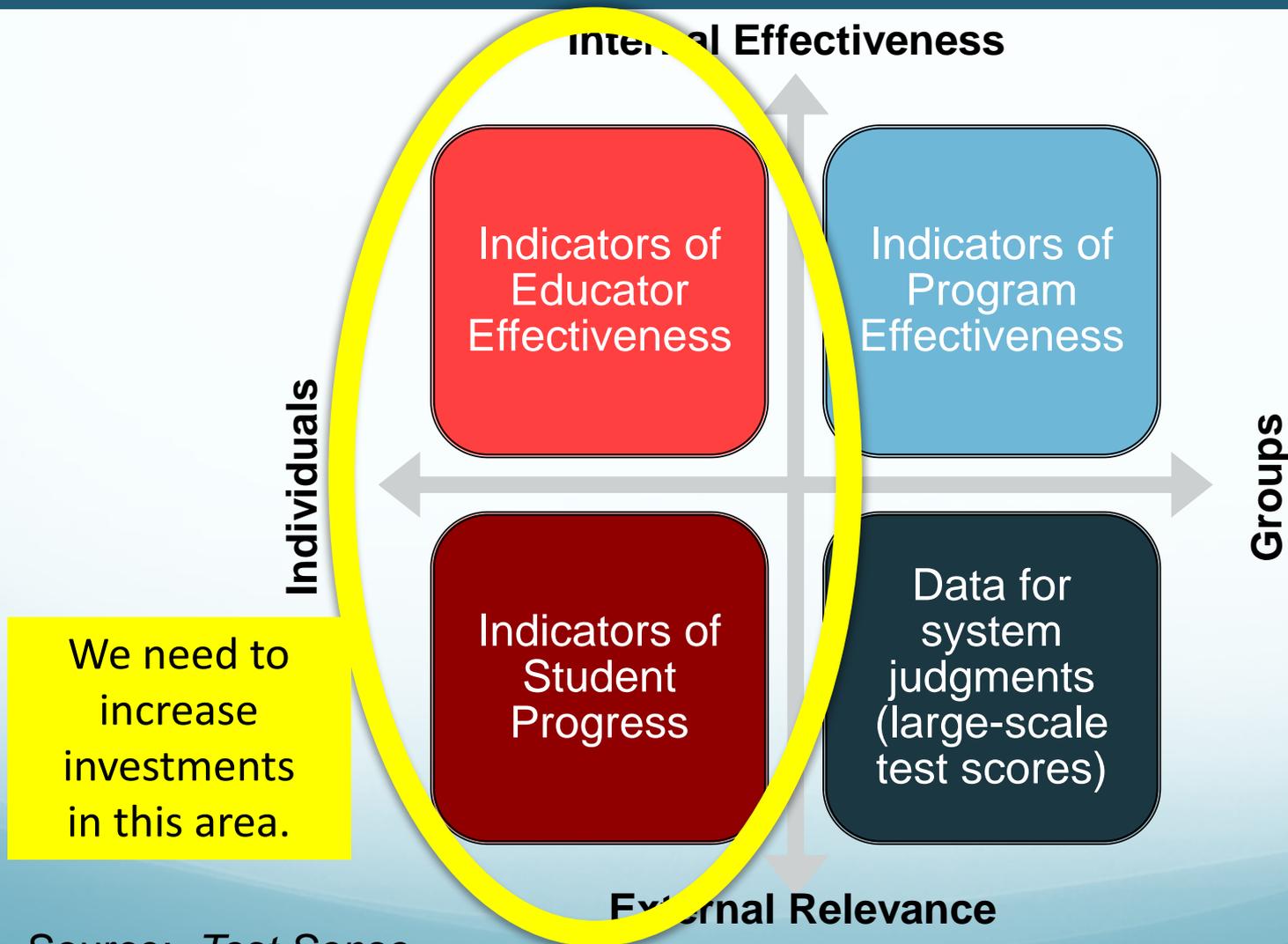
Skills

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- Knowing how to learn

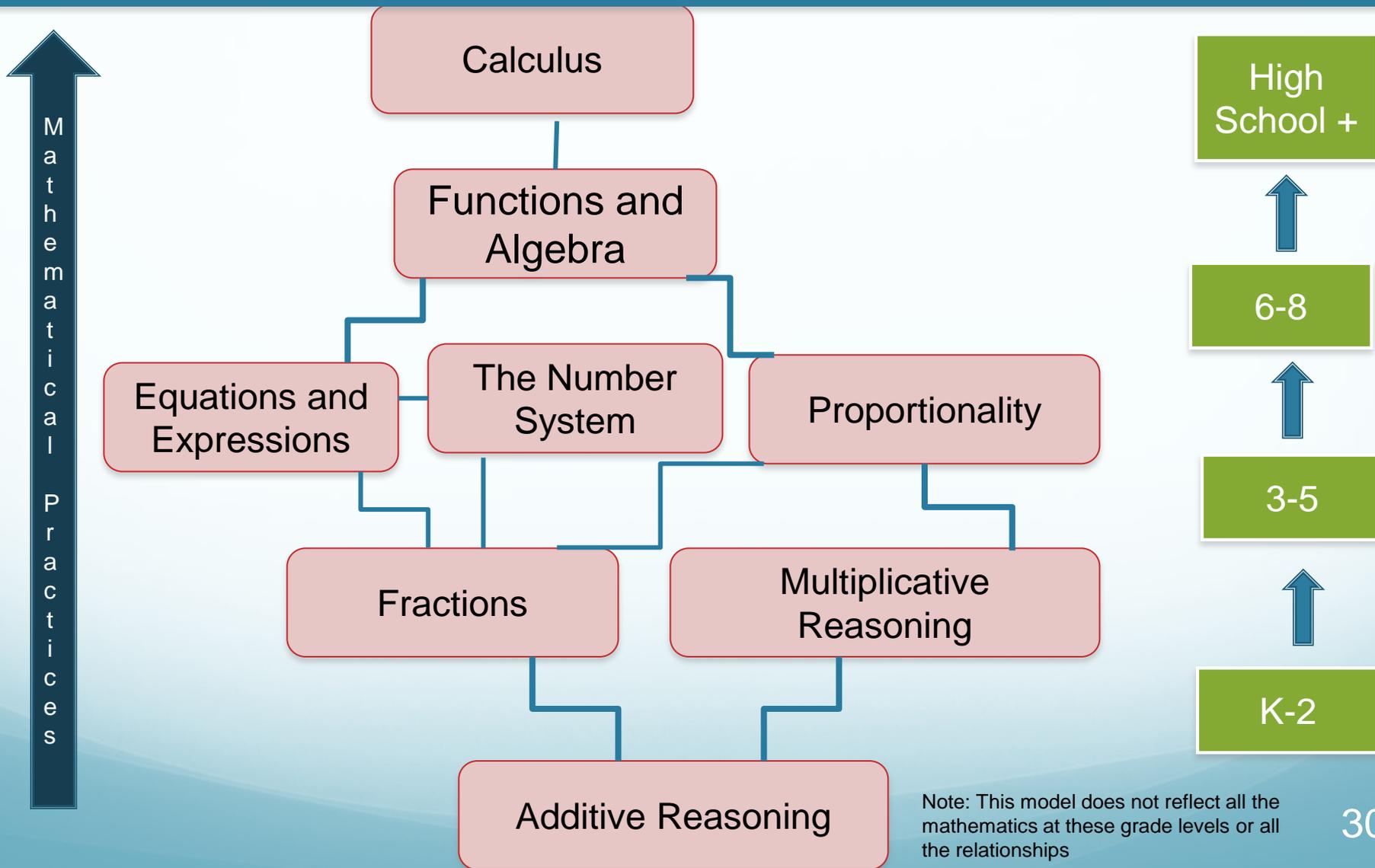
Personal characteristics

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Four Types of Assessment Data

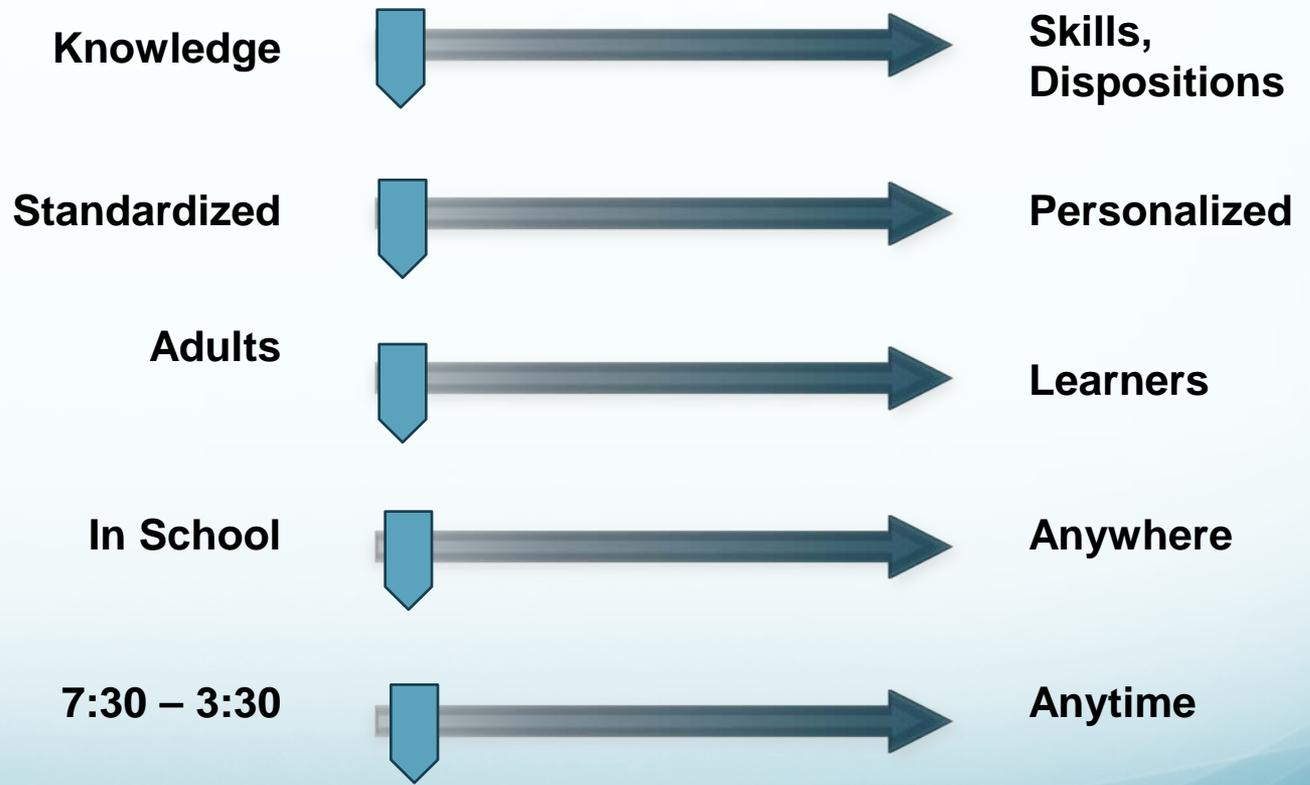


We need to know that students are developing the “big ideas” and fundamental skills



Moving toward *Personalized* Systems of Learning

WHAT
HOW
WHO
WHERE
WHEN

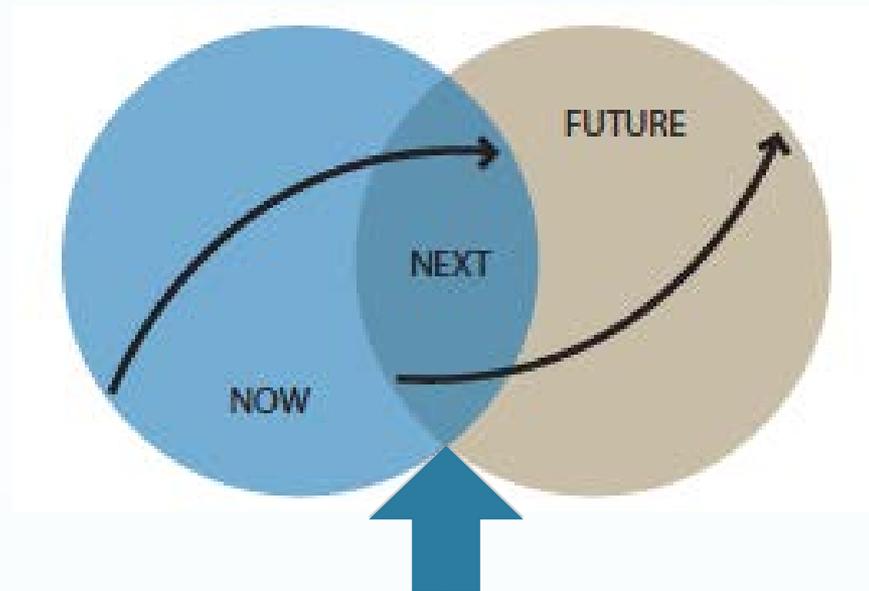


Learning and Teaching Progressions

- Big intellectual stepping stones and transitions students make
- Teacher has a fine-grained understanding, based on analysis of student work, of the stage of conceptual development
- Student “owns” learning –takes responsibility for moving forward
- Students traverse personalized pathways toward readiness for post-secondary success



School designers will have to rethink almost everything



Conditions	Design Parameters	Essential System Elements	Implementation Considerations
<ul style="list-style-type: none"> • Governance • Leadership • Data infrastructure • Public policy • Public will • Readiness • Resources 	<ul style="list-style-type: none"> • Applied • Performance-driven • Competency-based • Learner-centered • Personalized • Tech enabled • Cost effective • Anytime, anywhere 	<ul style="list-style-type: none"> • Curriculum, content • Credentialing • Evidence of learning • Human capital • Learning environment • Learning modalities • Use of time, place • Student supports • Roles of students, teachers 	<ul style="list-style-type: none"> • Change management • Family, community • Operations and infrastructure • Professional learning • School culture <p style="text-align: right;"><i>--Adapted from 2Rev</i></p>

**SYSTEM OF
SCHOOLING**

**Design
Parameters**

SYSTEM OF LEARNING

Intelligence is hard-wired, unchangeable	Beliefs about Learners	Learning capacity is malleable
Wait for failure and then provide remediation	Assumptions about Learning	Learner success is presumed and built into learning path
Focus primarily on acquiring KNOWLEDGE	Goals	Focused on knowledge, skills, characteristics essential for post-secondary success
Prescribed pathway from K through graduation	Curriculum Delivery	Customized learning pathways (Piaget meets Vygotsky) – Proximal zone
Focus on high-stakes, multiple choice tests as primary indicator	Assessment	Continuous improvement, demonstration of proficiency

SYSTEM OF SCHOOLING

Design Parameters

SYSTEM OF LEARNING

Can be rigorous; delivery is often “one-size for all”	Learning Experiences	Rigorous, relevant, engaging, personalized
Based on time and grades—Carnegie Units	Awarding of “Credits”	Competency-based credentialing systems
Student depends on teacher for direction	Student/Teacher Roles	Foster learner independence, student ownership
Involvement is limited, as requested by school	Family/Community Roles	Meaningful involvement in establishing learning direction and indicators
Depends on teacher’s comfort level	Use of Technology	Pervasive use of technology—learning tool
Top-down, focus on regulating all aspects of the system	Governance System	Board sets goals, metrics, parameters, and monitors results

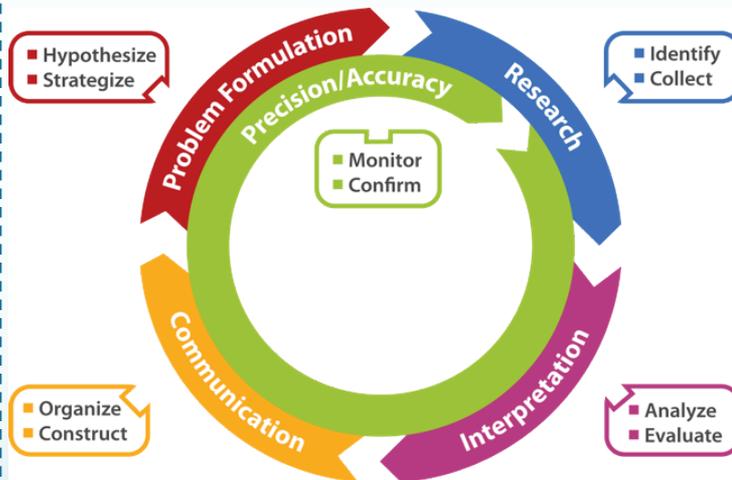
Education Policy Improvement Center

David Conley

Key Content Knowledge

- + Key terms and terminology
- + Factual information
- + Linking ideas
- + Organizing concepts
- + Common Core State Standards (in English/ literacy and mathematics only)
- + Standards for Success in Science, Social Sciences, Second Languages, the Arts

Key Cognitive Strategies



Key Learning Skills & Techniques

- + Time management
- + Study skills
- + Goal setting
- + Self-awareness
- + Persistence
- + Collaborative learning
- + Student ownership of learning
- + Technology proficiency
- + Retention of factual information

Key Transition Knowledge & Skills

- + Admissions requirements
- + College types and missions
- + Career pathways
- + Affording college
- + College culture
- + Relations with professors
- + Social/identity issues in transitioning

Creating an “Innovation Pipeline”

Field Test Sites – An Intensive R & D Effort

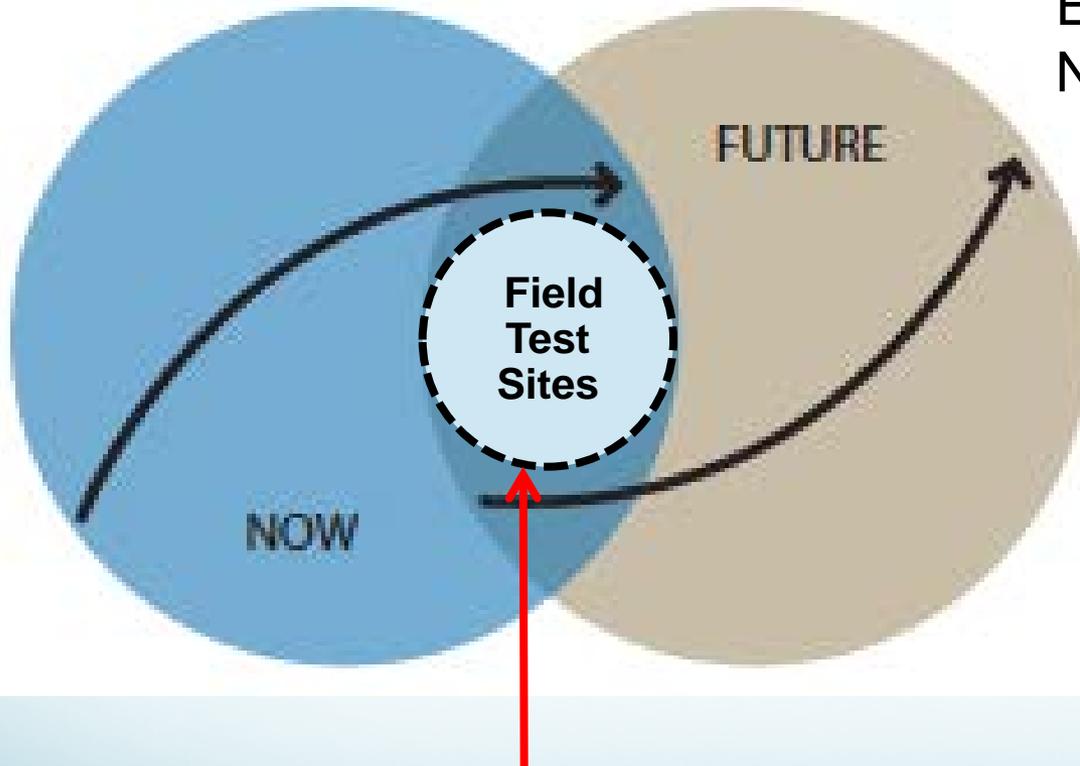
A few sites to test radically different approaches

Supported by:



- New R & D process – short learning cycles
- Assessments that provide real-time, actionable feedback to learners, teachers, parents
- Policies that allow education innovators much more flexibility
- Public-Private Partnership

Test Sites → Grassroots Network

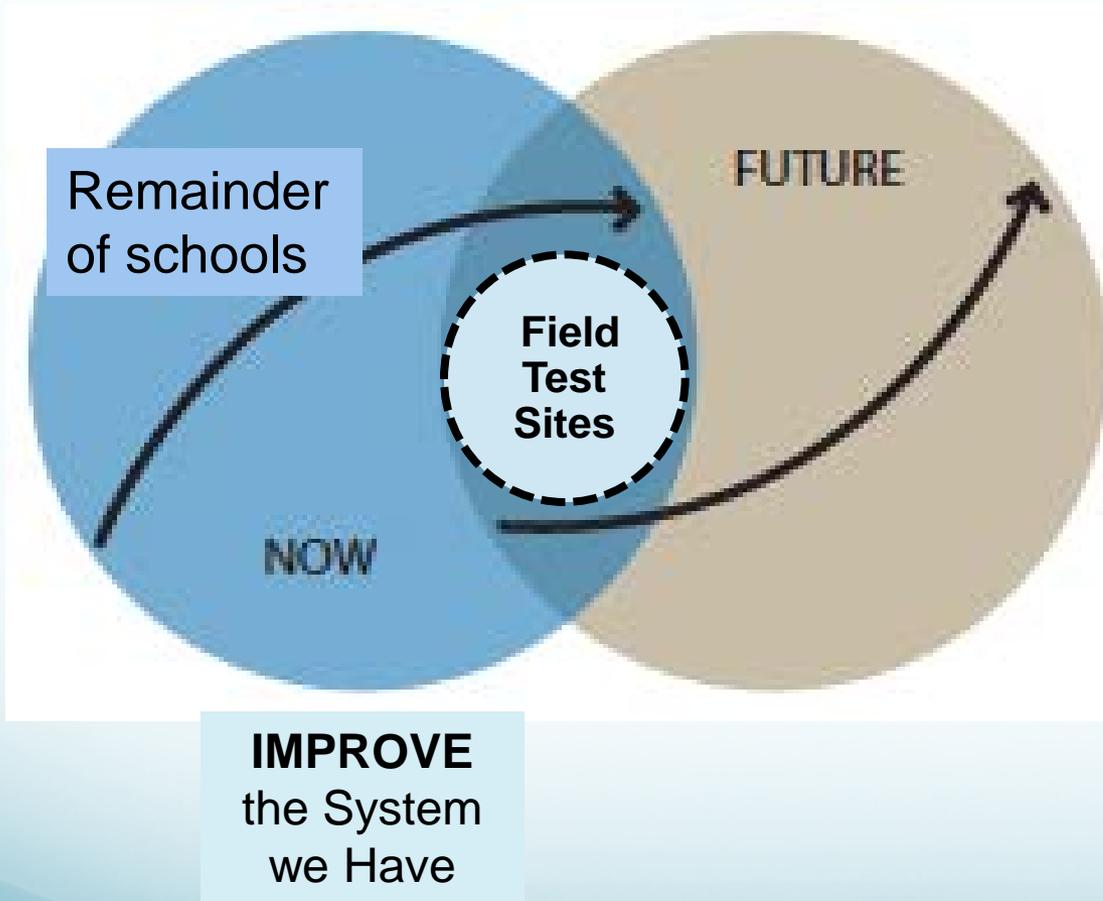


Intensive Design, Develop, Test Effort

Early thinking -- All schools in Network agree on:

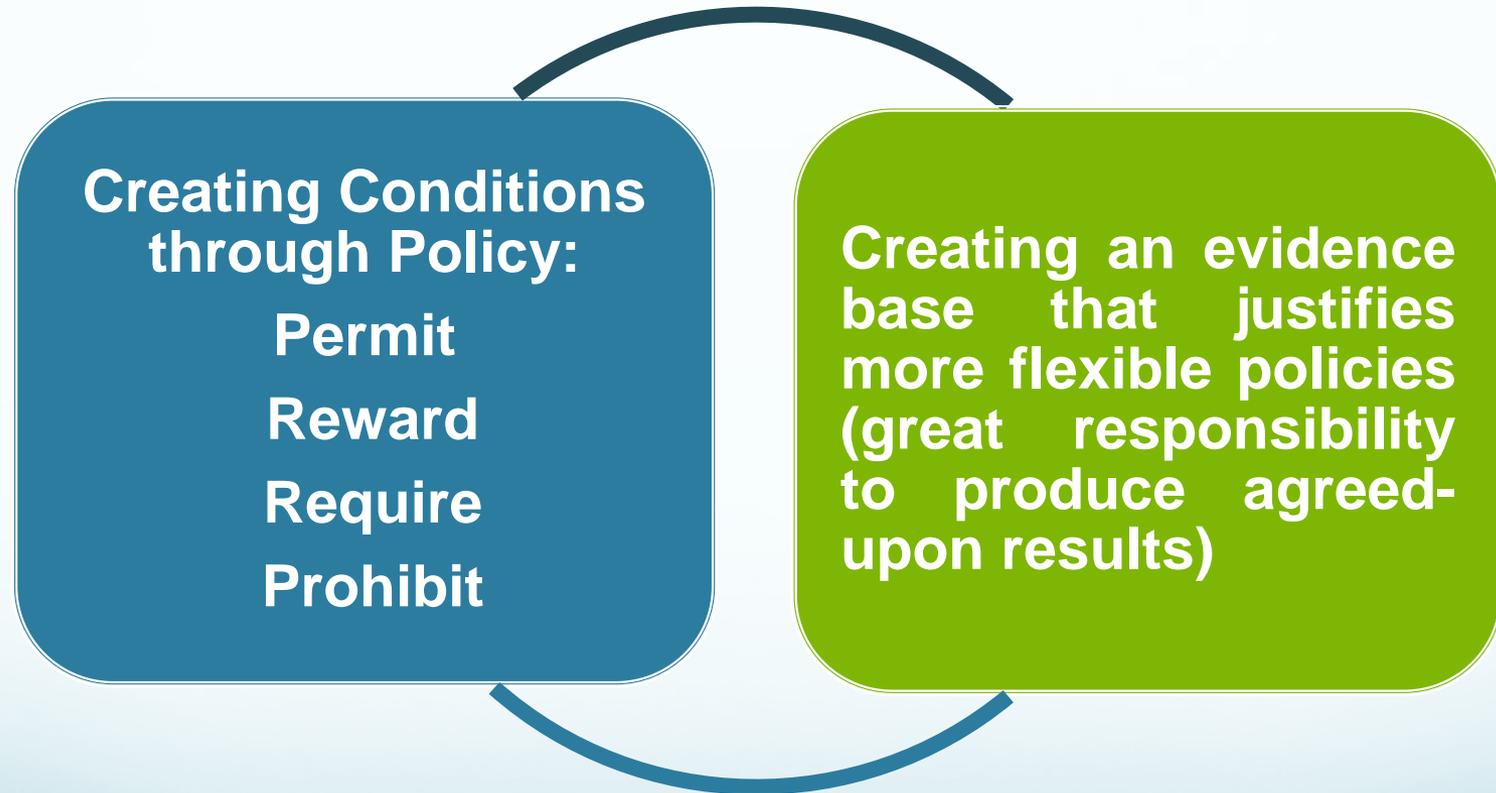
- ♦ Career, college, citizenship-ready standards
- ♦ New assessments-- Knowledge, Skills, Characteristics
- ♦ Different accountability approach
- ❖ R & D Participation

Test Sites vs. the Rest of the District



Test site schools may be using approaches, tools, and assessments that are different from other sites in the district.

Creating Optimal Conditions for Innovating and Scaling Successes



An iterative relationship between policy and evidence-based practice

Innovation Initiative: Major Tasks

Jan-June, 2013



1. Build a broad base of cross-sector support
2. Establish operating protocols and relationships; obtain clearance to proceed
3. Create, implement communications plan (firm has been identified)
4. Connect those who want to be part of this effort
5. Determine participation process
6. Vet proposed career, college, citizenship-ready outcomes
7. Develop R & D approach (Riley Institute)
8. Coordinate activities of key parties involved in the initiative (e.g., State Superintendent, State Board, EOC, Riley Institute)
9. Raise sufficient start-up funds