FOCUS On Children
Boston Public Schools

KINDERGARTEN: WHY WE NEED TO CHANGE IT

Jason Sachs
Boston Public Schools

WHAT IS THE DIFFERENCE BETWEEN?

- Preschool and Kindergarten?
- Kindergarten and First Grade?
  - How much direct instruction should they receive? Is it the same, more or less than preschool and 1st grade?

- Is there a difference in PreK, K and 1st students, e.g. more variation in prior schooling?
- Are there skills other than math, literacy, science, that you would expect to see?
- Would you expect different instruction in PreK, K & 1st (how so?)
- Would you expect to see naps/quiet time, after school?
- Would you think about students differently if you knew they were in a preschool program versus no prior preschool? How so?
- Would English Language Learners require different curriculum or the same?
- What sources of evidence would you use to measure student's progress? Do these sources match the skills you wanted the students to attain?
- What sources of evidence would you use to measure teacher quality?
  - Are these measures different for PreK and 1st grade?

PREK TO 3RD REPRESENTS A COLLISION OF TWO WORLDS: KINDERGARTEN ENDS UP BEING THE CROSS ROADS

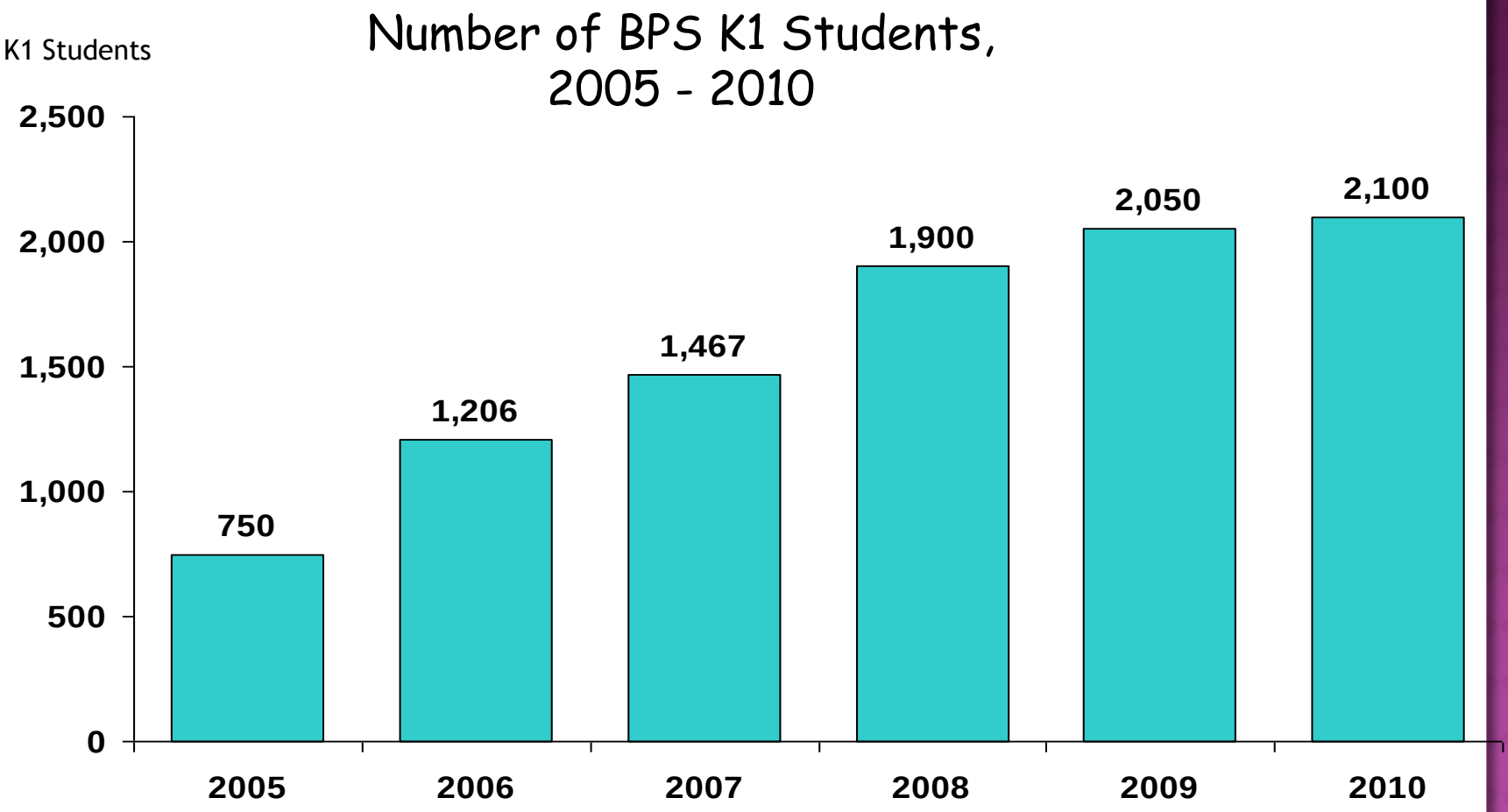
	Early Education	Elementary
Curriculum	• Thematic, integrated curriculum • Choice time (self directed/independent) • Observational assessments • Full day means full day	• Subject areas: ELA, math, science, social studies, art • K-5 publishing companies • MCAS
Structural	• Same staff for 8-10 hours (non union) • Less educated workforce/administration • Smaller Group Size • No transportation • Fees/vouchers	• 6 hour day (3-4 instructional hours) • Masters/Certified teachers • Larger group size/ratios • Transportation • Universal/Free/Grant
Family Engagement	• "Comprehensive Services" • 2 generational • Family work hours	• School site councils, "Family Engagement" coordinators • Parent teacher relationship limited
School Design	• Everything small-child sized • Health & safety standards licensed • Significant Facility challenges	• Built for older children (esp. playgrounds, cafeterias) • Meals in large cafeterias • Lack of bathrooms/running water

Add to the mix: public education is complex and underfunded, teachers unions contracts dictate school and intense political will not to resolve many of these issues…

Three Part Discussion: Ideas and Process

- Boston Data on K1 (preschool) and K2
  - Context of Department of Early Childhood in a P-12 System
  - Evaluation story
  - Making the case that Kindergarten is a missed opportunity
- Example of good integrated academic experience
  - What academic rigour should look like
- Some National Strategies: PreK to Third and how it might get us there
  - Montgomery County
  - Our Process
  - Next Steps

THE INVESTMENT: K1 EXPANSION



	2005	2006	2007	2008	2009	2010
Number of K1 Classrooms	38	60	78	101	108	110

MEASURES

- DOE Cost and Quality Study “measure quality first”
- 2006: ECERS, CLASS, SELA
  - Boston Globe
- 2008: ECERS, CLASS, ELLCO & PPVT
- 2010 ECERS, CLASS, ELLCO, PPVT
- 2010 Fidelity study and RDD: Math, Executive Functioning, Self Regulation, etc.
- District Measures: LAP-D, PALS, EVT,DIBELS, TRC, MCAS
- 2011 looking at the relationship between all of these measures

2006 RESULTS

- 30% of our programs are at the level of quality they need to be to close the achievement gap
- We are doing well in tone and interactions
- We need to improve in conceptual development, coverage, safety and sanitary practices
- Families want out of school time options (not discussing today but is BIG problem)
- Kindergarten lower quality

- The findings and recommendations of the study guide all of our work of the new department

1. CURRICULUM

Study Findings

- 70% of the classrooms do not meet the good benchmark but this is do in part to the amount of **time children are spending on task** and not necessarily the absence of materials.
- No difference between K1 and K2 classrooms and no difference between EEC and ELC and Neighborhood classrooms
- Classes with presence and use of paraprofessional were more likely to meet the good benchmark of quality

Story Behind the Findings

- Do not have a strong uniform curriculum for K1 and K2
- Bilingual and Unified have not done a lot of curriculum work in early education
- Teachers are not trained in current early childhood practice
- Coaching support is minimal
- Principals do not know how to monitor quality
- Resources not evenly distributed between K1 and K2, and elementary

Curricula used	K1	K2
Harcourt Trophies	20%	27%
OWL	60%	4%
Readers and Writers	8%	83%
Building Blocks	40%	2%
TERC	12%	88%
Self Developed	20%	17%
Other	--	13%

1. CURRICULUM

Short Term Solutions

- Support the mandate of K1 curriculum (OWL) and/or accreditation
- Identify and create K2 curriculum
- Create PD at all levels
  -Paraprofessionals
  -Teachers
  - Principals
- Bring in outside resources

Long Term Solutions

- K0-3rd grade curriculum alignment

Decisions/Help Needed

- Can I create a K2 curriculum?
- How do we best implement a policy handbook – the "essentials"?
- Need help with Reading First Grant
- How do I get to principals to show them data and offer them PD?

From the initial data and strategic planning process we:

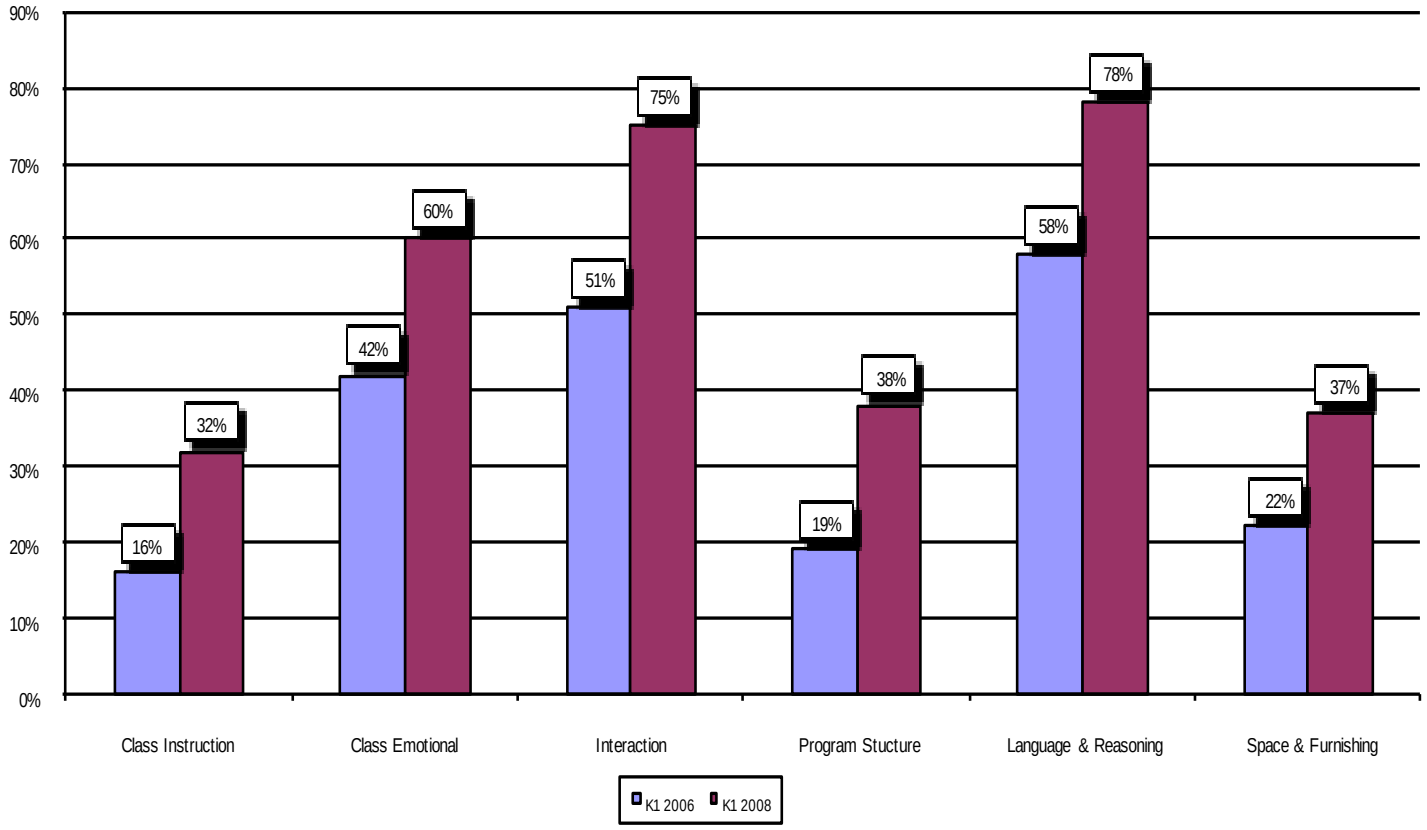
- Mandated a PreK curriculum (could not do the same for Kindergarten—connected to K-5)
- Choose quality enhancements through coaching, PD (teachers and principals), and NAEYC Accreditation
- Worked to change structural issues in district (e.g. paraprofessionals, screening, policies, facilities etc.)
- Evaluate quality/2008+ outcomes
- Tracked outcomes beyond Kindergarten

2008 FINDINGS

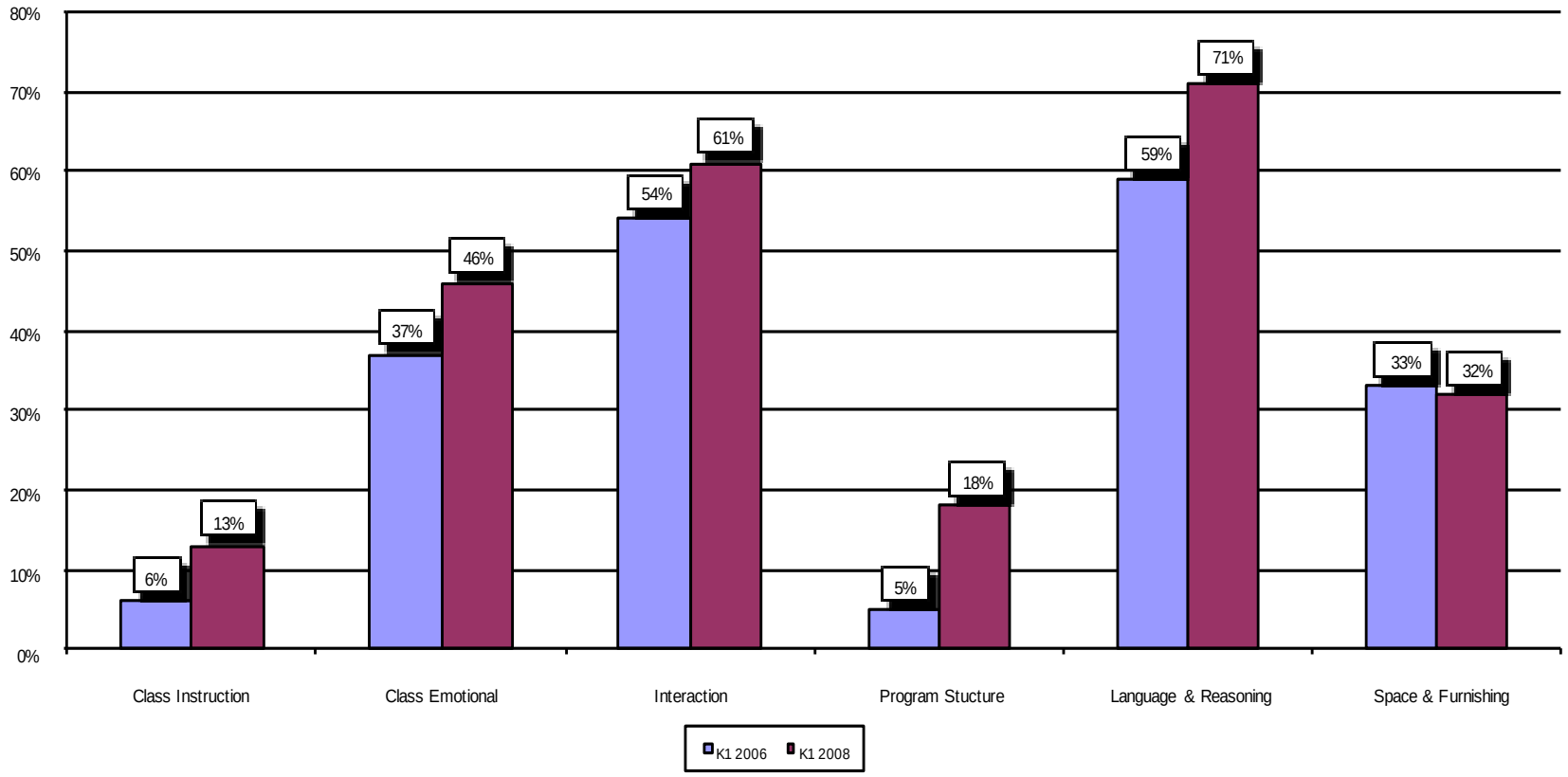
- Quality measures
- Comparison of NAEYC versus no NAEYC
- PPVT measures
- Gains Associated with Quality
- Mixed Income Settings

- K1s quality making gains
- K2 quality still lag behind

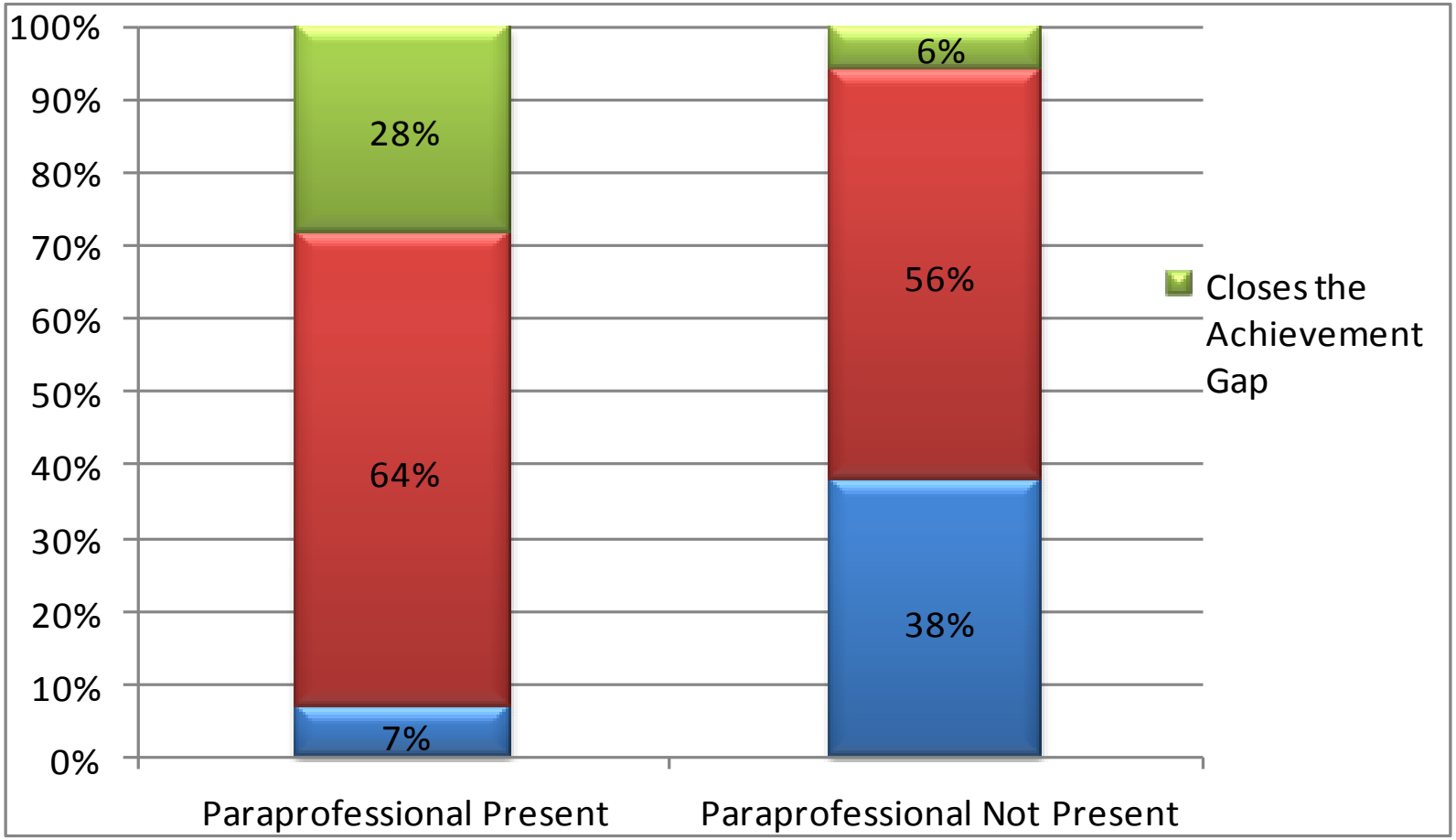
2006 TO 2008 PERCENTAGE OF K1 PROGRAMS THAT MEET THE "GOOD' BENCHMARK:



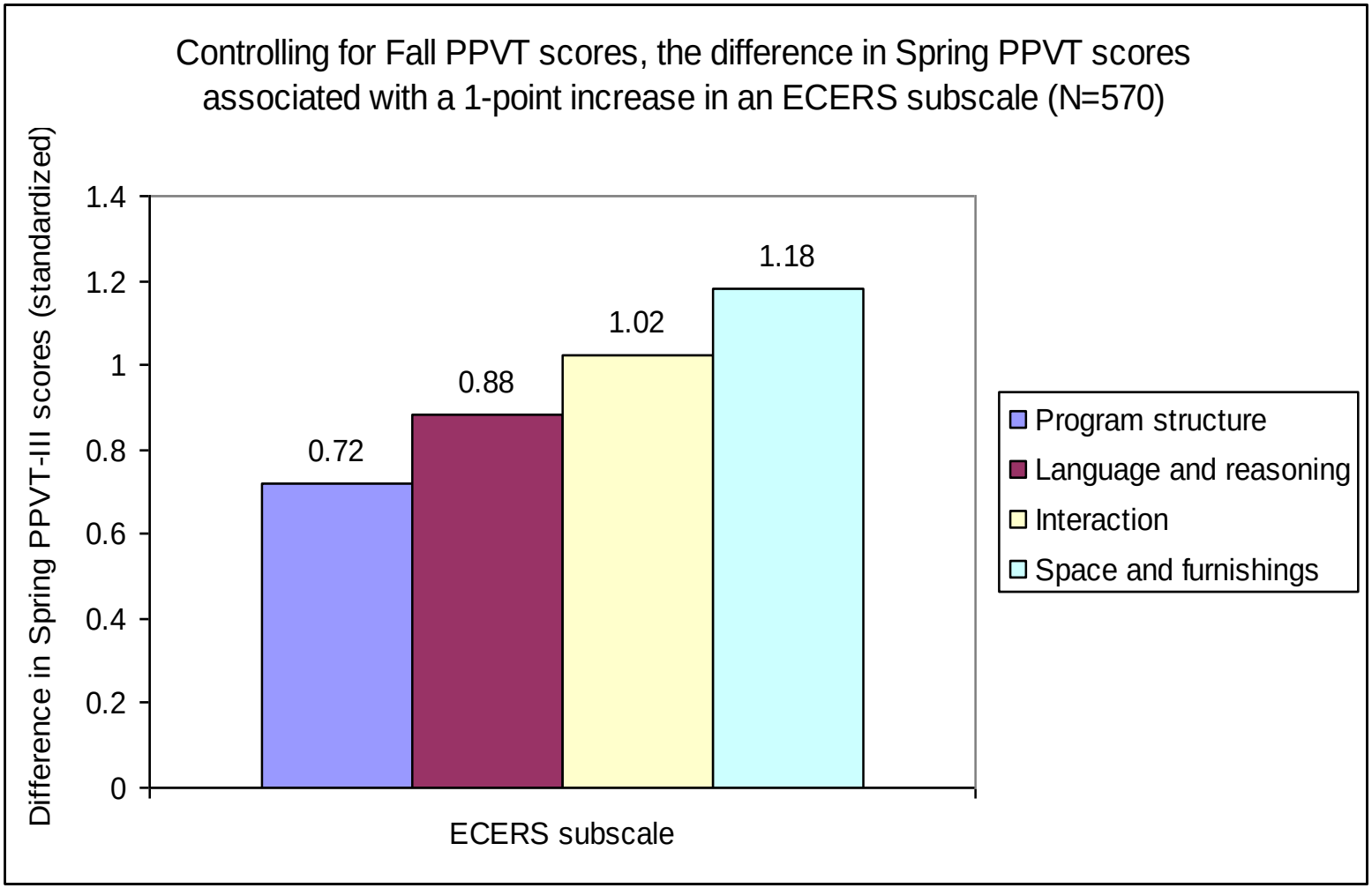
2006 TO 2008 PERCENTAGE OF K2 PROGRAMS THAT MEET THE "GOOD' BENCHMARK:



IMPORTANCE OF PARAPROFESSIONALS

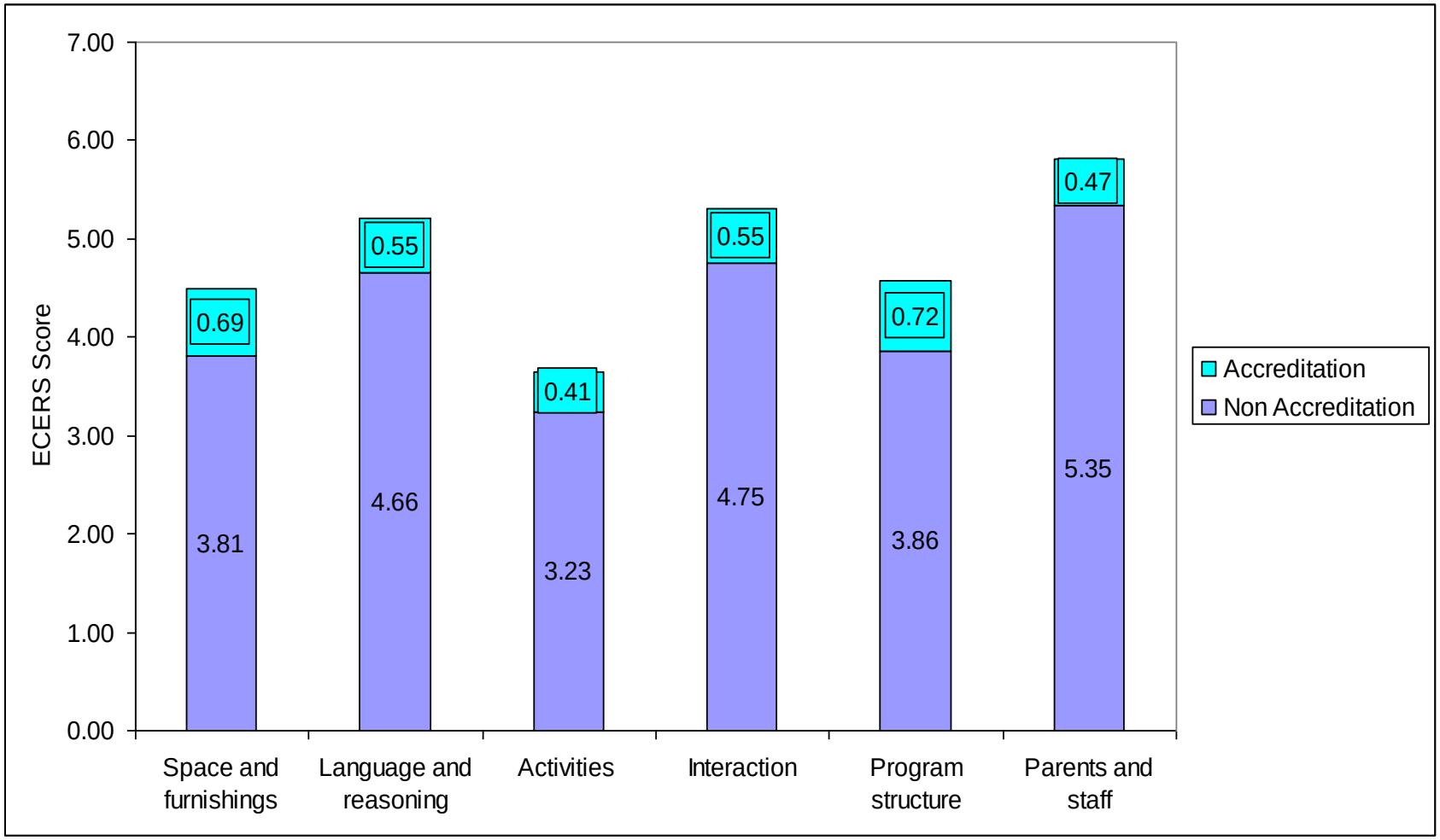


RELATIONSHIP BETWEEN QUALITY AND CHILD OUTCOMES



Please note that ECERS subscale s really should not be analyzed this way, so take for discussion purposes only.

THE INVESTMENT: NAEYC ACCREDITATION & QUALITY



Please Note that the ECERS subscales are not meant to be analyzed this way

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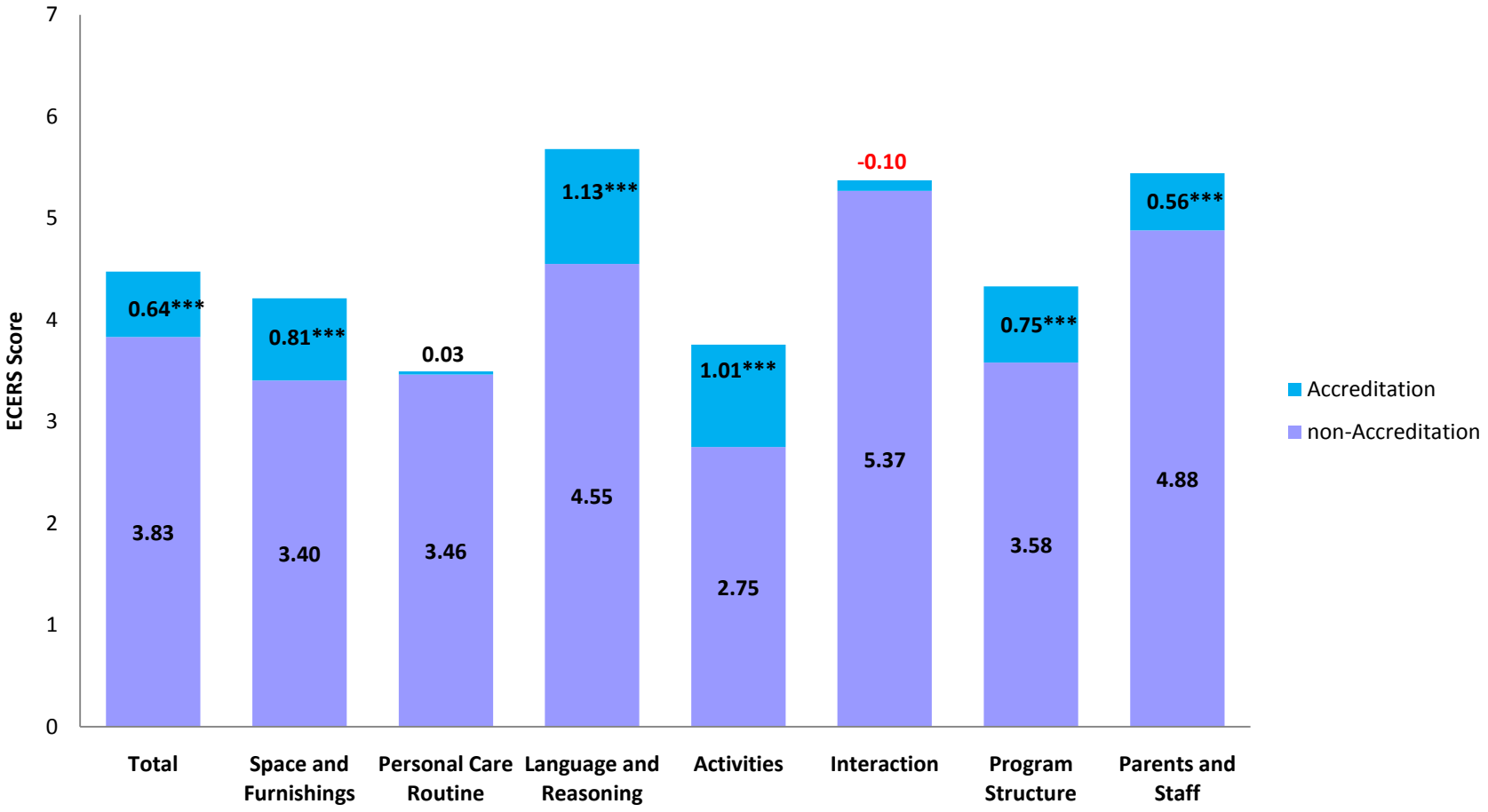
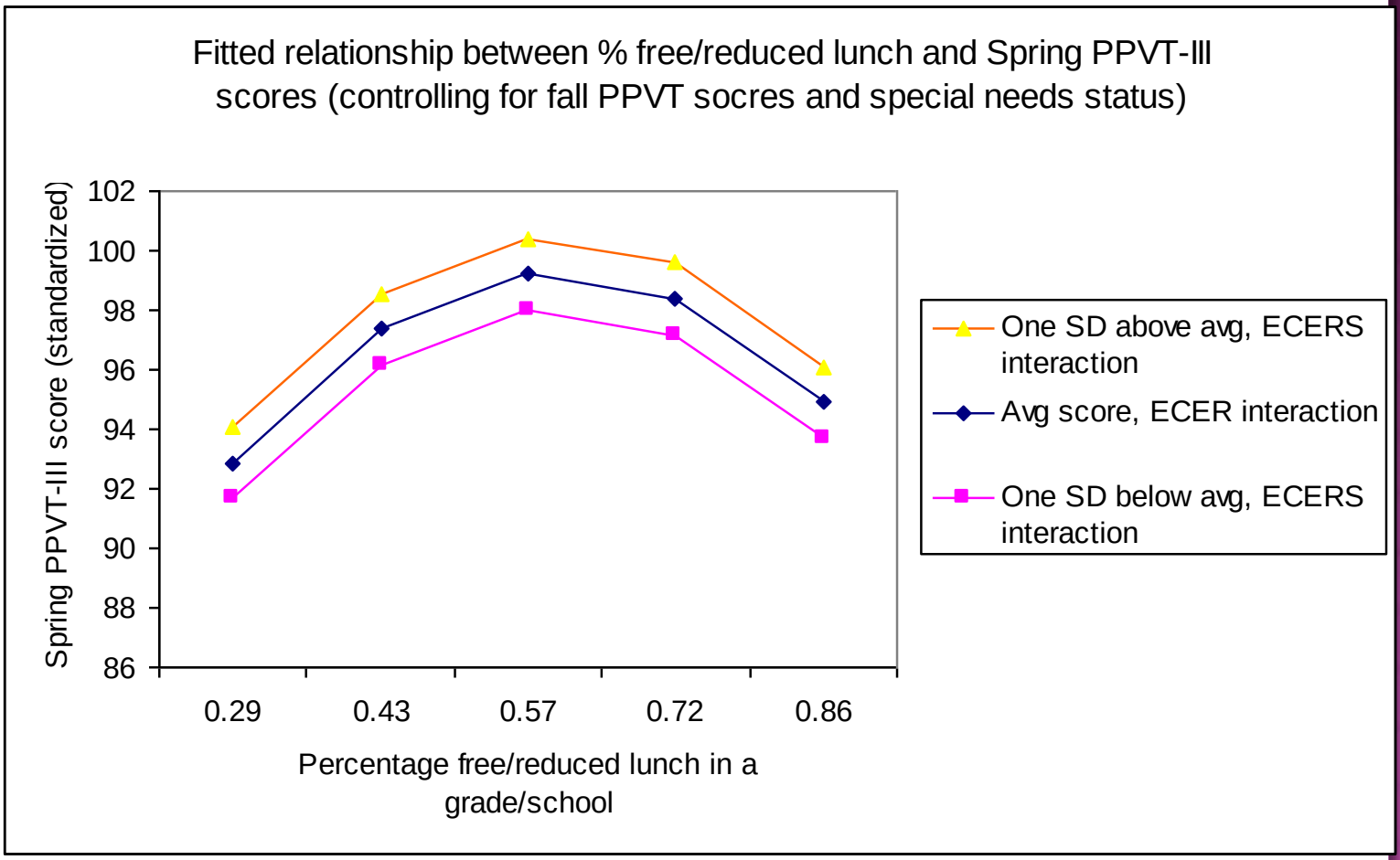
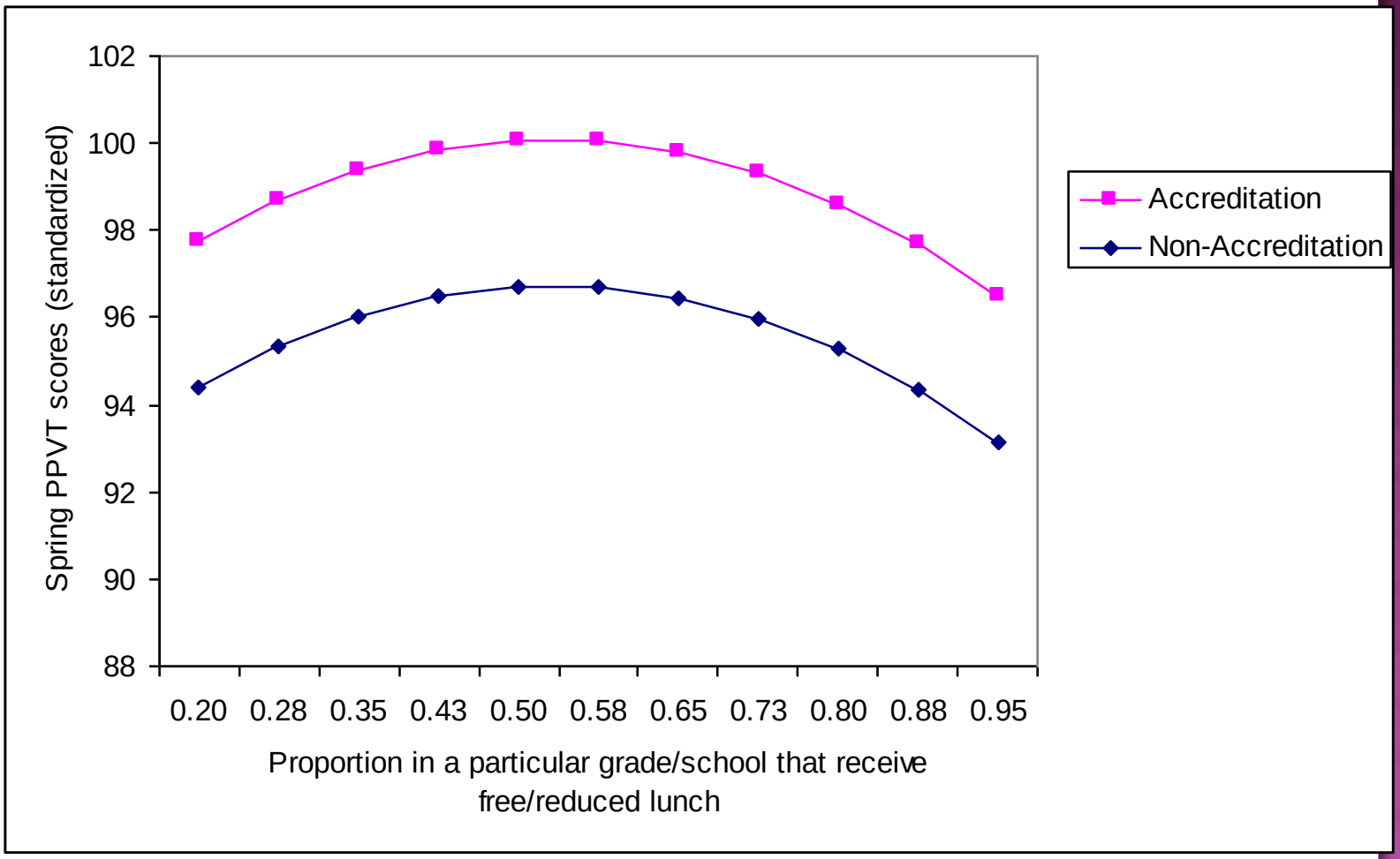
NAEYC ACCREDITATION IN K2 CLASSROOMS (N=80)



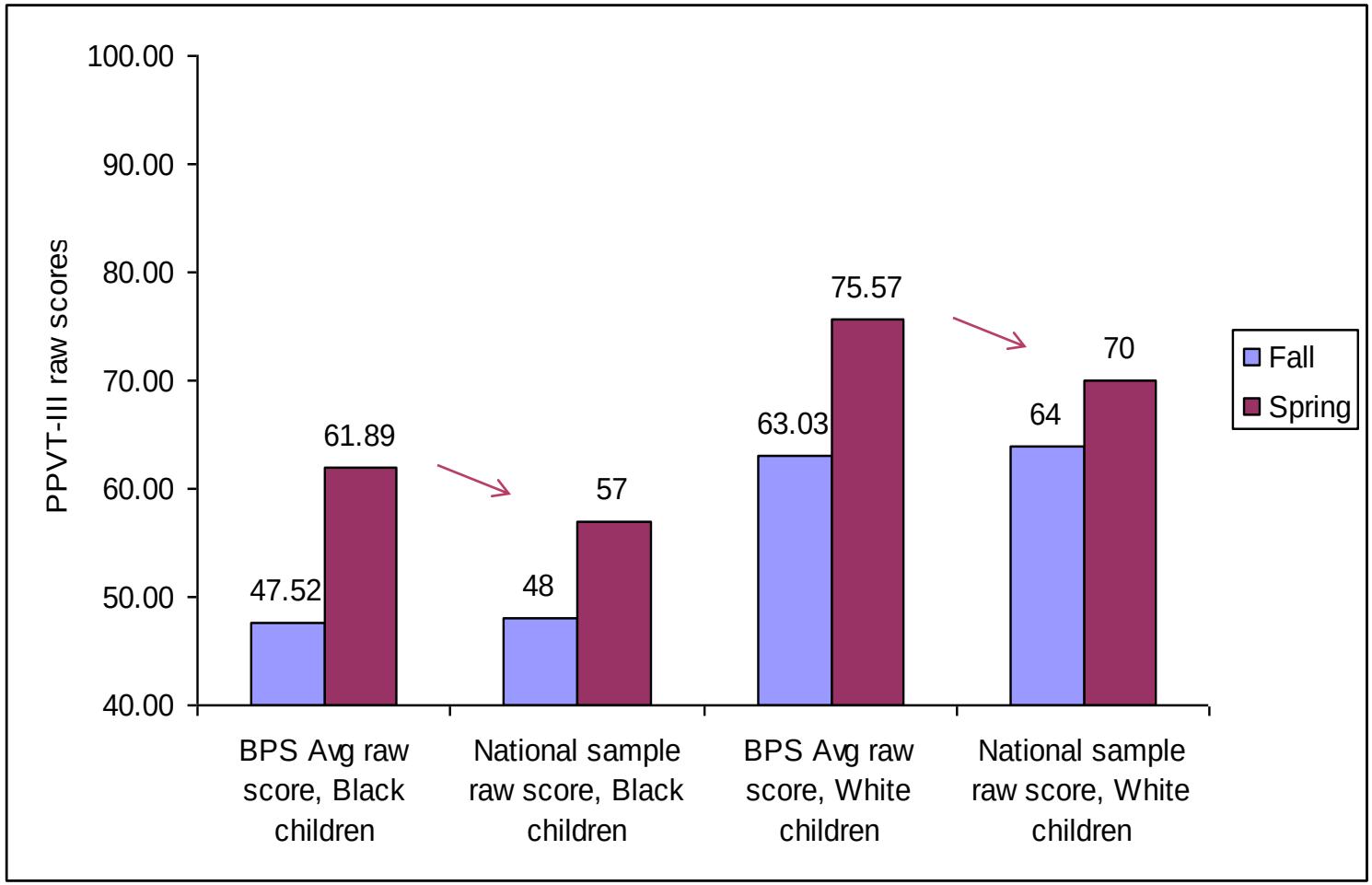
QUALITY/PPVT RELATIONSHIP BY % FREE/REDUCED LUNCH



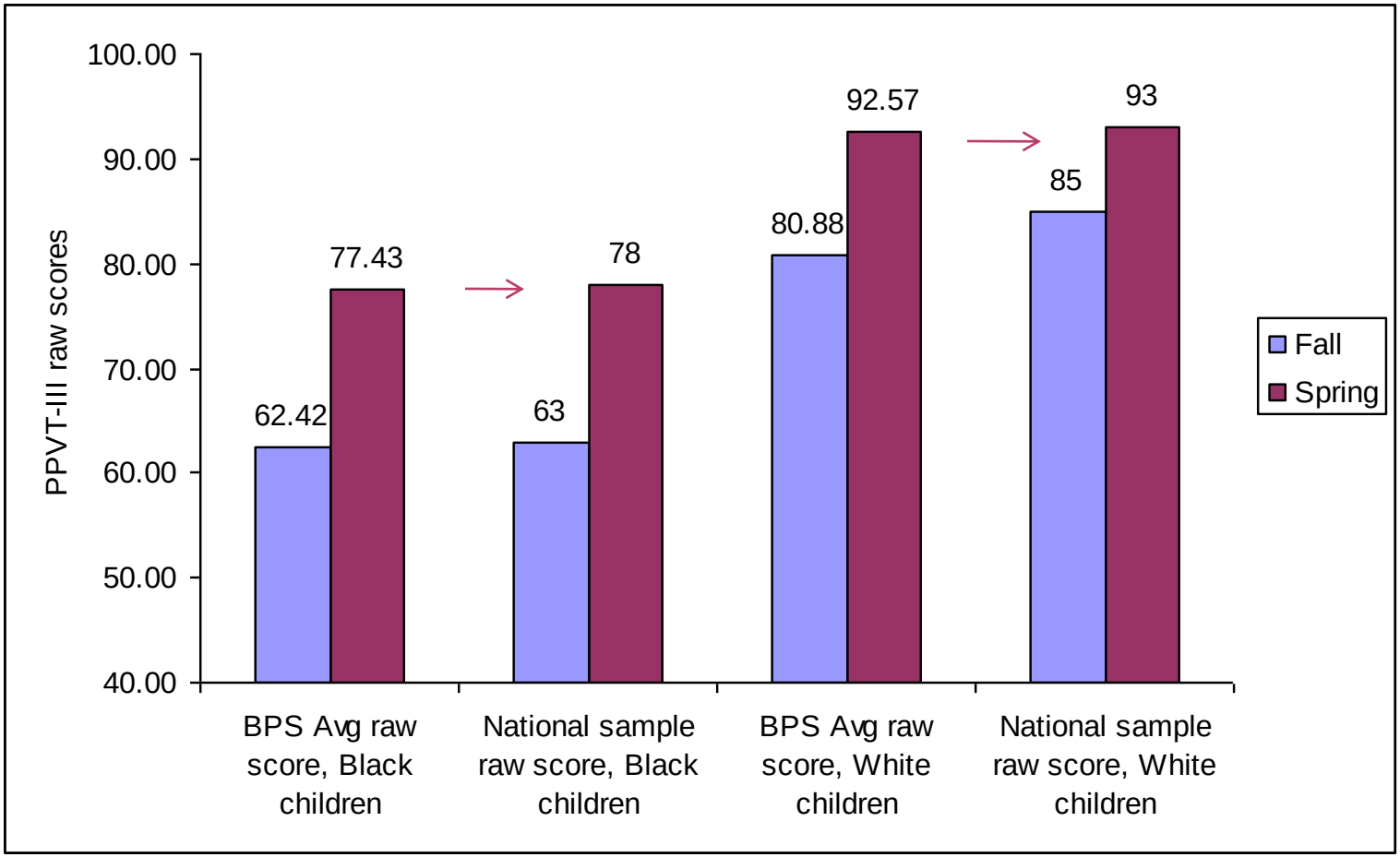
FITTED RELATIONSHIP BETWEEN ACCREDITATION STATUS AND SPRING PPVT SCORES (CONTROLLING FOR CHILD DEMOGRAPHICS, AND FALL PPVT SCORES AND ADJUSTING FOR CLUSTERING IN SCHOOLS/CLASSROOMS)



COMPARING BPS K1 RAW SCORES TO NATIONAL SCORES



COMPARING BPS K2 RAW SCORES TO NATIONAL SCORES



OTHER SOURCES OF EVIDENCE

- DIBELS data demonstrate large and significant differences between K1 and K2 students
- DIBELS data maintain into second grade (at risk group differences larger) some "diminishing"
- Large scale study of over 2,000 students who either went to K1 or K2 directly demonstrates significant and substantial differences on literacy, math, executive functioning, and self regulation

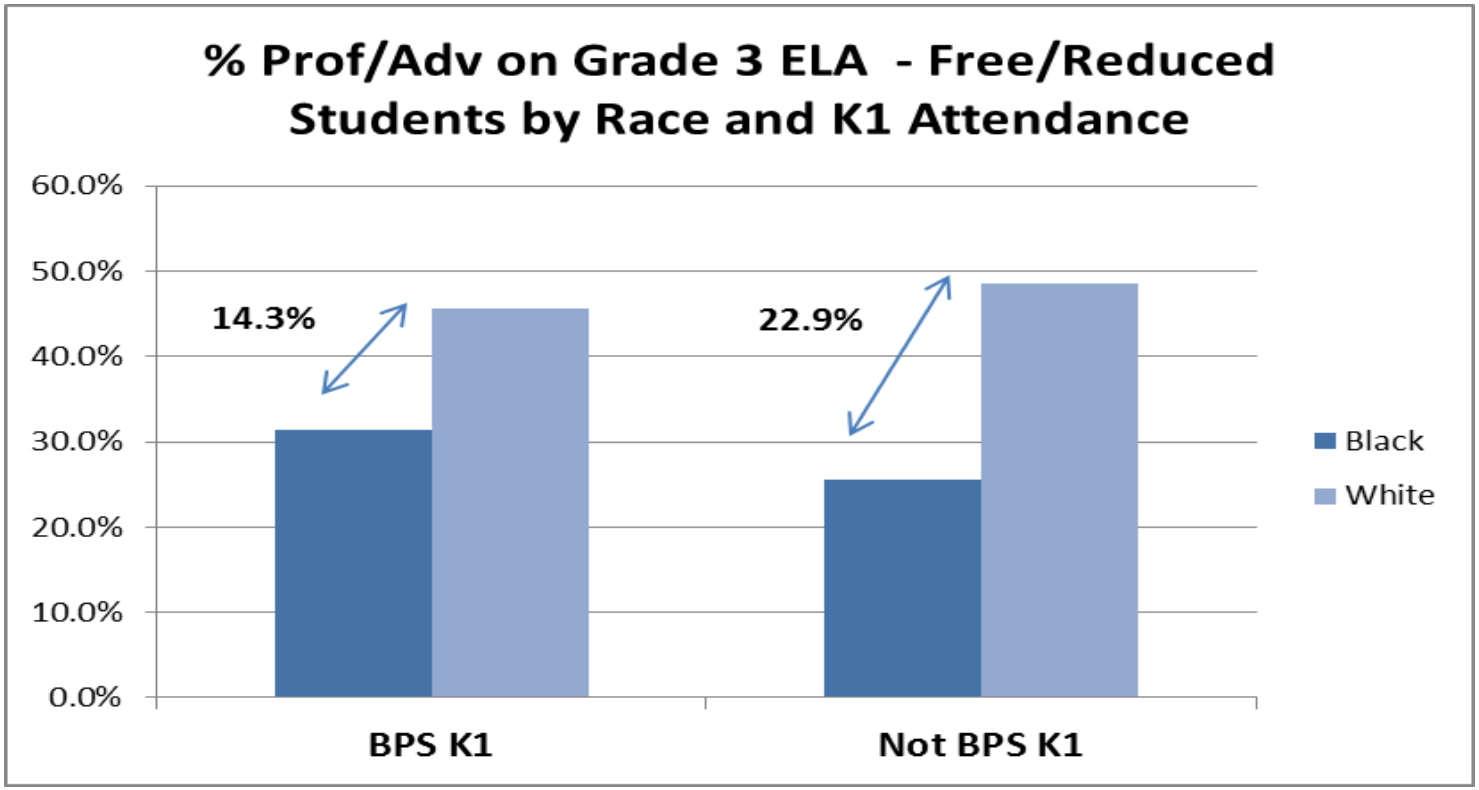
MCAS LITERACY DATA SUMMARY – K1 EFFECTS IN GRADE 3

	3rd Graders who attended BPS K1 % Prof / Adv.	3rd Graders who did not attended K1 - % Prof / Adv.	% Point Difference b/w 3rd graders who attended K1 vs. those who did not
All Students	43.0%	33.8%	9
F/R Lunch	37.4%	28.8%	9
Asian	63.0%	44.9%	18
Black	34.2%	27.3%	7
Hispanic	35.1%	30.5%	5
White	68.5%	62.7%	5

In the elementary grades, where the proficiency rates have generally stagnated at roughly 30%, the performance of grade 3 students who attended the K1 program in 2006-07 is markedly better than for students who did not attend.

Results are better for all students, regardless of race or F/R price lunch status.

MCAS LITERACY DATA SUMMARY – PROFICIENCY GAPS IN GRADE 3 DESPITE K1 ATTENDANCE



The K1 program is also effective in closing the proficiency gap between African American and White students in grade 3.

However, White students of the same socio-economic background continue to outperform their Black peers on the 3rd grade test.

SUMMARY SO FAR

- Data are critical for understanding and changing quality
- Strategic, intentional planning helps to make improvements
- K1 data indicate strong early childhood programming will get you results 5 years later
- Improvements center on PD, coaching, NAEYC accreditation, and structural aspects of the district
- K2 quality and outcomes not as strong as K1

2010 CONVERSATION WITH KINDERGARTEN TEACHERS

You might want to have

PROCESS:

- Introduced study findings
- Started with strengths
- Opportunities for growth
- Then asked them why they thought their scores were lower

General Classroom Environment: *Strengths*

- *Classroom management strategies*
  - *Children understand rules/routines*
  - *Clear expectations of children's behavior*
- *Classroom climate*
  - *Tone is positive & respectful*
  - *Teachers listen & display fairness*
- *Emotional & social support*
  - *Demonstrate positive communication & relationships*
  - *Teachers are aware & responsive to children's needs*

General Classroom Environment: *Challenges* *(Findings from the CLASS and ECERS)*

- Opportunities for child choice & initiative
  - Provide flexible schedule allowing time for self-directed activity & independent exploration
  - Provide appropriate materials & resources for children to elicit activity
- Need for more gross motor play,
  - music, and science

Instructional Practice: *Challenges*

- Concept development
  - Analysis & reasoning
  - Connections to the real world
- Quality of feedback
  - Scaffolding
  - Prompting thought through process
- Language modeling
  - Open-ended questions
  - Repetition & extension

TEACHERS IN HIGHEST RATED BPS CLASSROOMS:

- Consistently and effectively use multiple methods, materials and modalities to promote children's learning
- Focus children's attention on the process of learning rather than emphasizing getting the right answer
- Focus on concept development
- Use strategies to encourage analysis, reasoning, sequencing and problem solving
- Consistently connect concepts to the real world and classroom activities
- Promote children's prediction, experimentation and brainstorming

DISCUSSION QUESTIONS

- What part of these findings are you most intrigued by?
- What are the implications of these findings for your practice?
- What are we doing now in our classrooms that address these findings?
- How can we improve our current efforts to support concept development and our program structure to increase student choice?

WHAT TEACHERS TOLD US

- Too Much Curriculum (not a good one at that)—not enough time to build sustained activities
- They know good practice but principal does not
- Time constraints of school day make it hard to get enough done via pacing guides
- Day divided up in a non-integrated fashion
- Too much assessment means not enough time for instruction

WHAT WE HOPE YOU CAN DO:

- Consider the child's context, where she comes from, what she is thinking about (home visit or conferences)
- Support and strengthen student's thinking
- Add more choice time that is flexible to the child's needs— (connect it with themes)
- More gross motor, music and science
- Safety and health practices (hand washing)

- LESS is MORE (move a way from superficial, out of context, skills)

- Go Through NAEYC Accreditation

EXAMPLE OF ACADEMIC DOCUMENTATION

- http://www.youtube.com/watch?v=G3OV40Efqhl

- Again, we asked teachers what they thought of it…What did you????? Would you consider this rigorous? Why or Why not?

- MLV and focusing on Reggio-like documentations to get teachers to reflect and make visible students learning

MALINDI'S JOURNEY

SUMMARY OF ACADEMIC RIGOUR

- Defined what good teachers do
- Asked teachers why they can not do it
  - Curriculum and structural
- Demonstrated what an integrated curriculum might look like—Started MLV with teachers

ACT THREE: HOW DO WE ALTER THE EARLY EDUCATIONAL EXPERIENCE?

- Bridges between K1 work K-12
- NAEYC
- Principal fellowship
- Common Core/MLV/Instruction practices
- Structural Changes

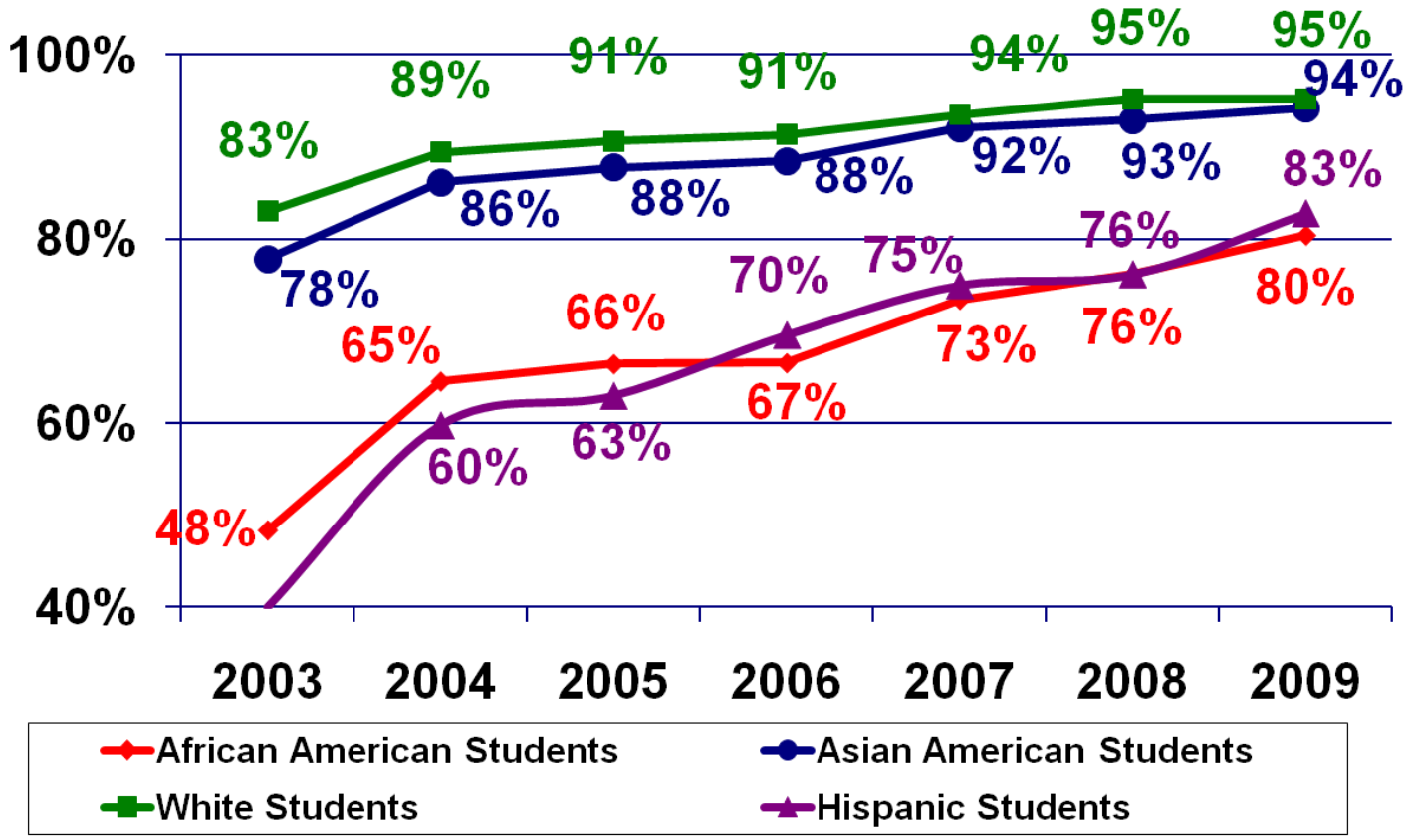
  - *But this is not sufficient…We started with an in-depth presentation of Montgomery County Public Schools and other PreK to Third efforts to see how their work could inform BPS schools*

WHY BPS

- Our Achievement gap still remains and is persistent
- Gains in large PreK investment need to be sustained in later grades
- Developmental research strongly supports a PreK to Third model
- We have started many of the initiatives in MCPS but they need greater buy in from all levels of BPS community
- Departments, schools, & teachers are not aligned under a common vision and clear road map
- People want to do the right thing but improved coordination between and across departments is a must to maximize our limited resources

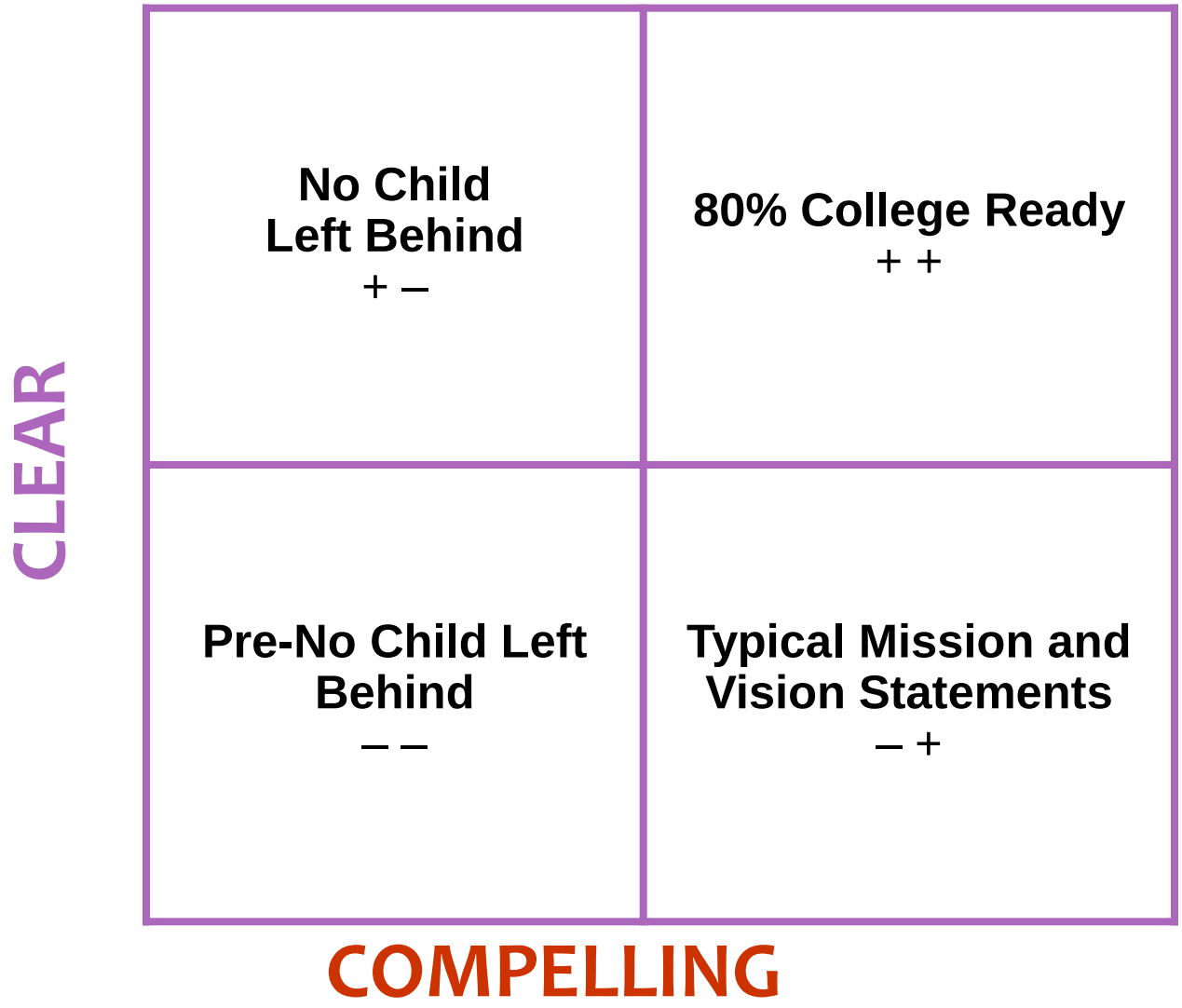
MONTGOMERY COUNTY PUBLIC SCHOOLS: LESSONS AND OPPORTUNITIES

Grade 3 Reading Gap Shrinks by 29 Percentage Points

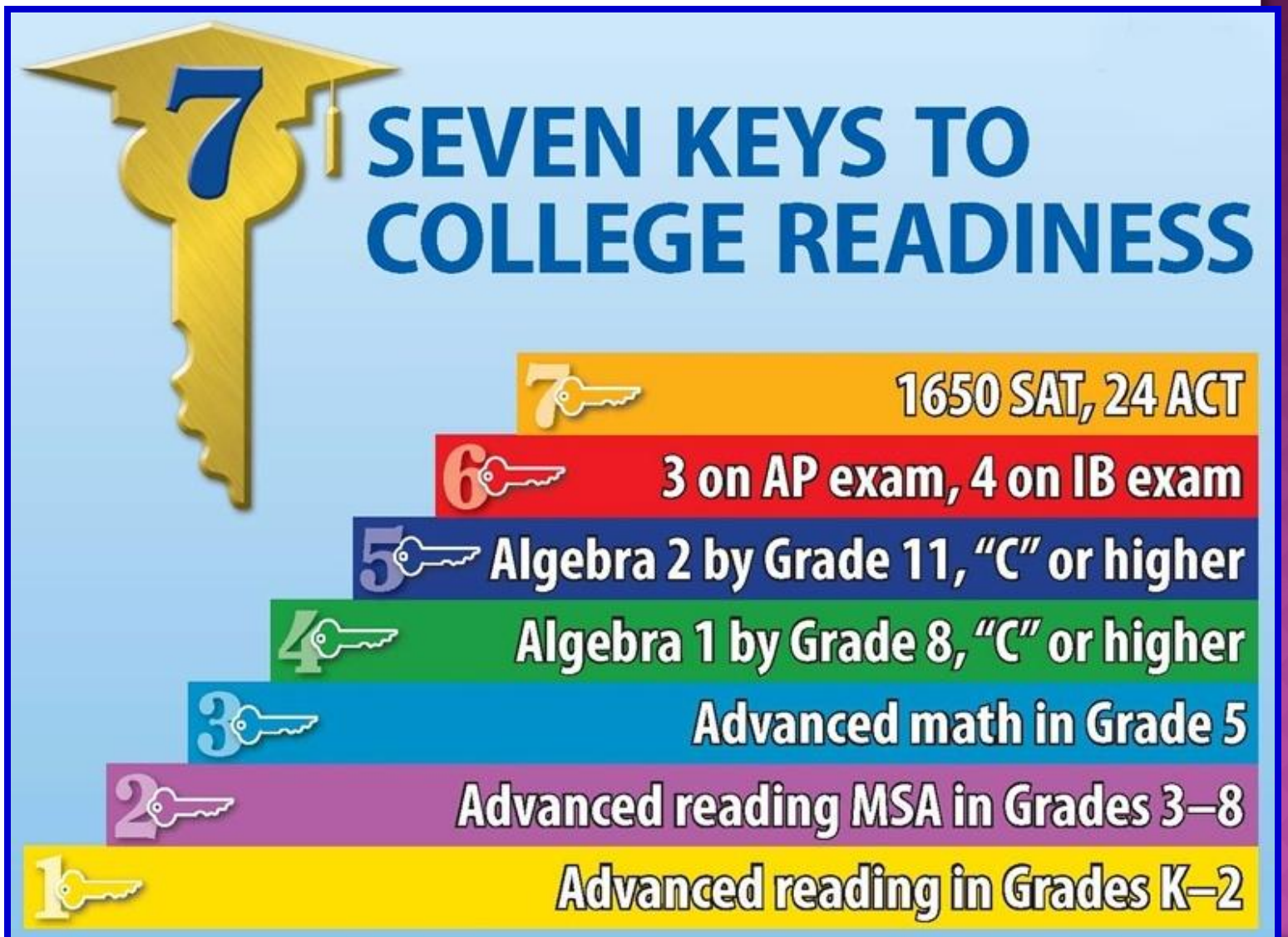


Percent Proficient or Higher

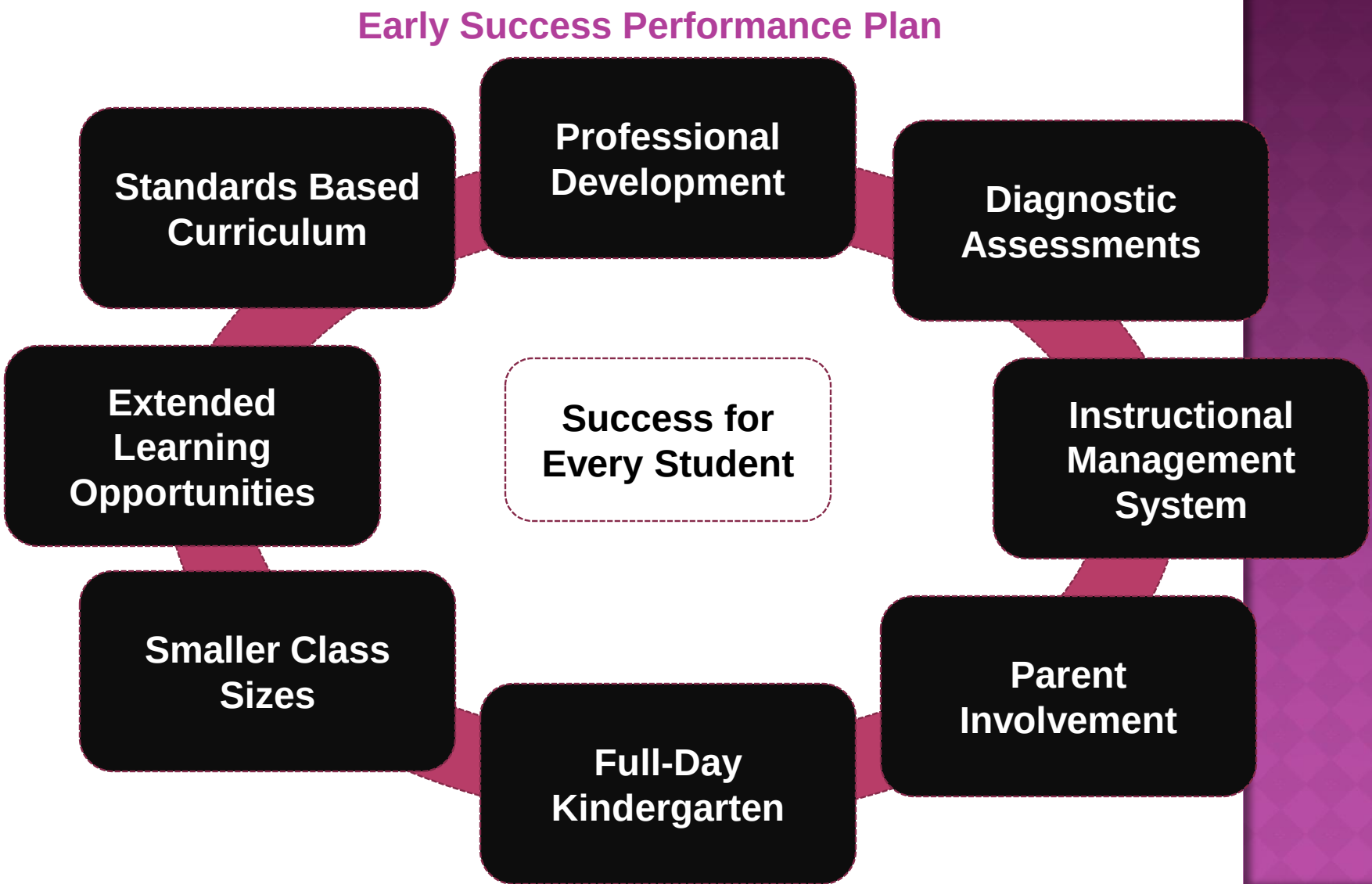
MCPS STEP 1: ESTABLISH A CLEAR AND COMPELLING GOAL



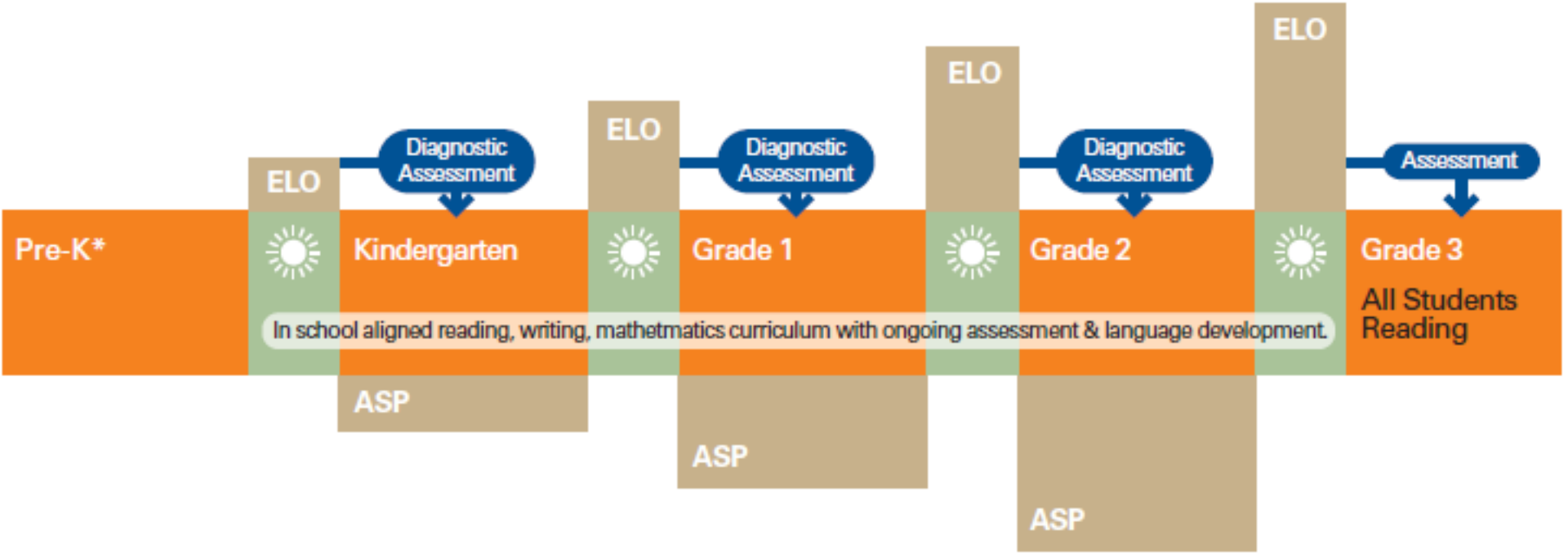
STEP 2: BACKWARD MAP GOAL TO KEY OUTCOMES PREK-12



STEP 3: DEVELOP EARLY-LEARNING STRATEGY TO MEET GOAL AND OBJECTIVES



STEP 4: EARLY SUCCESS PERFORMANCE PLAN MCPS



* **Pre-Kindergarten Programs**
Aligned reading, writing and mathematics curriculum.

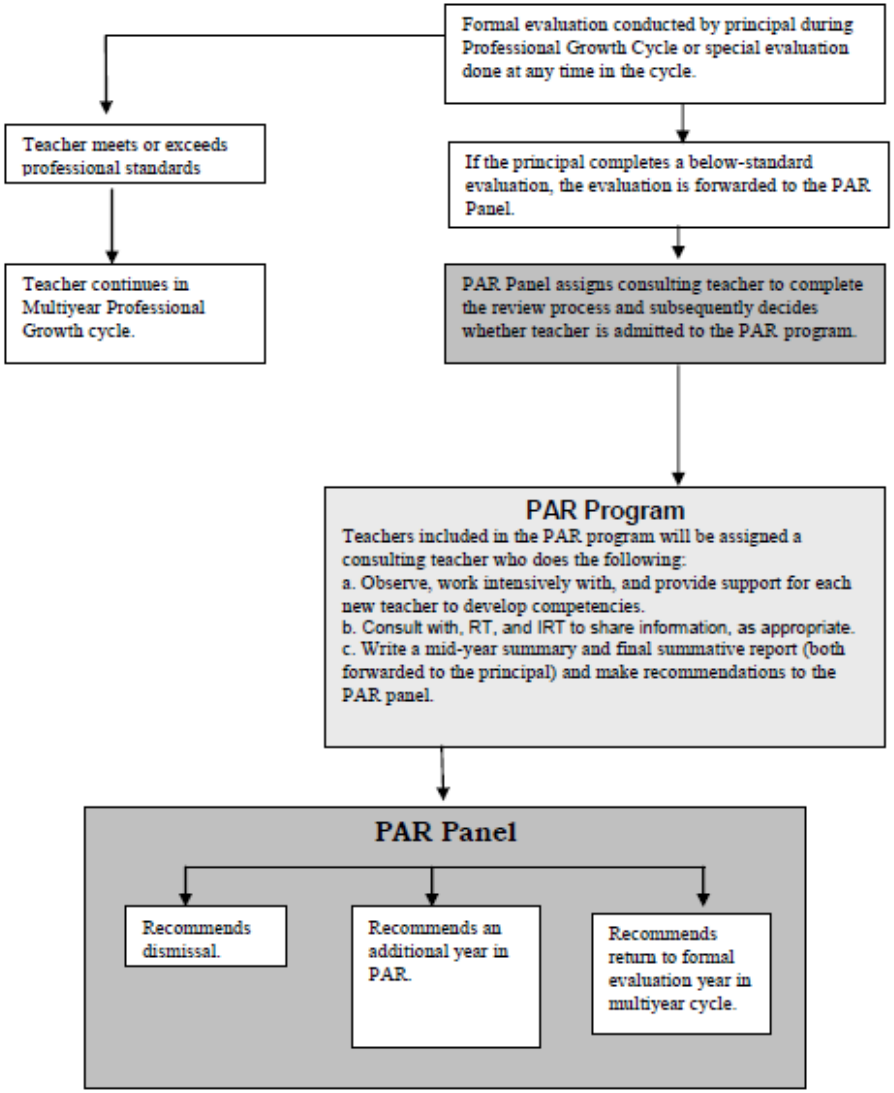
Summer

ELO **Extended Learning Opportunity**
Summer programs in reading, writing, mathematics and language.

ASP **Afterschool Programs**
Congruent and Focused instruction in reading, writing, mathematics and language.

STEP 5: BALANCE SUPPORT AND ACCOUNTABILITY

Teacher Professional Growth System (TPGS) Incorporating a Peer-Assistance-and-Review Component



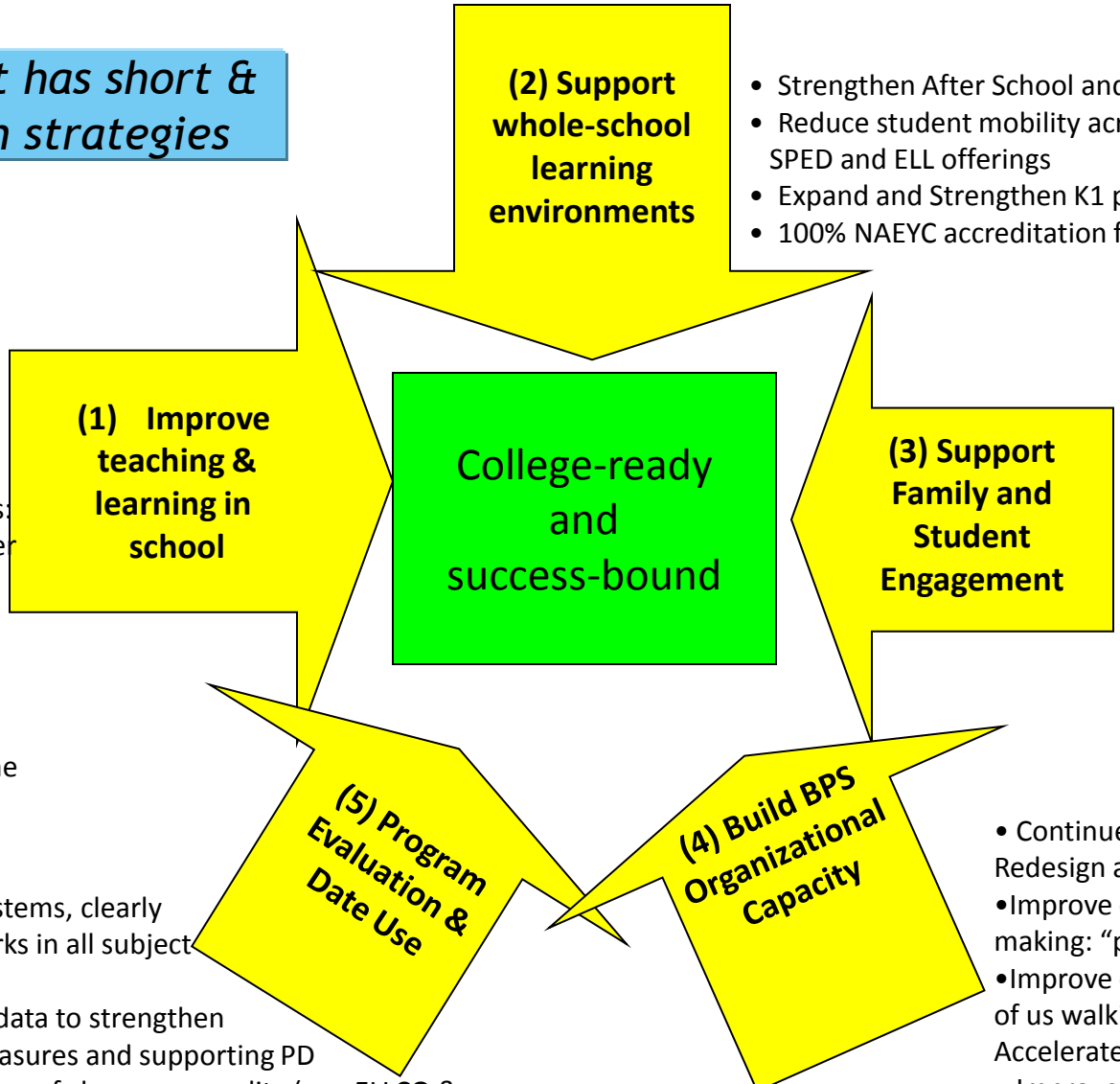
MCPS VS. BPS

1. MCPC has the "Seven Keys" benchmarks that links College to Early Childhood
2. MCPS has Red and Green Zones
3. Aligned Curriculum efforts with Seven Keys
4. MCPS has after-school and summer time extended learning opportunities from K2-2nd grade
5. MCPS has group size of 15 students K-2nd grade
6. Created an integrated diagnostic assessment for all students
7. "Just in time" professional development tied to assessment and outcomes. New Teacher require "Research for Better Teaching" or 100 hours of PD.
8. Set up accountability system for teacher support while ensuring effectiveness and consistent implementation
9. Multi-lingual and multi channels of communication between CPC, school, & parent regarding development and progress of curriculum. Used home visiting and community outreach as an enrollment tool
10. Accountability system with structured processes to obtain outcomes and buy-in with proper internal and external parties with "common expectations" and measures.
11. Vertical team meetings (e.g., cross functional teams, K teachers meet with 2 and 3rd grade teachers)

1. BPS has "Accelerated Agenda"
2. BPS efforts are universal but has Circle of Promise and Turnaround
3. BPS is currently working on Common Core
4. BPS doe not have targeted K-2nd grade effort. (Some elements but not systemic).
5. BPS is 2:22 save for early childhood special education classes
6. BPS is in process of developing integrated data system but needs more effort in this area, e.g. screening, PD on how to use data,
7. Tenured teachers require 36 hours of school based PD. No real accountability system and informal…different departments compete for PD and unclear as to who takes what PD
8. BPS is currently negotiating with BTU…but currently does not have a Peer Review System in place
9. BPS has Office of Student and Family Engagement that creates "family guides" and offer "Parent University". However, parents not involved in curriculum/ goal development etc. Special Education facilities a "Special Needs Council". Schoosl have "School Based Council"
10. To be determined as BPS is creating a "new student information system" and may be linked to "Common Core" standards. Office of Accountability does have data dashboards.
11. ILT teams but could be improved and strengthen. Currently school by school.

KEY INITIATIVES FOR BPS BASED ON MONTGOMERY COUNTY FRAMEWORK

Each effort has short & long-term strategies



- Strengthen After School and Expand Summer School
- Reduce student mobility across by improving SPED and ELL offerings
- Expand and Strengthen K1 programs in Circle
- 100% NAEYC accreditation for all schools by 2020

- Continue to develop & Support: Common Core (instructional practices)
- Support MLV
- Support PD initiatives: Real Time, New teacher (e.g. RBT), Principal
- Improve use of vertical and horizontal teams
- Strengthen PLCs and Common Planning Time

- Continue & strengthen: Parent guides, Parent University
- Develop incentives to promote parent accountability
- Develop protocol for home visiting/messaging on college bound students
- Continue efforts with Thrive in Five

- Integrate data systems, clearly define benchmarks in all subject areas, K-12
- Train staff to use data to strengthen accountability measures and supporting PD
- Continue evaluation of classroom quality (e.g. ELLCO & CLASS) at higher grades
- Create peer review and support system with Union

- Continue district initiatives: Redesign and Reinvest , C-FRST
- Improve district wide decision making: "process is important"
- Improve district messaging to get all of us walking in the same line, e.g. Accelerated Agenda
- Improve operational efficiencies by consolidating offices

ONE DEFINITION OF PREK TO 3RD GRADE

Components:

Curriculum

- Alignment of content and pedagogy
- Match between age group and developmentally appropriate practice

Data Driven Instruction

- Strong data collection systems that enable staff to track student growth in key academic areas throughout the preK to 3rd grade.
- Cross-grade data teams.
- Rich assessments for staff to use at several points during the year.

Socio-Emotional

- Whole school training on constructive approaches for working with children with challenging behaviors as well as on fostering social and emotional development
- Focus on positive school climate and community building in classrooms with developmentally appropriate activities

Afterschool & Summer School

- Create Summer Programs
- Align practices across the regular school day and after school.

Family Engagement

- Home Visitng
- Reading contracts for parents to read to their children for 20-30 minutes a day four times a week.
- Training and support for teachers in conducting home visits 2x per year.
- Support for literacy and numeracy events crafted to assist parents in building storytelling, math, and rich conversations into routines

WHATEVER YOU DO WILL NEED

- To be grounded in how young students learn (skills without context are ineffective)
- Should be data driven
- Should be grounded in discussion with teachers
- Should change the structures in your PreK to 12 system

- MCAS and DIBLES data show us that students are not to be thought of as “flat” but they co-construct their learning so we better get it right early

WHEN I GROW UP:

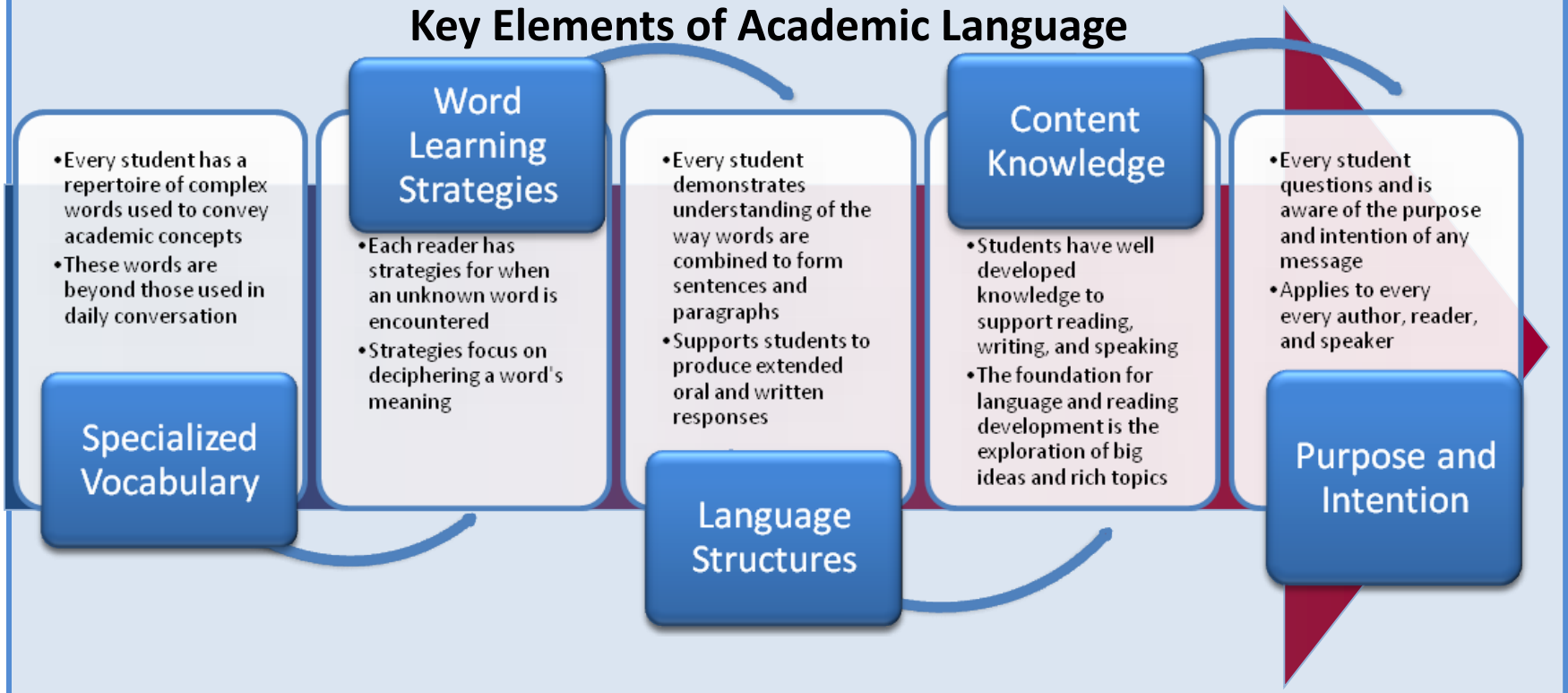

firefighter.
Andy
When I grow up, I want to be ...
a chef.
Augie

WHEN I GROW UP…

WHEN I GROW UP

WHEN I GROW UP…

Building Up Metalinguistic Awareness and Knowledge: Key Elements of Academic Language



Supporting Skills and Critical Analysis

Accomplishing the Common Core Language, Listening, and Speaking Standards: Key Classroom Practices

Supporting Language through Key Practices: Examples along a Developmental Continuum

Early Childhood	Middle Childhood	Early Adolescence
Close, Interactive Read Aloud		
Identify a text's main ideas	Present an opinion of the quality of the text and provide supporting evidence	Analyze the perspectives presented in different texts on the same topic
Collaborative Discussion and Debate		
Demonstrate turn-taking and the ability to stay on topic	Elaborate on a peer's response by agreeing or disagreeing	Respond to peers' points by acknowledging their data and providing counter evidence
Multifaceted, Intensive Vocabulary Instruction		
Use new, more exciting words to describe a situation or emotions (e.g., "I am flabbergasted")	Students use vocabulary under study in their writing projects	Discuss linguistic roots of morphemes (e.g., Latin) as they apply to scientific vocabulary in texts
Role Playing and Rehearsed Oral Performance		
Become a scientist at center designed to elicit observations of butterflies	Prepare a performance based on a specific of piece informational text	Write, rehearse, then present persuasive speeches on a chosen topic related to a theme under

Supporting Language through Key Practices: Examples along a Developmental Continuum

Early Childhood	Middle Childhood	Early Adolescence
Language Frames for Speaking and Listening		
Use teacher-prompted conversation starters to facilitate peer-to-peer interaction	Students present the same argument using informal English and academic English	Employ posted sentence stems that provide language for challenging an author's perspective
Open-Ended Questions and Strategic Responses		
Wondering out loud together about a interesting phenomenon under study (e.g., rate of human versus plant growth)	Students work together to solve a classroom problem using a peer-mediated discussion process	Student-facilitated discussion with prompts for the discussion leader to help guide peers in responding to each other's points
Jointly Constructed, Academic Writing		
Students and teacher interactively write a letter to a character in a story	Students craft a blog over the course of several weeks that publishes the findings from an oral history project	Students work together over a period of several weeks to create a formal proposal and budget for a new program to be presented to the school board
Explicit Connections to Community and Content		
Students complete interactive homework around family's migration pattern that is shared	Develop, administer, and present the results of a community-based survey	Students present multi-media proposals for solutions to community problems to representatives of

Comprehension Supports

Word-Learning Strategies

Knowledge of language functions and types

Understanding of (Author's) Purpose & Intention

Specialized Vocabulary

Sentence Structure

Interest

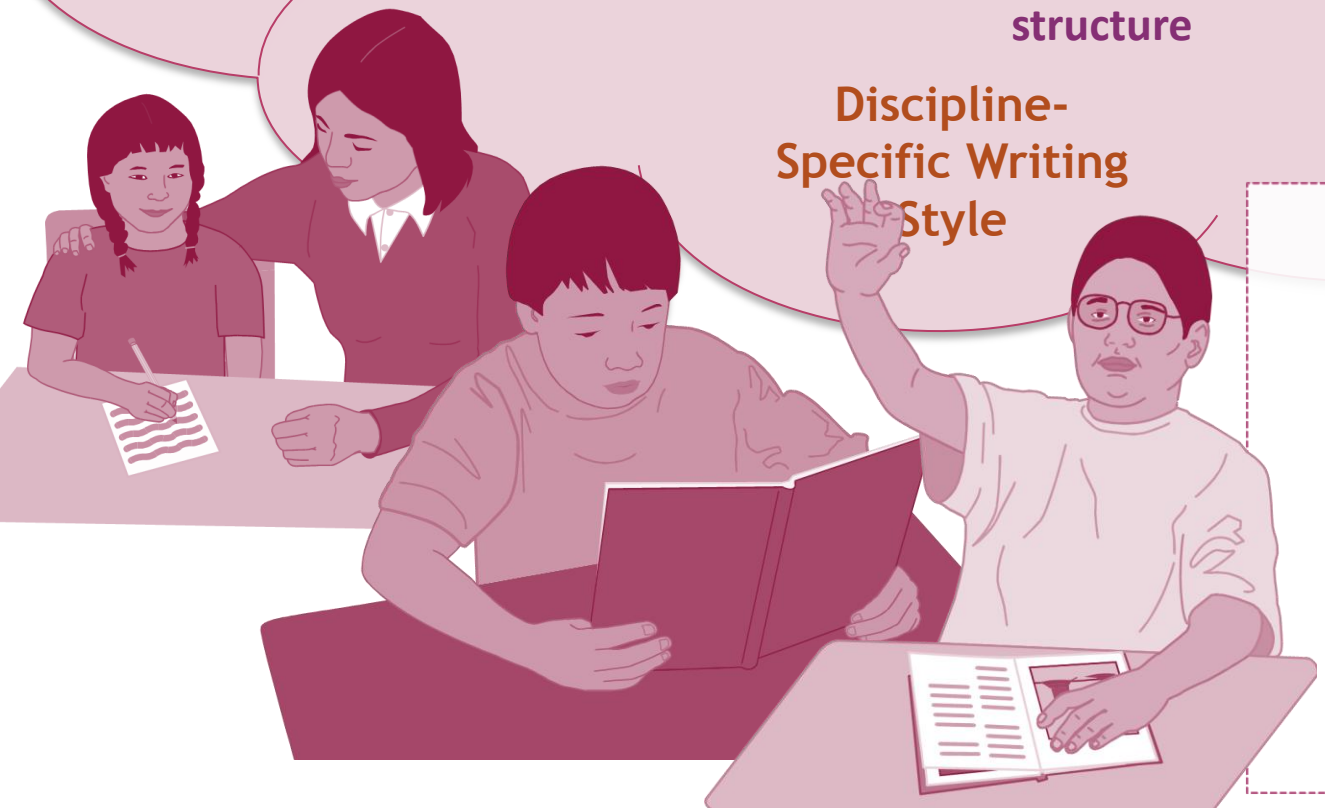
Motivation

Figurative Language

Organizational structure

Content-Specific Knowledge

Discipline-Specific Writing Style



Phonological Awareness

Letter Names & Letter Sounds

Word Reading

Accuracy

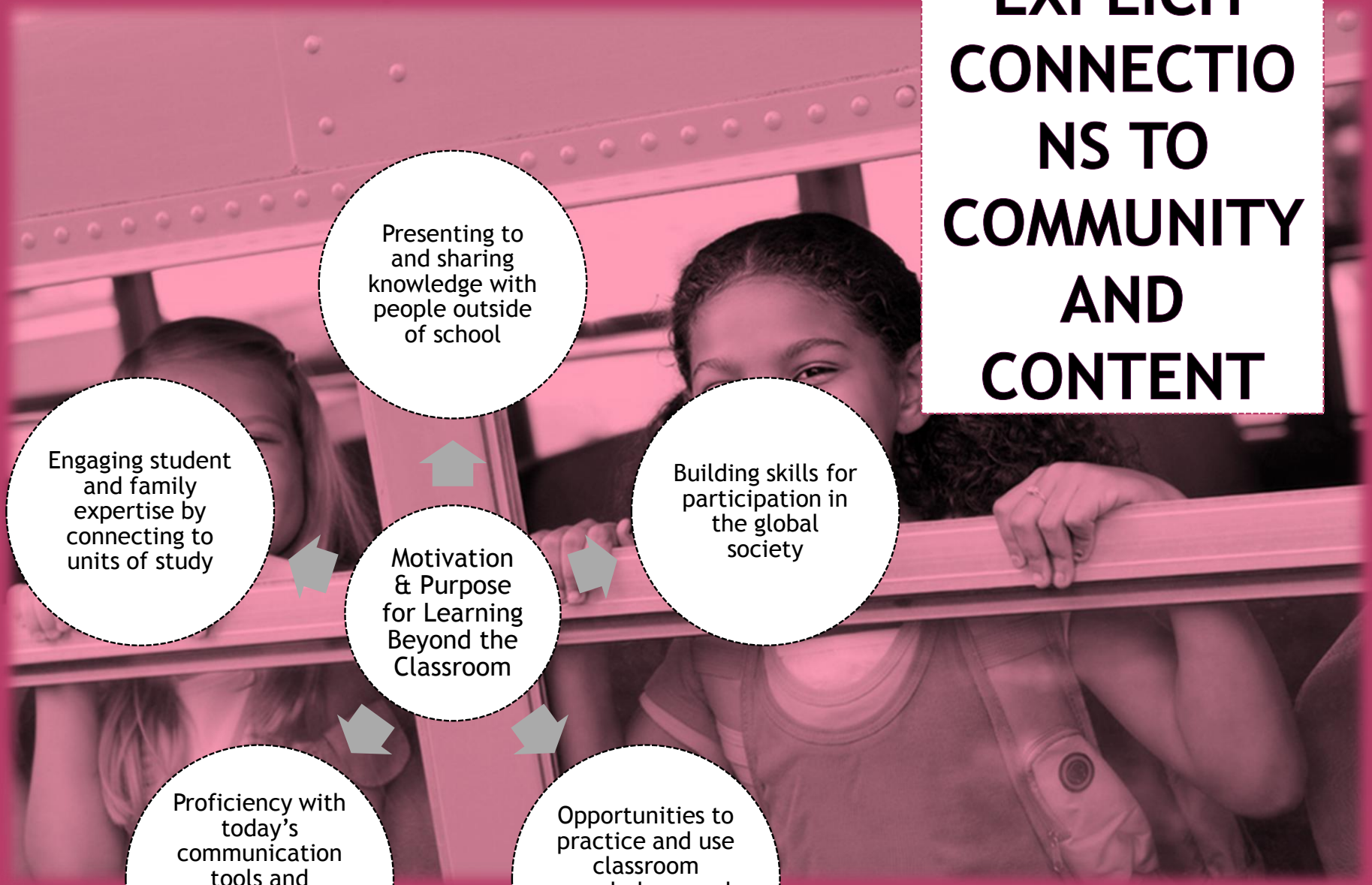
Efficiency

Common Core Reading Instruction

Shifting from Reading Skills	…To Content Learning
Reading instruction relegated to a block/class/age	Reading instruction happens throughout the school day and across the school years
Meeting standards: each is “covered” in turn, and then move on to the next	Meeting standards: comprehensive, inquiry-based instruction is continually built on prior learning
Vocabulary work is incidental and/or in isolation	Language learning is purposeful and is anchored in big ideas & corresponding texts
Strategy-based comprehension instruction	Concept-driven comprehension instruction
Sitting and listening; turn and talk; independent seat-work	Debate & dialogue are central to content-learning

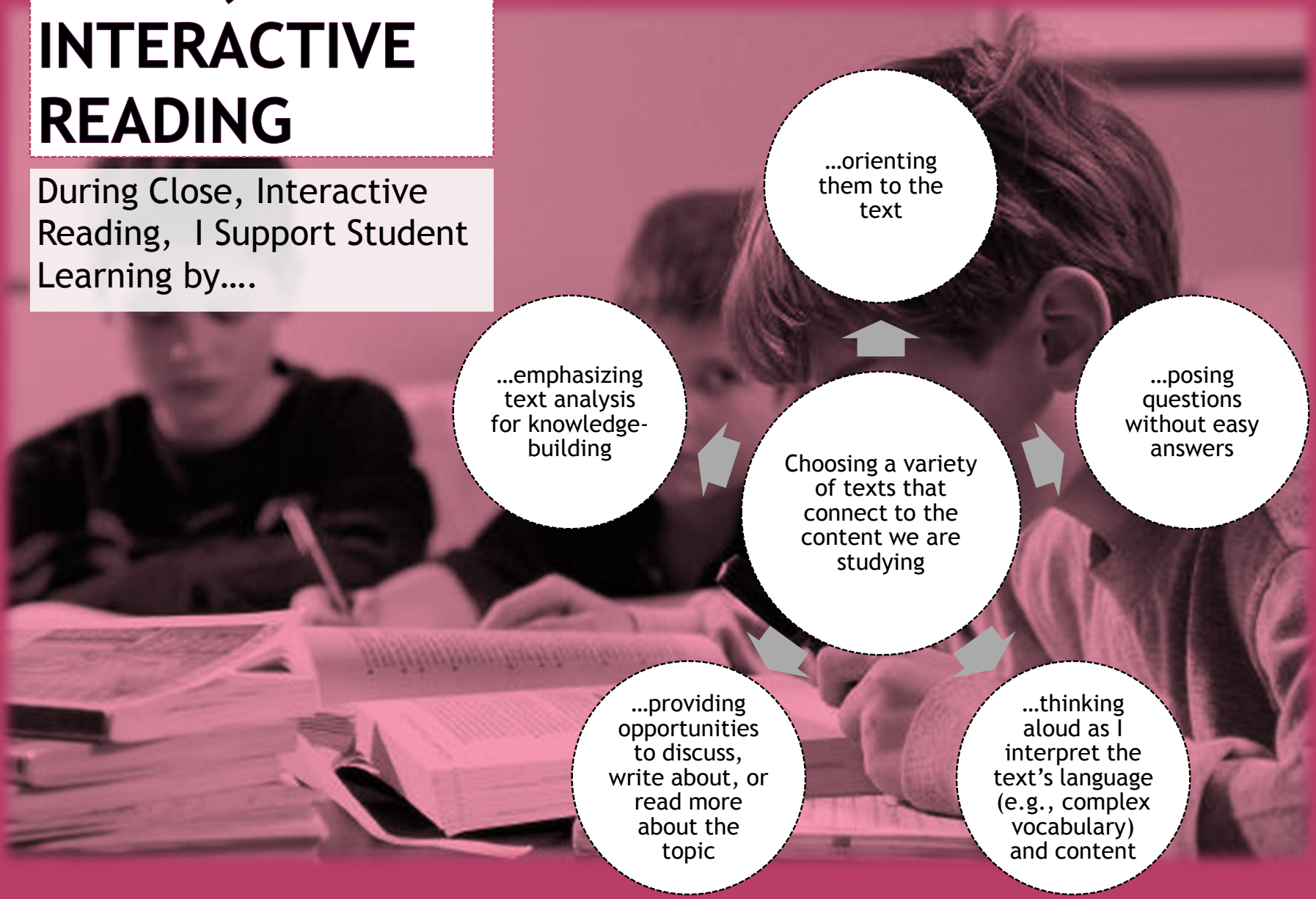
Example: Promoting Language, Listening, Speaking through a Content-Rich Unit of Study

EXPLICIT CONNECTIONS TO COMMUNITY AND CONTENT

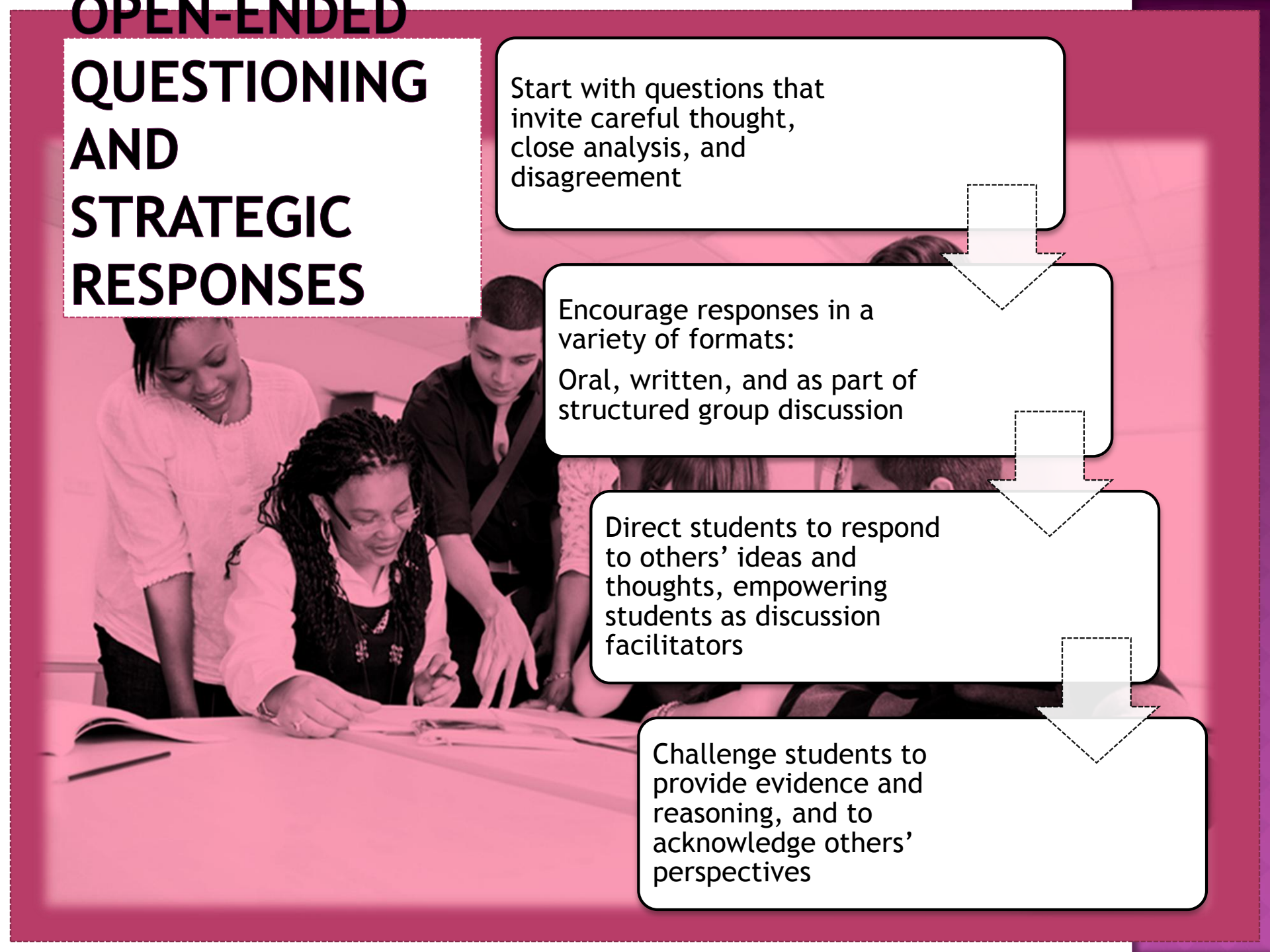


CLOSE, INTERACTIVE READING

During Close, Interactive Reading, I Support Student Learning by….



OPEN-ENDED QUESTIONING AND STRATEGIC RESPONSES



Start with questions that invite careful thought, close analysis, and disagreement

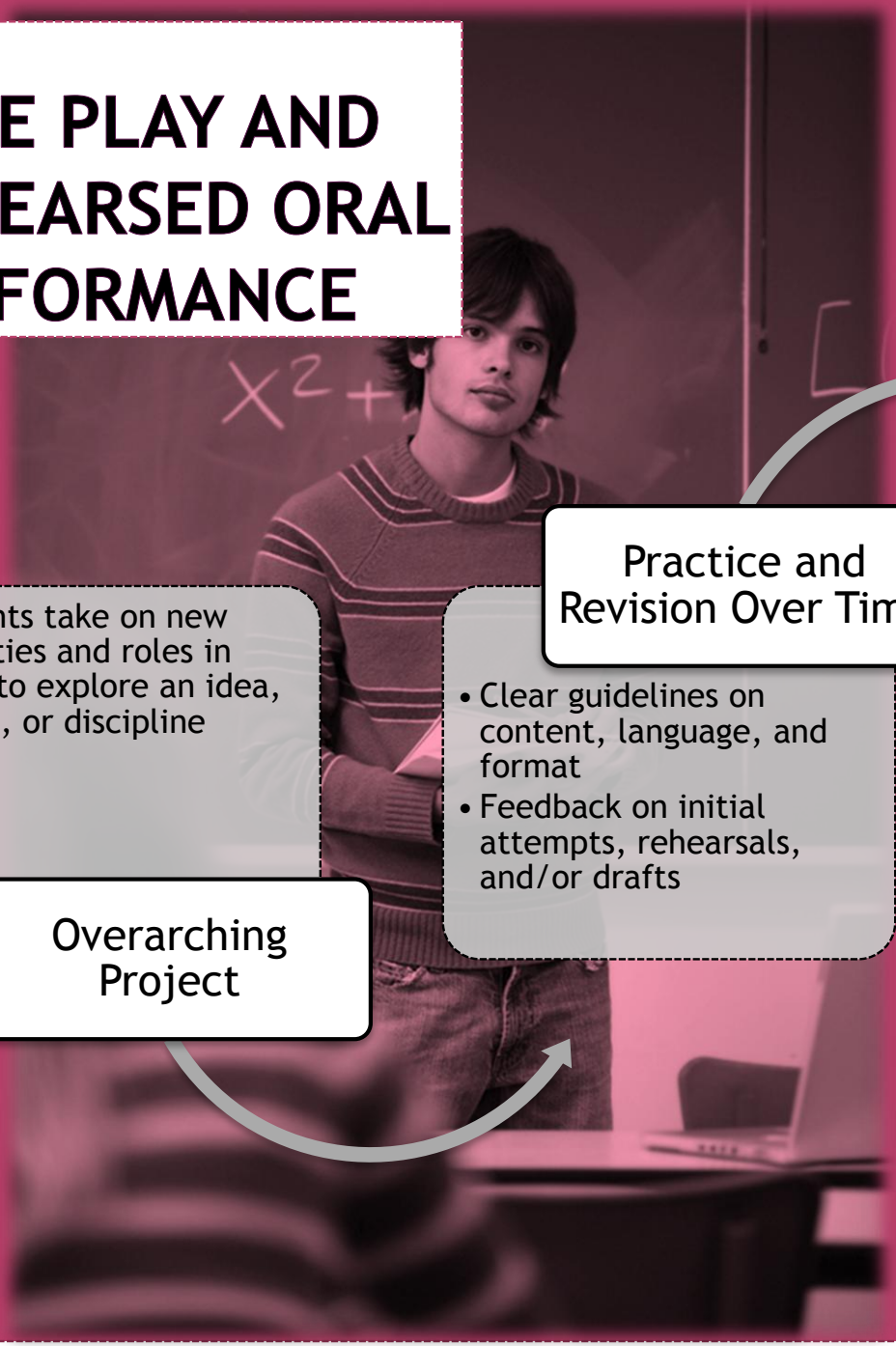
Encourage responses in a variety of formats:

Oral, written, and as part of structured group discussion

Direct students to respond to others' ideas and thoughts, empowering students as discussion facilitators

Challenge students to provide evidence and reasoning, and to acknowledge others' perspectives

ROLE PLAY AND REHEARSED ORAL PERFORMANCE



- Students take on new identities and roles in order to explore an idea, theme, or discipline

Overarching Project

Practice and Revision Over Time

- Clear guidelines on content, language, and format
- Feedback on initial attempts, rehearsals, and/or drafts

- Student finalizes product and presents to audience
- Student receives feedback and reflects upon process and product

Performance or Presentation

Multifaceted, Intensive Vocabulary Instruction

Multiple, *planned* active encounters

Targeting *depth* of word knowledge

High-utility academic words

Direct instruction & word-learning strategies

Anchored in content-rich text

Language Frames for Speaking and Listening

"As a result,"
"Due to the…"
"Therefore, I am arguing that…"
"However, I found that…"
"I take this stance because…"

Structured response format

- Contain Specialized Academic Vocabulary
- Support Formal Academic English
- Encourage Use of Academic Sentence Structures
- Helpful for clarifying and responding to others' points
- Helpful to gain the listener's attention
- Make reasoning visible and explicit

JOINTLY CONSTRUCTED, ACADEMIC WRITING

Lesson's Content or Unit of Study Theme

Discussion and reflection on the purposes of the written product

Anchored/ Guided by a prompt
- open-ended question or complex problem for response

Explicit planning stage
- e.g., joint conversation, graphic organizers, etc.

Feedback on draft(s) & student checklist for revision
- e.g., Have I used academic language? Do I cite evidence for my position?

Second submission, oral presentation, etc. to gain feedback from teachers and peers

Evaluation constructed between teacher and student