# The Connection Between School Climate & Academics

**Dr. David Osher**

Principal Investigator,

Safe and Supportive Schools Technical Assistance Center
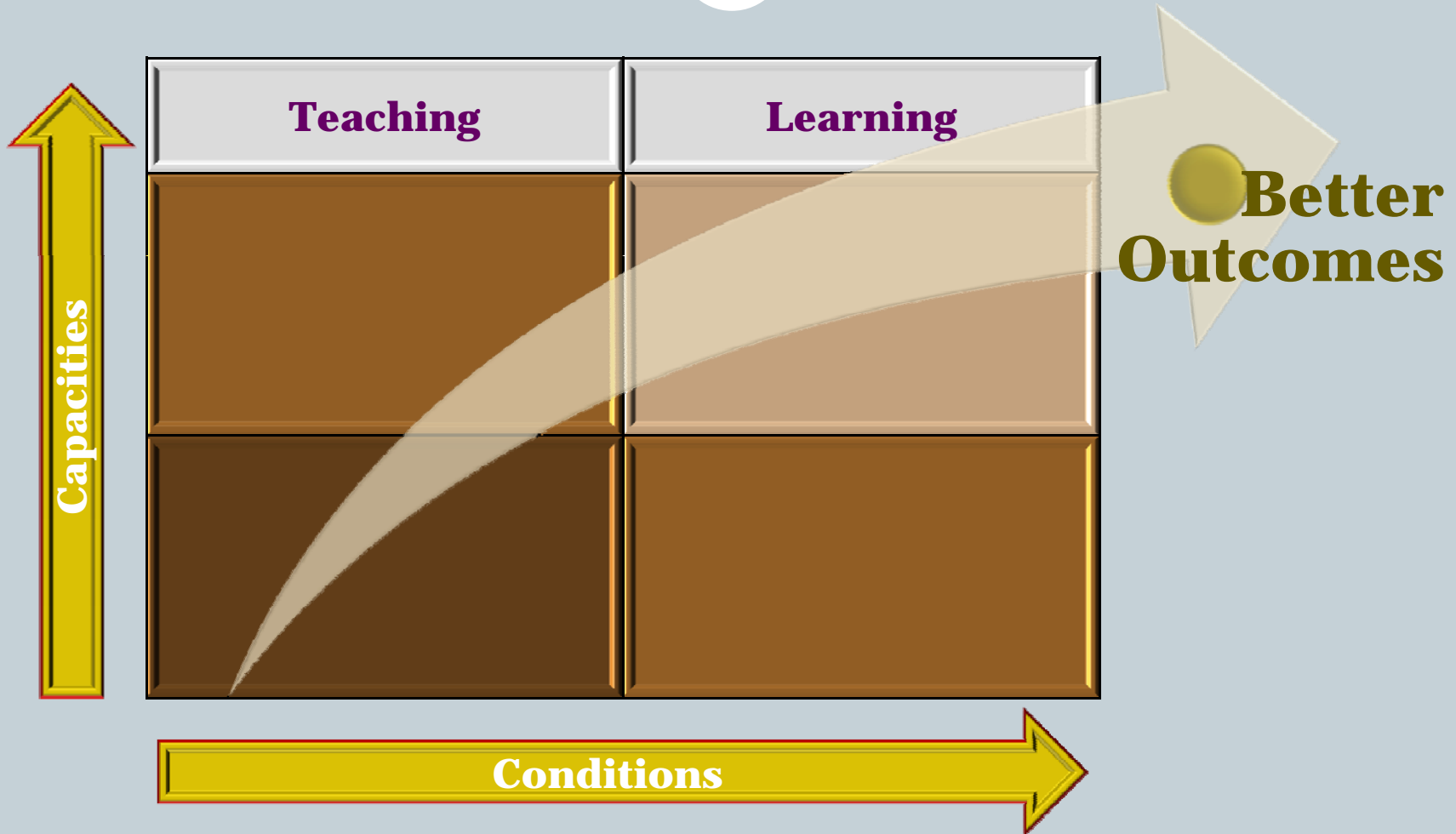**American Institutes for Research® (AIR ®)**
**dosher@air.org**

School Climate Technical Assistance Symposium

# Underperforming Mailboxes

# What Affects Learning Outcomes?

# Conditions are:

Environmental features that facilitate or serve as barriers to learning, teaching and development

- Include school climate
- The extent to which students and teachers are and feel:
  - Safe, connected and supported
  - Engaged and challenged
  - Youth and adults can manage their emotions and relationships productively
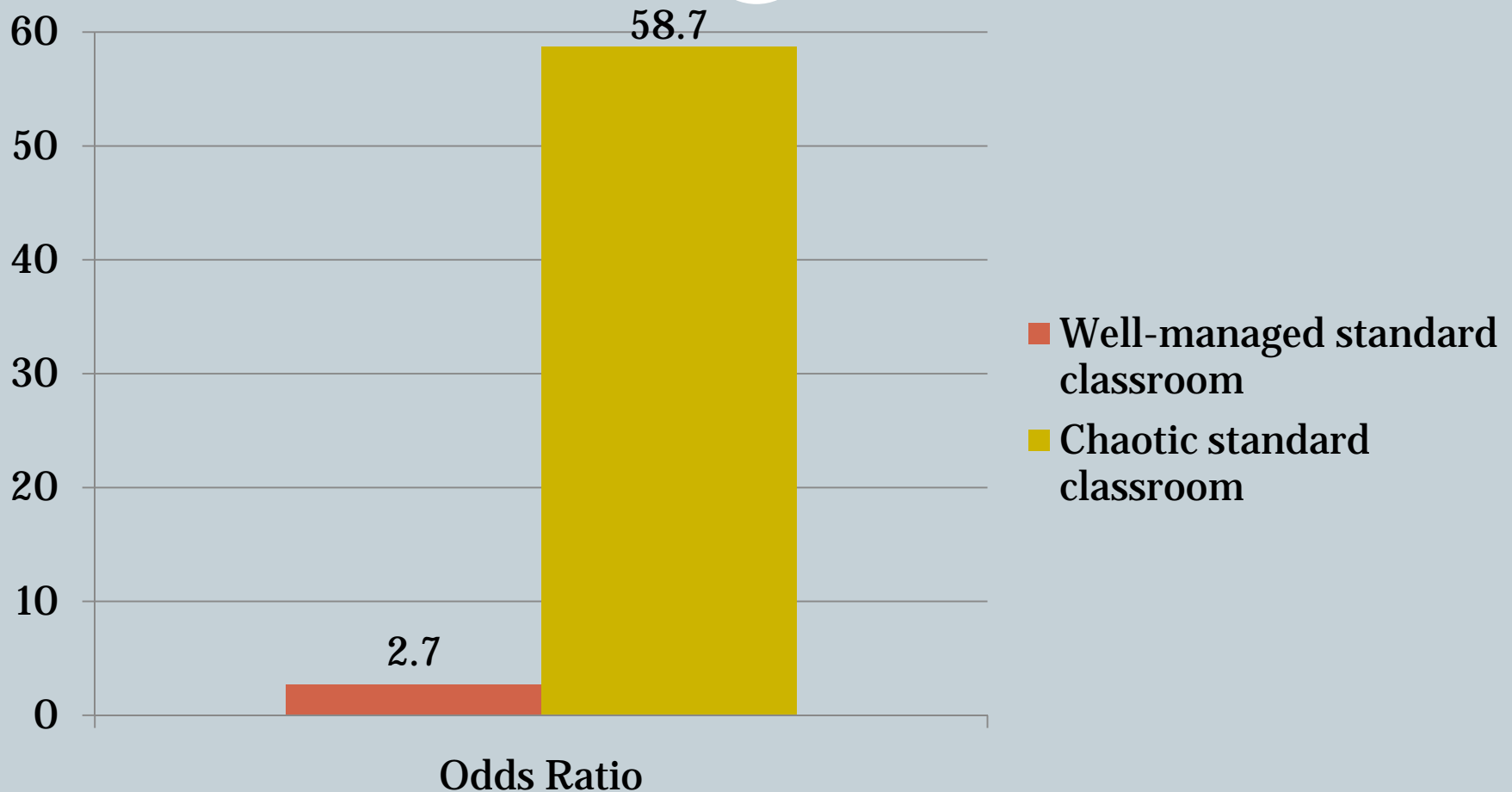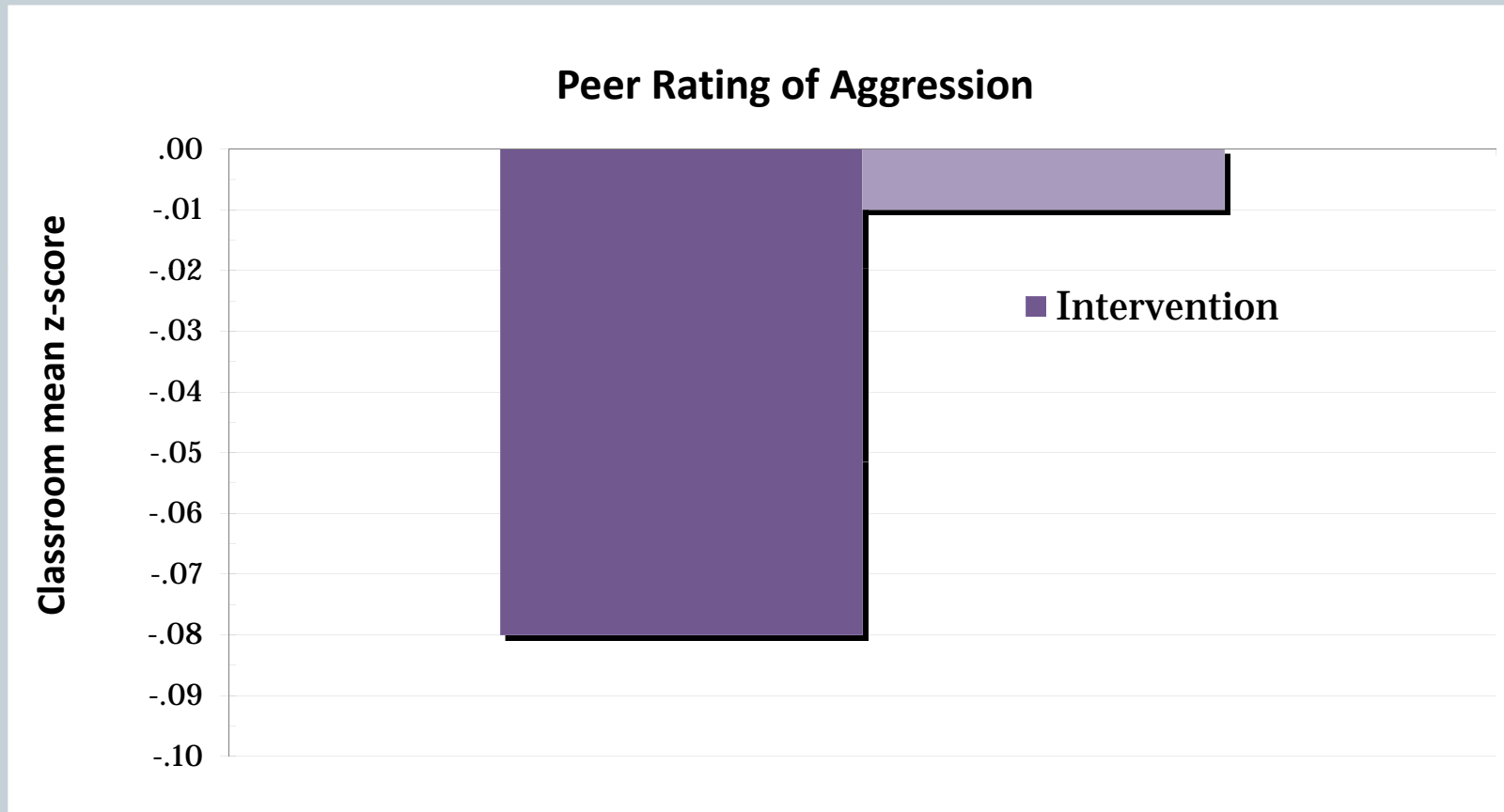
# Individual Capacities:

personal characteristics, attitudes and skills that help children and youth learn and develop and help teachers succeed as educators

- The stronger their capacities are, the more likely it is that the learner or the teacher can with stand challenges and poor conditions

- However, very poor conditions usually overwhelm strong capacities and, even when they do not overwhelm, will limit effectiveness

# Example of School Effects: Impact of 1st Grade Teachers on Seventh Grade School Outcomes?



60

58.7

50

40

■ Well-managed standard classroom

30

■ Chaotic standard classroom

20

10

2.7

0

Odds Ratio

The Impact of First Grade Teacher Capacity on 7th Grade Behavior (Kellam, Ling, Merisca, Brown, & Ialongo, 1998)

# Example of What Can Be Done: PATHS

**Peer Rating of Aggression**



Children Who Receive PATHS Rate Their Classmates As Significantly Less Aggressive Than Do Children In Randomized Comparison Classes

Fast Track Study – 378 Classrooms – 6715 children

# Example of What Can Be Done: Teacher Student Connection On Students Identified to Be at Risk

- Students who were at-risk and placed in first-grade classrooms offering strong instructional and emotional support had achievement scores and student – teacher relationships commensurate with their low-risk peers (Hamre & Pianta, 2005)

# False Dichotomies



STAHLER. 1999

PROTECT

SCHOOL PRINCIPAL

EDUCATE
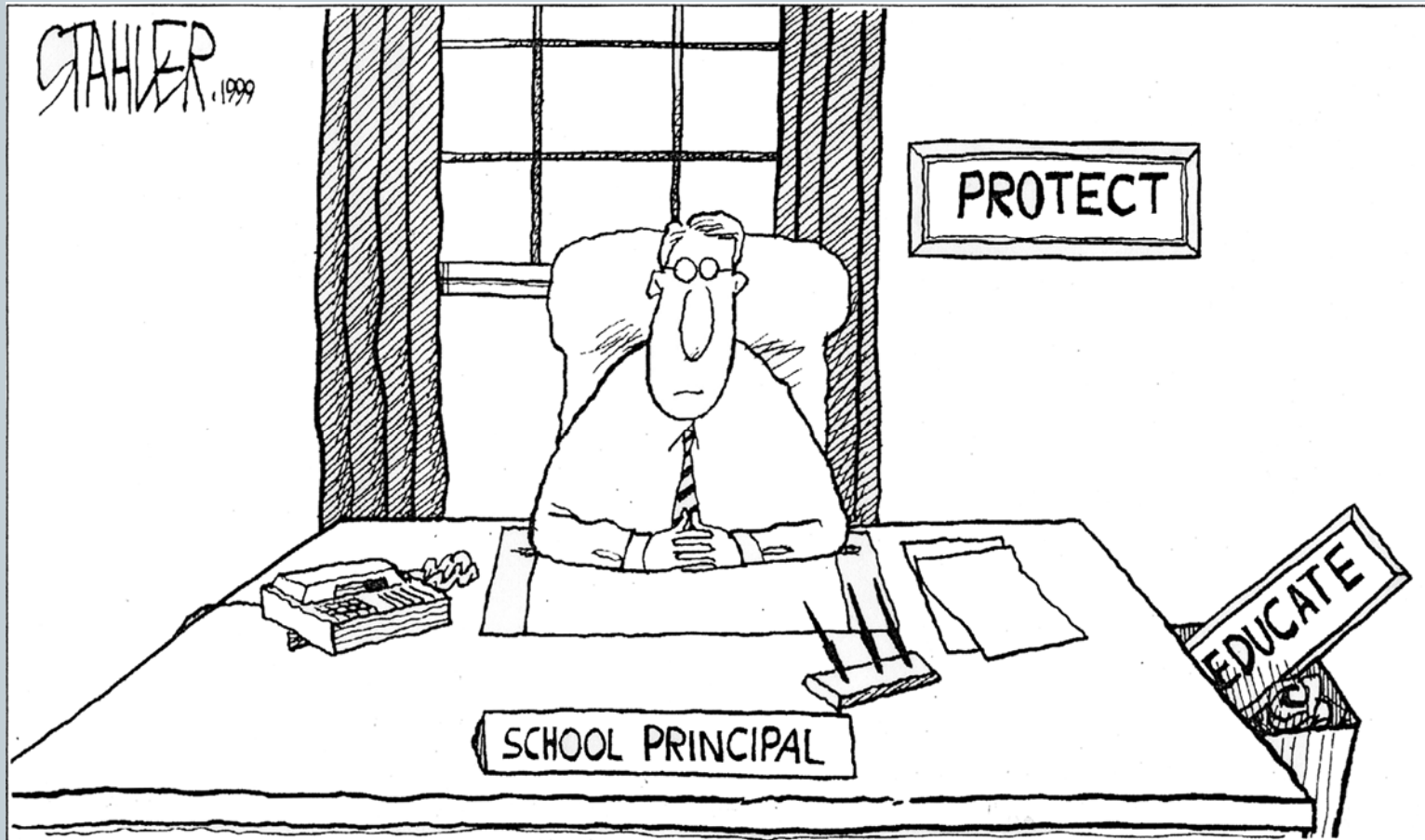
By Jeff Stahler (stahler@fuse.net), The Cincinnati Post, for USA TODAY

# Biggest Math Gains in Schools that Combine High Levels of Student Social Support and School Academic Press*
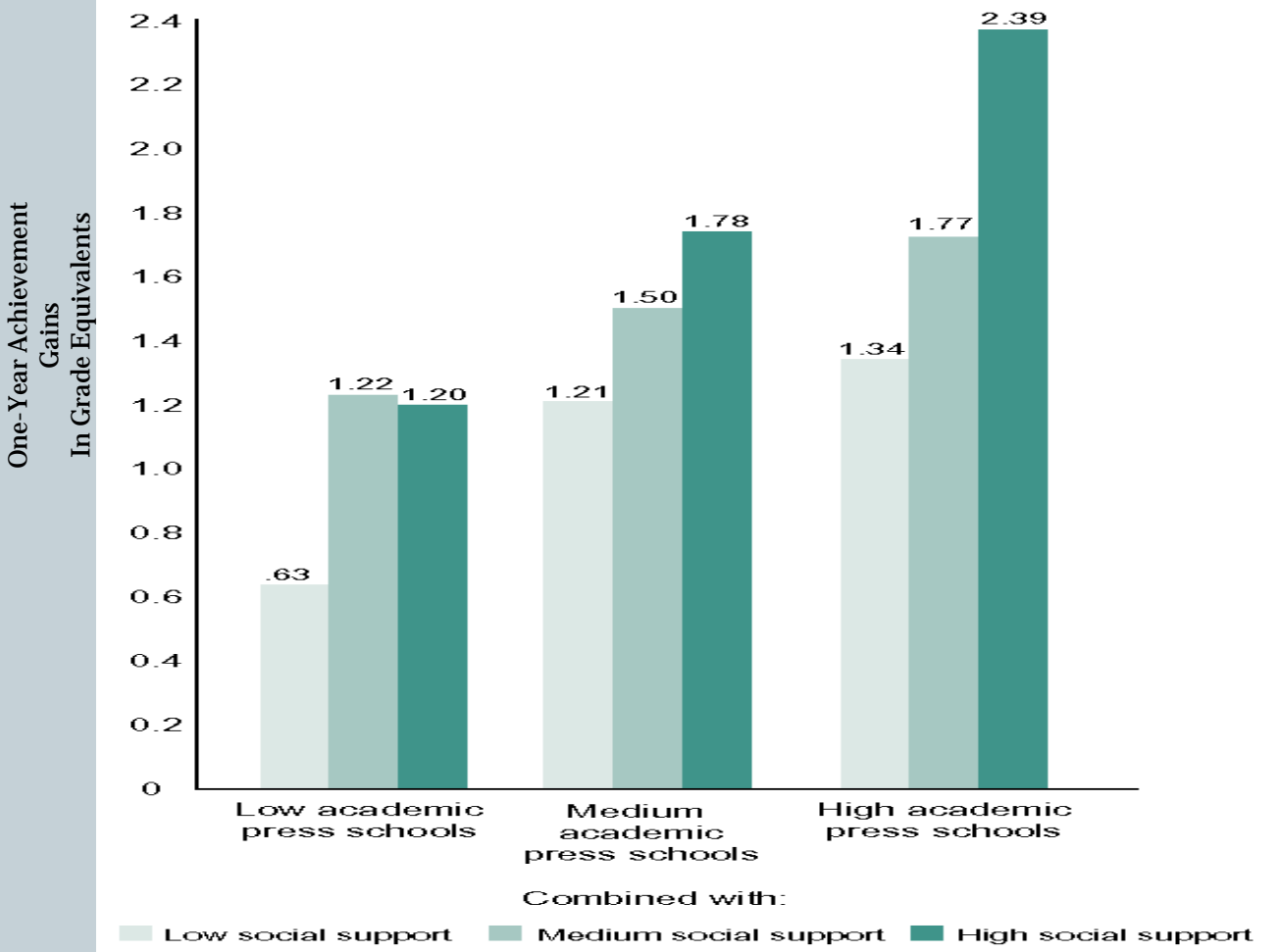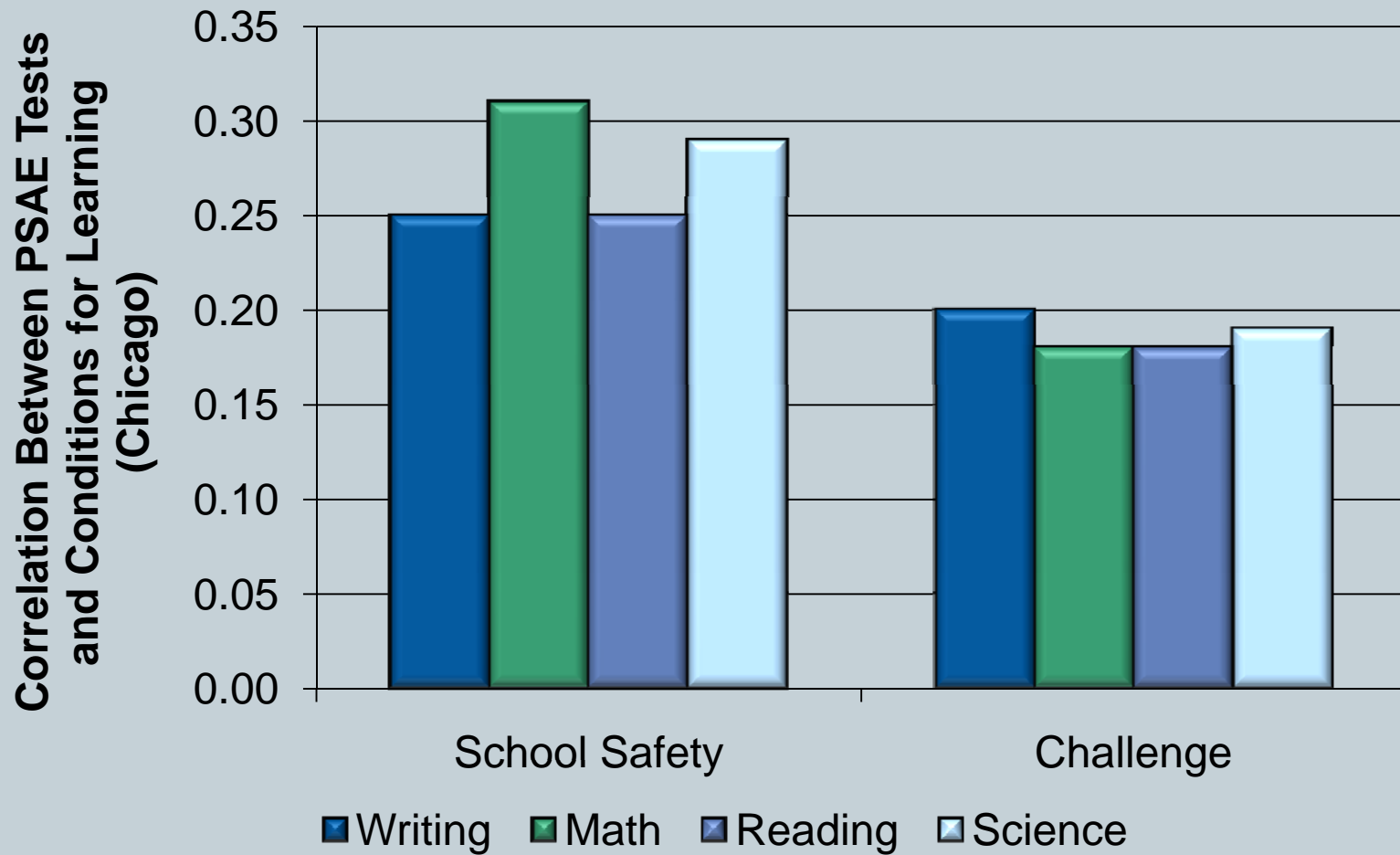


*Extent that school members experience strong emphasis on academic standards and success

Lee, et al. (1999)

# Biggest Reading Gains in Schools that Combine High Levels of Student Social Support and School Academic Press



Lee, et al. (1999) School Research, Social Support Academic Press, & Student Achievement
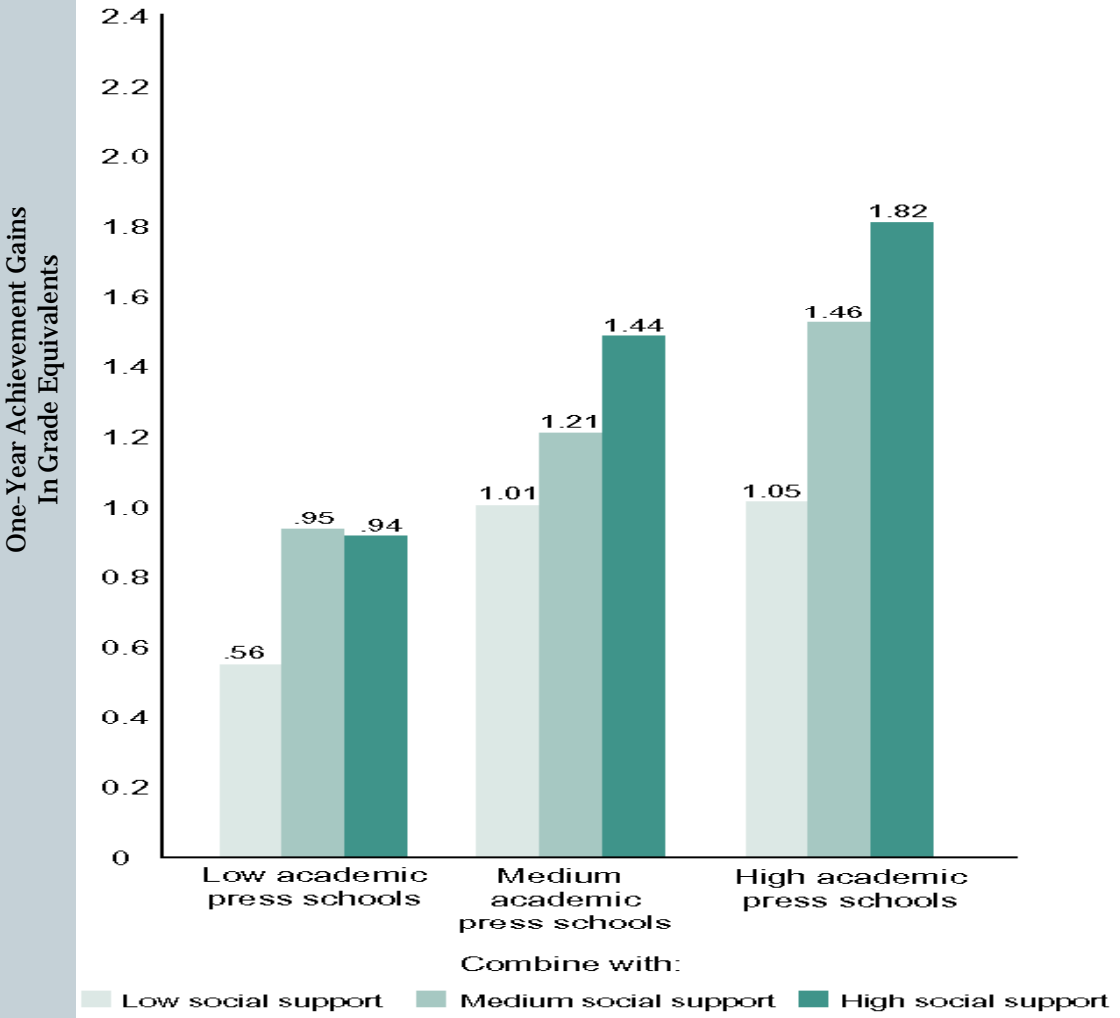
# Safety and Statewide Tests

# Supportive relationships between teachers and students promote

- student engagement
- positive attitudes
- a sense of belonging toward school
- motivation
- academic achievement (Barber & Oson, 1997; Begin & Begin, 2009; Birch & Ladd, 1997, Christenson & Anderson, 2002; Connell Halpern-Felsher, Clifford, Crichlow, & Usinger, 1995; Hamre & Piantea, 2001; Wentzel, 1997; Wentzel & Wigfield, 1998).

# A caring school community prevents anti-social behavior that interfere with learning

- Connections with adults in the school & School bonding are protective regarding a range of anti-social outcomes which impact on academic performance (e.g., substance abuse and arrest) (Resnick, Harris, & Blum, 1993; Srpott, Jenkins, & Doob, 2005)
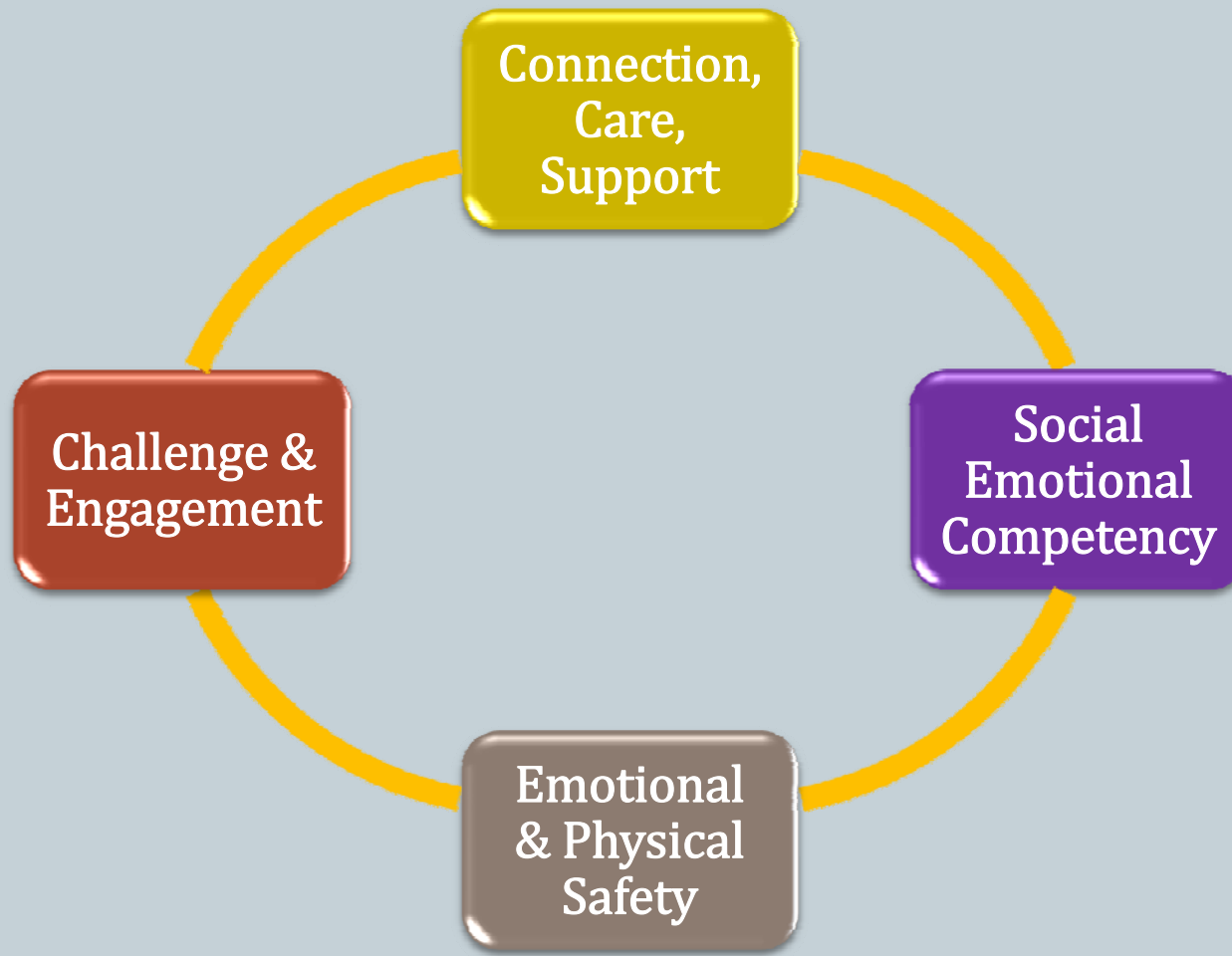
# School Climate and Academic
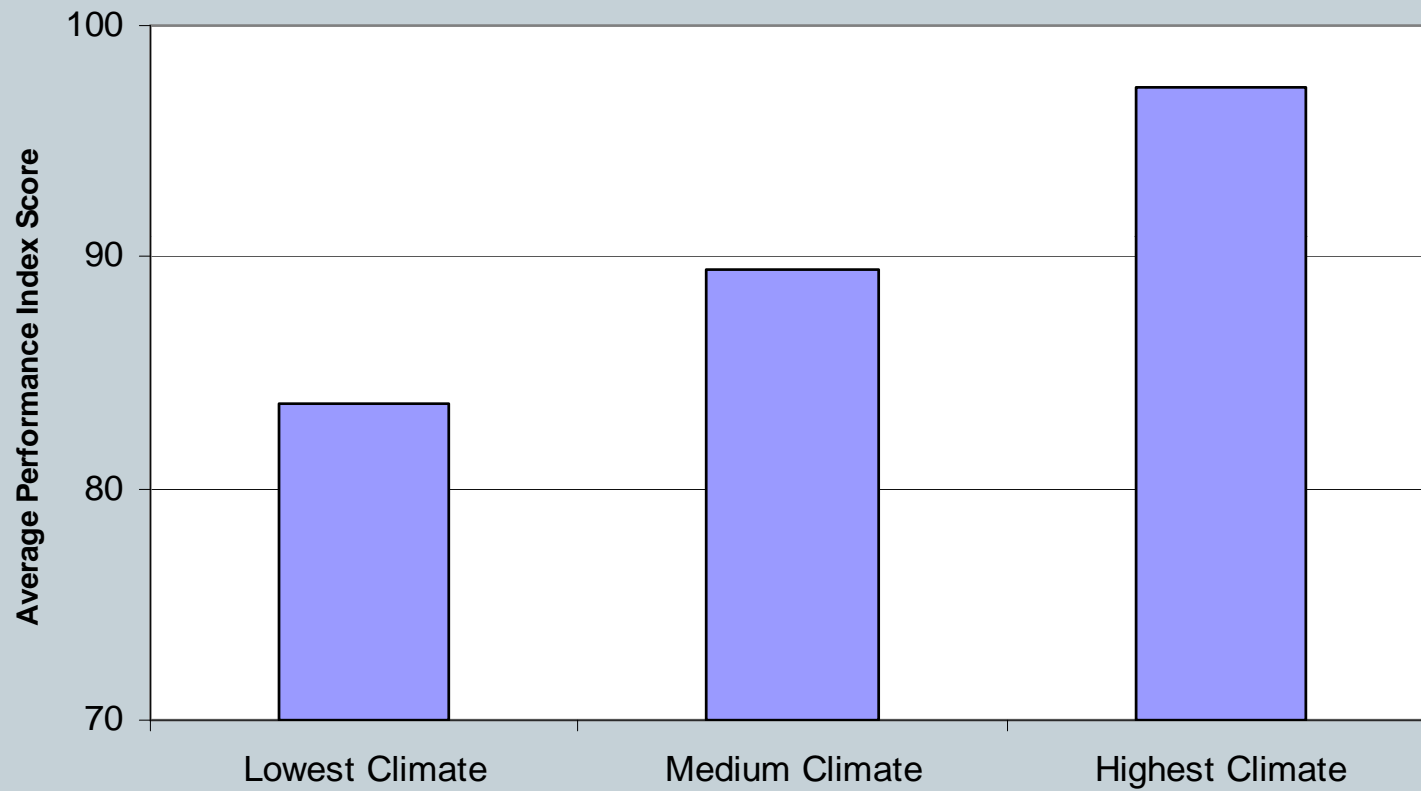


Source: EMIS, CSEE, 2006-07

# The Four Elements of a Comprehensive Plan for Safe, Supportive and Academically Successful Schools

# Social and Emotional Conditions for Learning

## Safety

- Physically safe
- Emotionally safe
- Treated fairly and equitably
- Avoid risky behaviors
- School is safe and orderly

## Support , Care, & Connection

- Meaningful connection to adults
- Experience of Care & Respect
- Strong bonds to school
- Positive peer relationships
- Effective and available support

## Challenge & Engagement

- High expectations
- School is connected to life goals
- Strong personal motivation
- Academic Engagement
- Rigorous academic opportunities

## Social  Emotional Competency

- Emotional intelligence
  Self Regulation
- Culturally competence
- Responsible and persistent
- Cooperative team players
- Contribute to school community

# Safe and Respectful Climate

- Emotional Safety
- Climate Of Mutual Respect And Trust
- Students Comfortable Taking Personal And Academic Risks

# Safe and Respectful Climate

- Physical Safety
- Little Or No Fighting, Bullying, Crime, Gang Presence, Or Substance Abuse

# Impact of Safety on Math Achievement: National Surveys

- NAEP *(National Assessment of Educational Progress)*
  - At all three grade levels students in schools reporting an above-average climate had higher mean NAEP mathematics scale scores than students in schools reporting average or below-average school climate on the same measure
  (Greenberg, Skidmore, Rhodes, & Nesbitt, 2001)

# Impact of Violence & Bullying

- Perception of Safety was the highest correlate of attendance in the Bryk et al. (2010) study of Chicago School Reform

- Violence and bullying affect the extent to which students and staff feel "angry, anxious, depressed, fearful, frustrated, upset, traumatized, worried, sad, otherwise distressed" directly and indirectly (e.g., Nansel et al., 2001; Flannery, 2006)

# Implementing positive behavior support systems

- Students need to arrive at class "ready to learn"
- Teaching time lost to problem behavior
- Learning time lost to problem behavior generated disciplinary encounters (e.g., 41 % of time for disciplined students according to one urban coordinator)
- Teaching time lost because students do not move efficiently through halls
- Teachers frequently do not provide opportunities to learn to students who exhibit problem behavior
  - E.g., wait time; being called upon

# Student Support

- Adults Listen To Students, Care About Them And Treat Them Fairly
- Adults Provide A Welcoming Environment For Students
- Supportive relationships promote student engagement, positive attitudes, and a sense of belonging toward school, motivation, and academic achievement

**Headlines from One Comprehensive Review of "Students Need for Belonging in the School Community (Osterman, Review of Educational Research, 2000)**

- Positive Relationships With Staff And Peers Associated With:
  - Intrinsic Motivation
  - Accept Others Authority While Developing A Strong Sense Of Identity
  - Experience Autonomy
  - Accept Responsibility To Regulate Their Own Emotions
- Experience Of Acceptance Associated With:
  - Positive Orientation To School, Class Work, & Teachers
- Dropouts Feel Estranged From Teachers And Peers
- Belonging →Engagement →Achievement

# Some More Headlines

- Adolescent perceptions of connections with teachers predicted academic growth in Mathematics (Gregory & Weinstein, 2004)

- Students were more likely to perform well on tests when they believe that their teachers care about them (Muller, 2001; Ryan & Patrick, 2001)
  - this relationship is stronger for students who are judged to be at risk for dropping out of high school

# Create a caring community

- Teachers who had high-quality relationships with their students had 31% fewer discipline problems, rule violations, and related problems over a year's time than did teachers who lacked high-quality relationships with their students  (Waters, Marzano, & McNulty, 2003)
- connections with adults in the school are protective regarding a range of anti-social outcomes which impact on academic performance (e.g., substance abuse)

# Authentic Challenge

- Teachers Establish A Connection With Students
- Teachers Provide Extra Help When Students Are Having Trouble Understanding Material
- Teachers Engage Students In The Learning Process

# Academic Challenge

- School Courses And Lessons Are Challenging To Students

- School Staff Provide Academic Support To All Students

# Academic Challenge

- Students Are Expected To Work Hard To Learn
- Students Are Interested In What They Are Learning
- Students Are Not Bored By Their Classes

# The Implications of Freedom  Writers

# Teachers and Student Achievement

- "The most critical aspects contributed by the teacher are the quality of the teacher, and the nature of teacher-student relationships." (Hattie, p.127)

- Creating "an environment for student learning" appears to be more important than the domains Planning and Preparing for Student Learning, Teaching for Student Learning, and) Professionalism in its impact on achievement (Kane, Taylor, Tyler, & Wooten, 2010)

# Social and Emotional Learning

- Work Well With Others
- Cooperate As Team Players
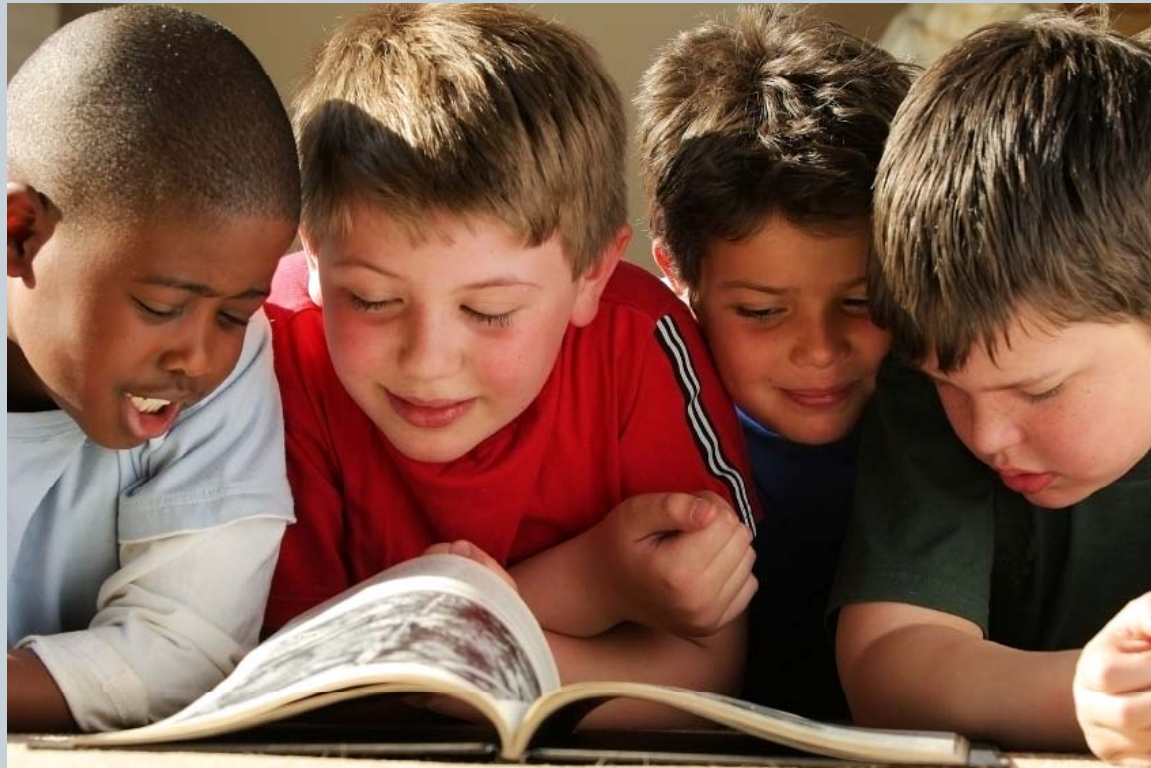
# Social and Emotional Learning

- Solve Problems With Persistence And Creativity
- Set And Work Toward Goals
- Make Responsible Decisions In Academic And Social Settings
- Recognize And Manage Emotions

# An Example of the Challenge: Richards High School: Most Students At My School….

- Get into arguments when they disagree with people— 69%

- [Don't] Try to work out their disagreements with other students by talking to them -60%

- Say mean things to other students when they think the other students deserve it- 67%

- Think it's OK to fight if someone insults them- 64%

- [ Don't] Stop and think before doing anything when they get angry – 69%

Social and Emotional Conditions for Being Off Track
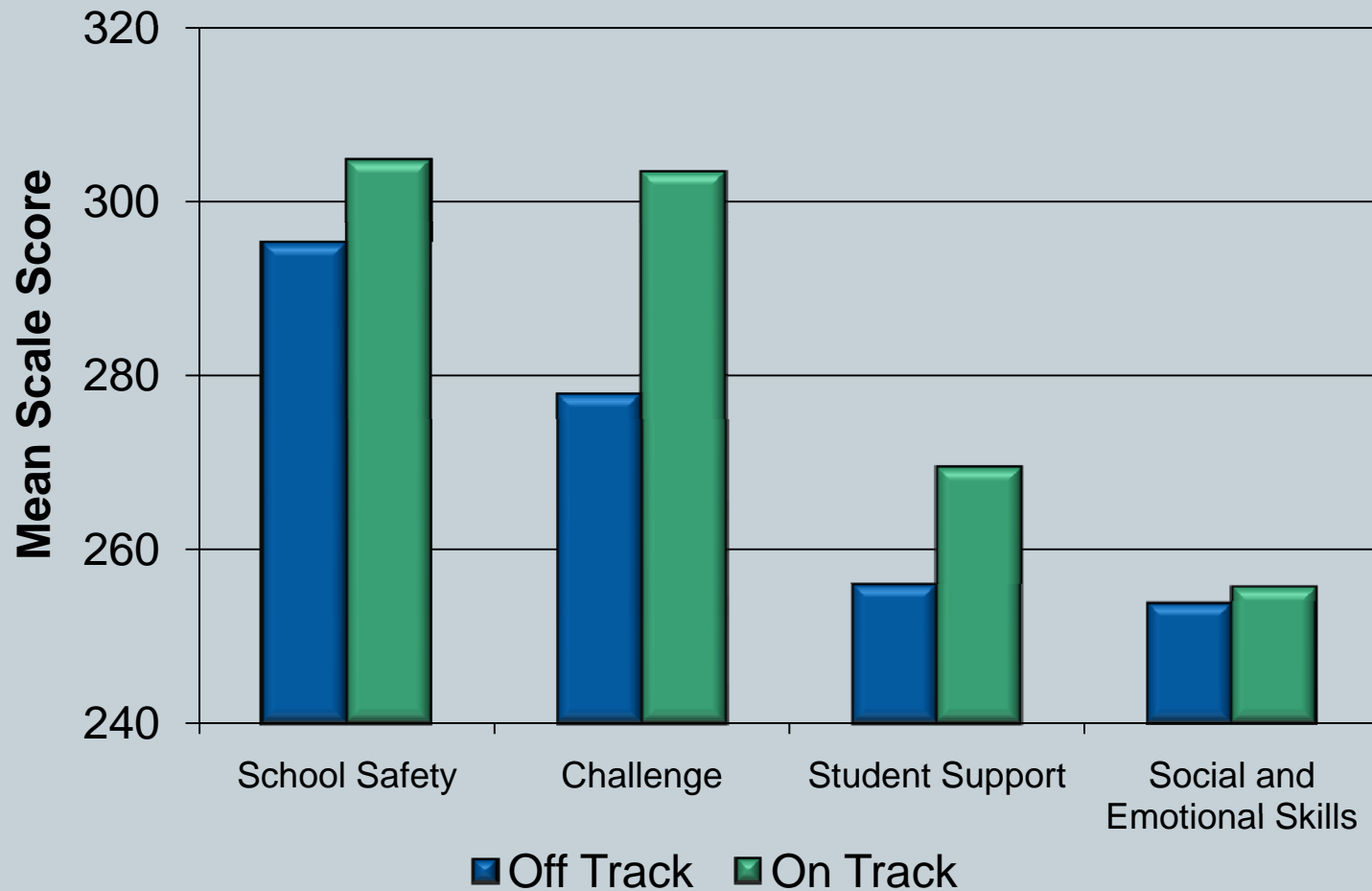
# School Climate and Graduation Rate
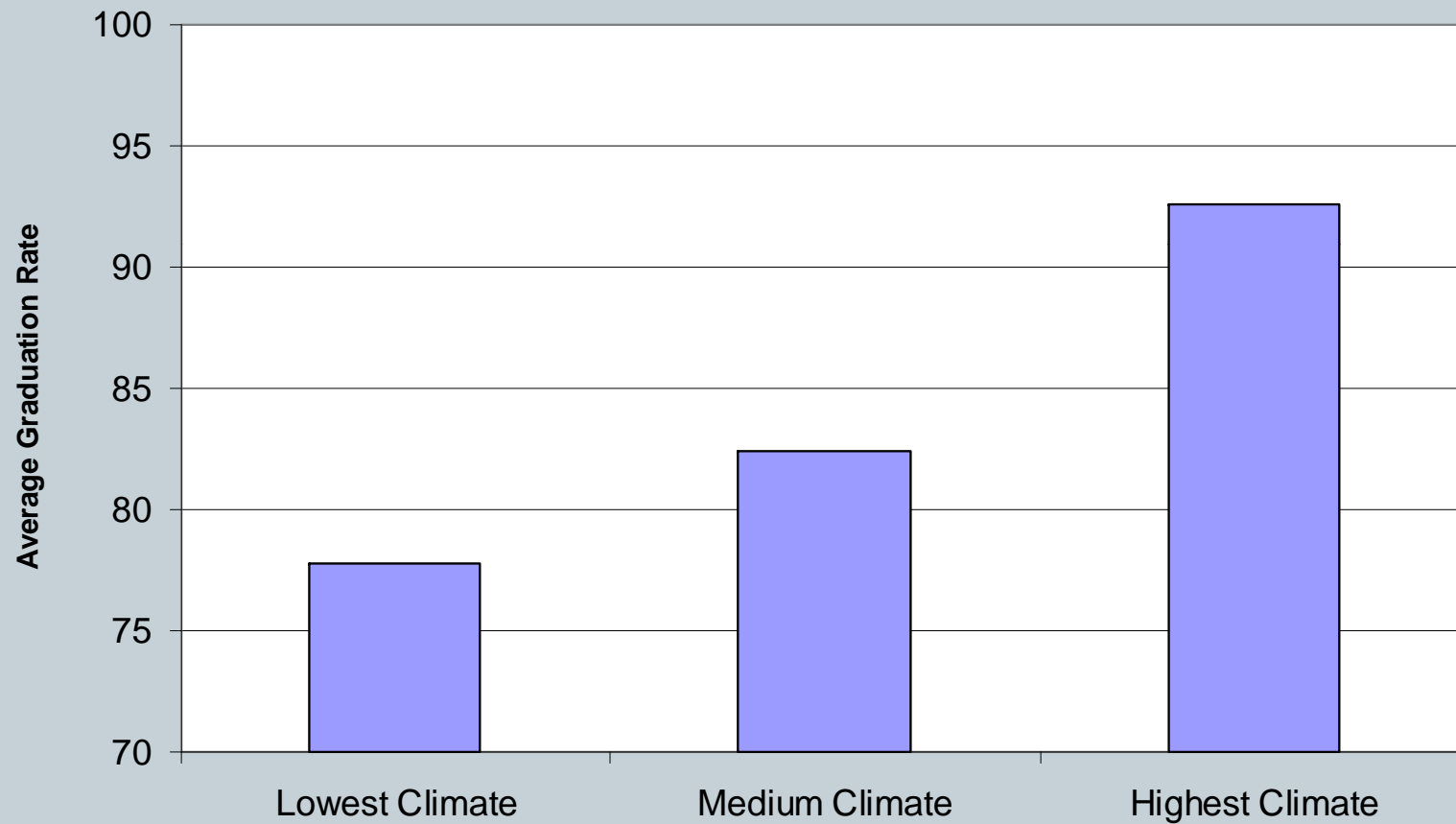


Source: EMIS, CSEE, 2005-06

Climate scores for high schools have a direct relationship with graduation rates  Rush, 2010

# Evidence of Success with SEL

- 23% increase in skills
- 9% improvement in attitudes about self, others, and school
- 9% improvement in prosocial behavior
- 9% reduction in problem behaviors
- 10% reduction in emotional distress
- 11% increase in standardized achievement test scores (math and reading)

Source: Durlak, J.A., Weissberg, R.P., Taylor, R.D., & Dymnicki, A.B. (in press, Child Development). The effects of school-based social and emotional learning: A meta-analytic review

# Comparing What Works Clearing House Improvement Indices for 2 Evidence-based Reading and Math Programs

**Aggregate Improvement Index for all interventions in the CASEL Meta-Analysis of 207 SEL Programs**
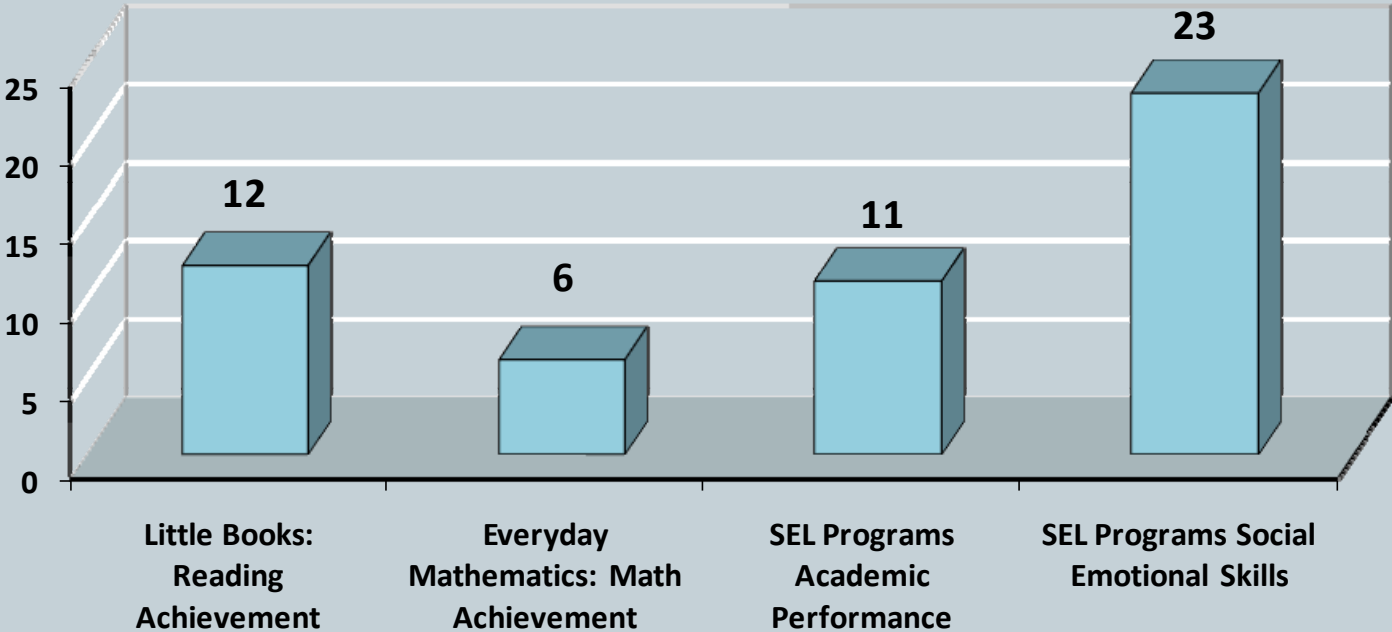
# Why Are Conditions for Learning Important?

- **Maximizing the amount of time that students really attend to learning**
  - E.g., working memory (Davidson, 2002)
- **Maximizing the opportunity for the teacher to:**
  - Concentrate and differentiate
  - Teach in the Zone of Proximal Development (Vygotsky, 1978)
    - Personalizing instruction
    - Scaffolding learning and support

The Zone of Proximal Development for Learning and Development

ZPD

challenge

(frustration)

(boredom)
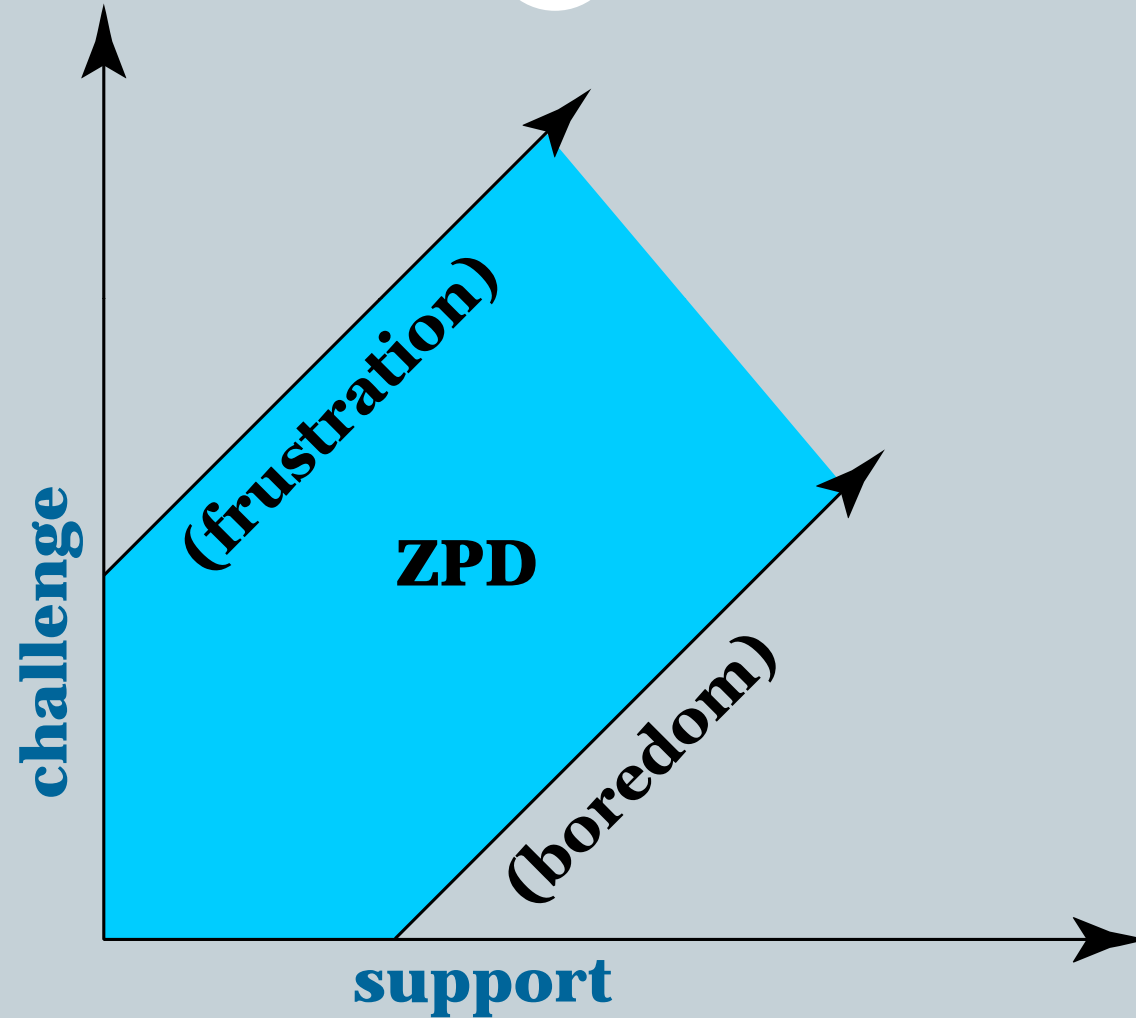
support

# The Challenge: Be in the Zone of Proximal Development for Every Child
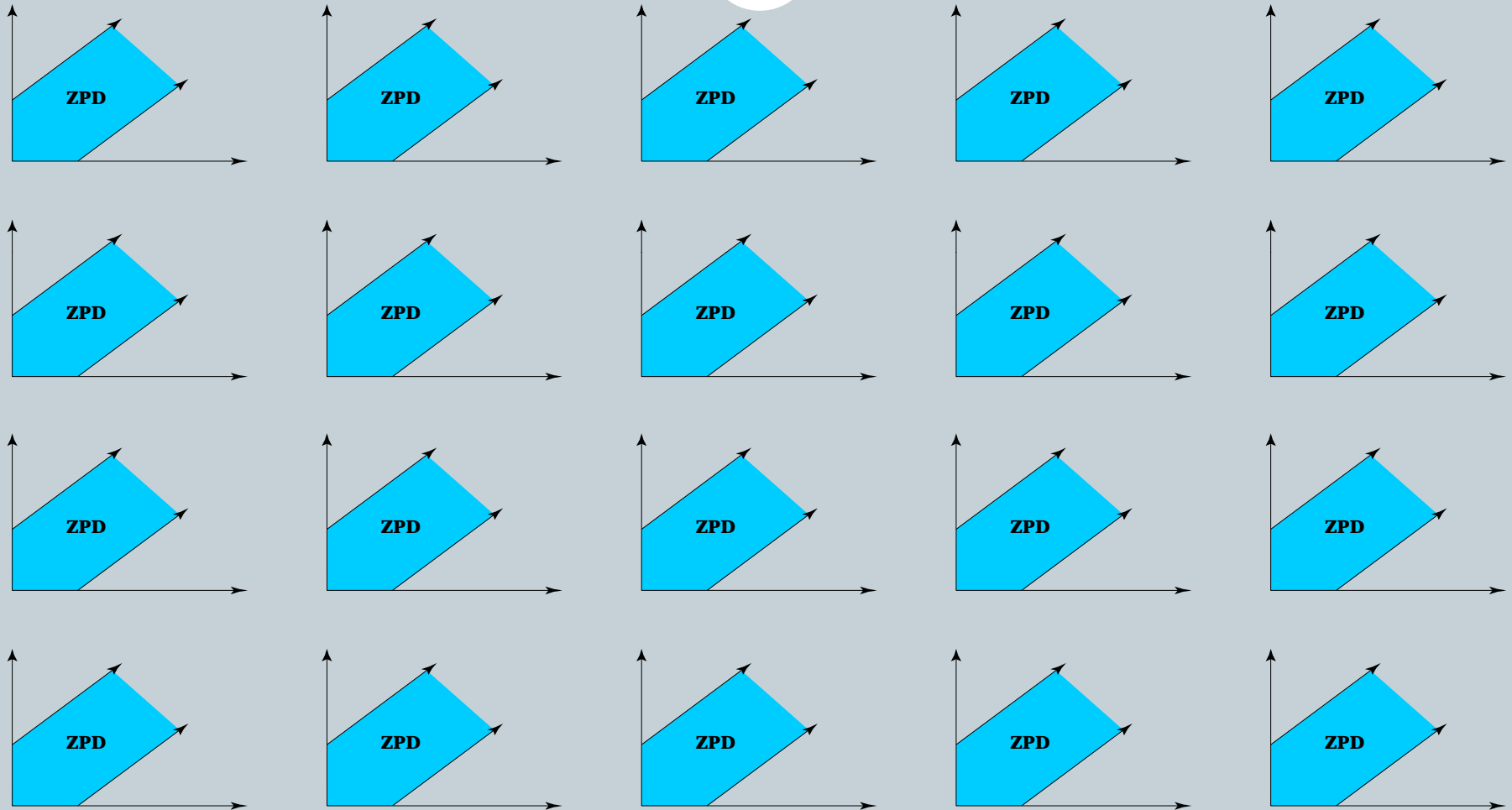
# Logic Model for Safe and Successful Schools

**Strategic and Evidence-Based Learning Supports and Effective Opportunities To Learn**

**Safe, Caring, Cooperative, Well-Managed, and Engaging Learning Environments**

**Effective Instructional, Behavioral, and Emotional Supports**

**Teach SEL Competencies**

- *Self-awareness*
- *Social awareness*
- *Self-management*
- *Relationship skills*
- *Responsible decision making*

**Greater Attachment, Engagement, and Commitment to School**

**Less Risky Behavior, More Assets, and Positive Development**

**Better Academic Performance and Success in School and Life**

# Work at Three Levels

**Provide Individualized Intensive Supports**

Provide coordinated, intensive, sustained, culturally competent, individualized, child- and family-driven and focused services and supports that address needs while building assets.

**Intervene Early & Provide Focused Youth Development Activities**

Implement strategies and provide supports that address risk factors and build protective factors for students at risk for severe academic

**Build a School-wide Foundation**

Universal prevention and youth development approaches, caring school climate, positive and proactive approach to discipline, personalized instruction, cultural competence, and strong family involvement.

# Academic Improvement Model

What
we do for
students who have
high risk factors

What we do for students
who have risk factors

What we do for all students

**Academic Achievement**

**Conditions for Learning**

**Academic Achievement Plan General Resources**

# An Example of What Can Be Done: North Lawndale College Preparatory School, Chicago

- "This is not about graduating from high school; it is about graduating from college"

- Money for counselors, not metal detectors and security staff

- One counselor stays with same students grades 9-13; another one follows up 14-16

# An Example of What Can Be Done: North Lawndale College Preparatory School, Chicago

- Strong academic press; strong social support

- Supports academic risk taking: "teachers are like another set of parents"



- Development of moral community

- Fellow students "like brothers, sisters, cousins"

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