Adult Responsibility in Schools: Equity and Student Success

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Not all "Evidence-Based" Practices Are Equal

- Some give bigger effects
- Some work faster
- Some are easier to implement with consistency
- Some have broader effects

It's a Gamble

Maximize Probability by Considering the Evidence

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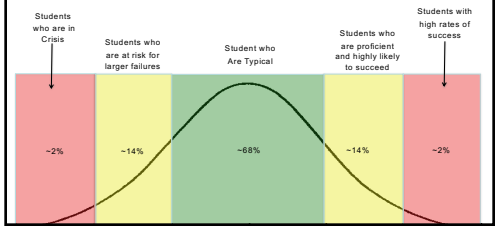
Why Does it Matter?



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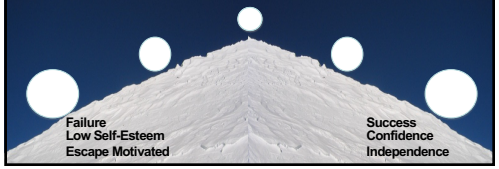
Success Predicts Success & Failure Predicts Failure . . .



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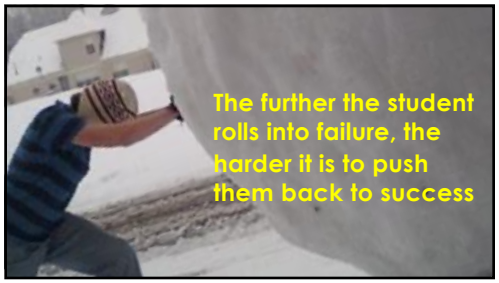

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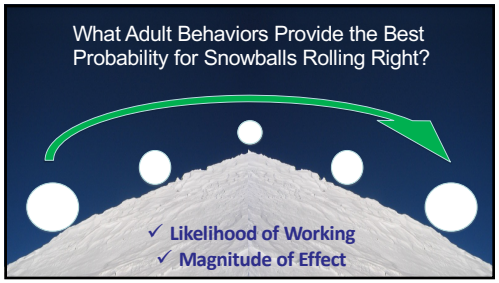
What Adult Behaviors Provide the Best Probability for Snowballs Rolling Right?



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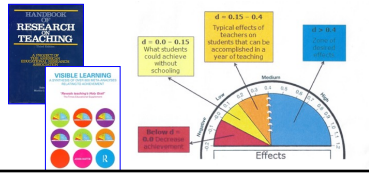
High Probability Practices

– Effective Classrooms Literature from 1970s
(e.g., Brophy, Good, Rosenshine, Berliner, et al)

– Meta-Analyses from past 15 years
(e.g., Hattie, Gottfredson, et al)



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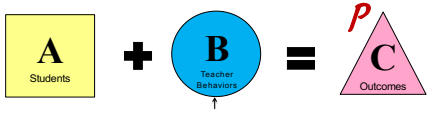
Considering the Logic of Probability for Instruction and Management



Provide the Highest Probability of Positive Outcomes

• Explicit curriculum • Modeling • Engagement • Goals
Consistent routines • Guided practice • Proximity
Spaced authentic practice • Formative assessment
High rates of positive to negative feedback

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The Basics of PBIS

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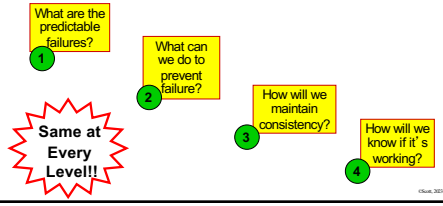
Underlying Principles of 3-Tiered Prevention Models



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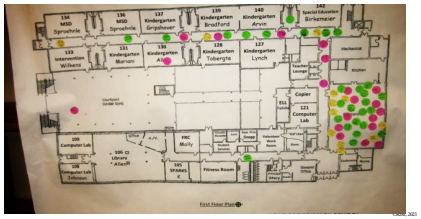
Elementary Map



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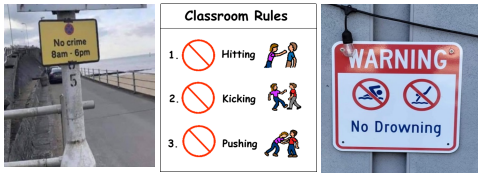
Poor Instruction



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Teaching Rules

Keys to Teachable Rules

1. Anchor all rules to 3-5 big ideas – School-Wide
2. All rules are taught as examples of the big ideas
3. Organize by location
   - Try for max 5 rules per location
4. Teach to students directly and explicitly
5. Revisit instruction throughout the year – acknowledge compliance

EXAMPLE

Respect Yourself
- -in the classroom (do your best)
- -on the playground (follow safety rules)

Respect Others
- -in the classroom (raise hand to speak)
- -in the stairway (single file line)

Respect Property
- -in the classroom (ask before borrowing)
- -in the lunchroom (pick up your mess)

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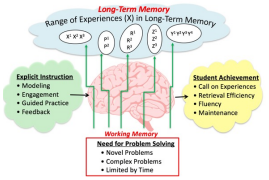
What Science Tells Us About Teaching and Learning

- Guided explicit instruction with repetition and varied examples enhances storage in long-term memory
- Unstructured learning places a heavy load on working memory -- information not stored in long-term memory is lost in 30 seconds
- Students with deficits can actually lose ground when instruction is not structured and explicit
- Especially important for novice learners



(Based on Kirshner, Sweller, & Clark, 2006)

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Acknowledgement!

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Goal Setting and Continuous Feedback

Post the Data for all Faculty to See

-Staff need to know that data collection has a purpose

-Staff need to see results of efforts

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A Science of Instruction for Changing Behavior

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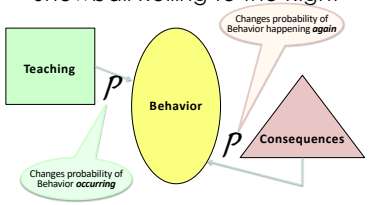
How Adults Change the Probability Snowball Rolling to the Right



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High Probability Instruction Involves:

1. Teacher is explicit with lesson content and thoughtfully considers what is necessary to facilitate success with learning (examples)
2. Teacher takes responsibility for maximizing active student engagement within the content
3. Students get multiple opportunities to practice success at high rates with high rates of positive teacher acknowledgement

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Instructional Practices and Student Success/Failure

Consider the degree to which teachers provide:

- Focus on students (active teaching)
- Opportunities to respond (OTR)
- Positive feedback (verbal or other affirmation)

- Latent-class analysis reveals 3 clusters of teachers in terms of using these practices
- Teachers in the lowest cluster have students that are:
  - **27% more likely to be off task**
  - **67% more likely to be disruptive**

Gage, N., Scott, T. M., & Hirn, R. G., & MacSuga-Gage, A. (2018). The relationship between teachers' implementation of classroom management practices and student behavior in elementary school. *Behavioral Disorders, 43*(2), 302-315.

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Explicit Instruction

The teacher controls how the message (lesson) is delivered by carefully considering what to say, how to say it, what examples to use, and the sequencing of examples. Effective Teachers find ways to make complicated things simple

Explicit Instruction = Clarity

- Keys
  - Authentic examples (age, culture, & context are important)
  - Teach the positive – what and how to do
  - Say it, show it, discuss it

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Engagement During Instruction

Engagement is a Teacher Behavior

Teacher provided opportunities for student response related to lesson content during instruction (OTR)

Significantly higher active engagement and significantly lower disruptions when OTRs at 3 or more per minute

Effective Teachers find ways to engage all students

- Keys
  - High rates of success
  - Used as vehicles for delivering positive feedback

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High Poverty Schools & Engagement

22 Title One Eligible Elementary Schools in Kentucky

- 11 "Distinguished" in reading on state assessment
- 11 "Needs Improvement" in reading on state assessment

- Matched Sample (size, location, demographics)
- Hierarchical Linear Modeling

- **Group OTR predictive of academic achievement**
  - **High achieving receive 260+ more OTR each week**
- **Negative feedback predictive of suspension**
- **Differences are at the teacher level**

Hirn, R. G., Hollo, A., & Scott, T. M. (2017). Exploring instructional differences and school performance in high poverty elementary schools. *Preventing School Failure: Alternative Education for Children and Youth, 62*(1), 37-48.

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Feedback

- Simple feedback on performance – formative and summative – is one of the most effective components of instruction
  - This means nothing more than simply acknowledging student success when you see it
  - Affirmation!

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Instruction and Student Success - Elementary

Rates of **Group OTR** and **Positive Feedback** found to be significant predictors of both suspension (negative relationship) and academic achievement (positive relationship)

OTR and Positive Feedback Alone have Negative Relationship with Suspension

Parameter	beta coefficient	s.e.	t-value	p-value
Positive Feedback	-0.169	0.073	-2.312*	0.030
Grp. OTR	0.130	0.051	2.556*	0.018

*p < .05, **p < .01, ***p < .000. Overall, there were 32 elementary schools. F-statistic: 2.341 on 8 and 23 DF, p = 0.053, Adjusted R2 = 0.257

OTR and Positive Feedback Combined have positive relationship with Percentage of Students Proficient in Elementary Reading and Math

Parameter	beta coefficient	s.e.	t-value	p-value
Instructional Cluster	0.308	0.093	3.325**	0.003

All covariates mean-centered. *p < .05, **p < .01, ***p < .000. Overall, there were 32 elementary schools. F-statistic: 34.54 on 4 and 27 DF, p = 0.000, Adjusted R2 = 0.812

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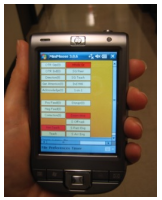
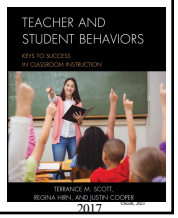
Instructional Coding



National Norms for Effective Instructional Practices

- 15-minute observations
- Only watch instruction
- See every teacher in the school
- Randomly select target student
- Code gender and ethnicity of teacher and student



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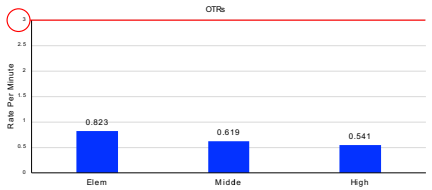
OTR Rates

N= 6,730 Elementary, 1,544 Middle, 1,983 High



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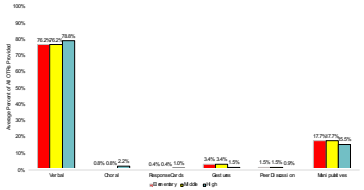
OTR Types as a Percentage of All OTRs



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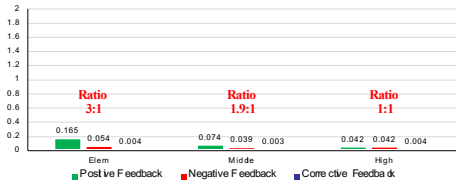
Feedback Rates

N= 6,730 Elementary, 1,544 Middle, 1,983 High



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Inequity and Disproportionality

Effective practices are found to be applied inequitably across different student populations

- Students of color
  - More negative teacher comments (control for behavior)
- Students from disadvantaged backgrounds
  - Lack of explicit instruction and engagement
- Students with behavioral disabilities
  - Less instruction
  - More negative teacher comments (control for behavior)

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School Culture and Climate:
Engagement Outside of Instruction

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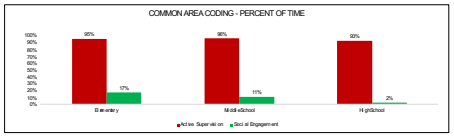
Common Area Observations - % of Time



At all school levels, teachers engage in active supervision of students in their area at an average of 93% or better. However, social engagement between adults and students is only 17% of observed time at the elementary, decreasing to 11% at middle and just 2% of observed time at the high school.

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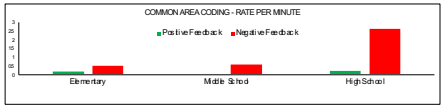
Common Area Observations - Rate



The average elementary student hears something positive from an adult every 5.8 minutes, becoming once every 25 minutes at middle school and once every 4.3 minutes it high school. In contrast, negatives are heard every 1.8 minutes at elementary, every 1.6 minutes at middle school, and every 23 seconds at high school.

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Big Ideas

- Student behavior won't change until adult behavior changes
  - -- Adults Matter! We make a big positive difference
- ALL behavior change is an instructional process
  - -- Instruction Matters! Teach
- It's all about probability – what's the simplest way to make a difference in a student's probability for success?
  - -- Practices Matter! Begin with high probability strategies

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QUESTIONS?

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