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Early Warning Systems 101

Early Warning Systems

I have heard about Early Warning Systems	We are planning a roll-out this year	We have started trying out some of these pieces	We are perfecting our EWS
1	2	3	4

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Core Ideas of Early Warning Systems

1. To graduate, college- and career-ready, students need to successfully navigate several key transitions and acquire a set of academic behaviors - they need to learn how to succeed at school.

2. Students signal that they are on- or off-track toward these outcomes through their behaviors

Core Ideas of Early Warning Systems

3. By tracking Early Warning Indicators, it is possible to identify when students are beginning to fall off-track, providing time to intervene and alter their trajectory through school and beyond.

4. Using EWS schools can be organized to apply school-wide preventative, targeted and intensive interventions until students are on-track.

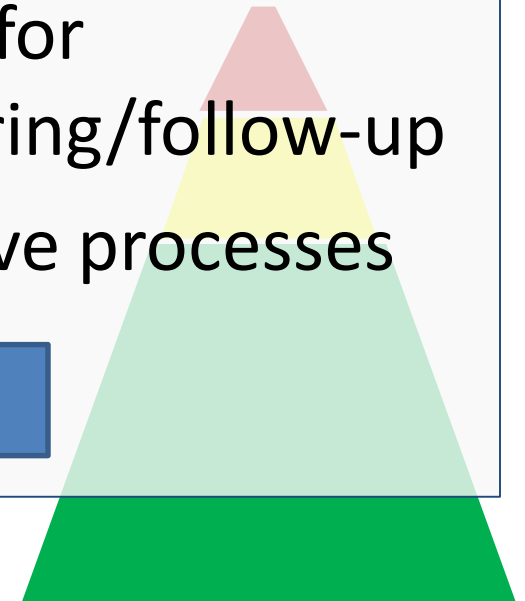EVERYONE GRADUATES CENTER   JOHNS HOPKINS SCHOOL of EDUCATION

Early Warning System

Indicators

- Reliable and Valid
- Predictive
- Unique information for action

Intervention system

- Tiered Interventions (Individual, targeted, whole school)
- System for monitoring/follow-up
- Reflective processes

Facilitation and Teams

WHAT IS THE RESEARCH TELLING US?

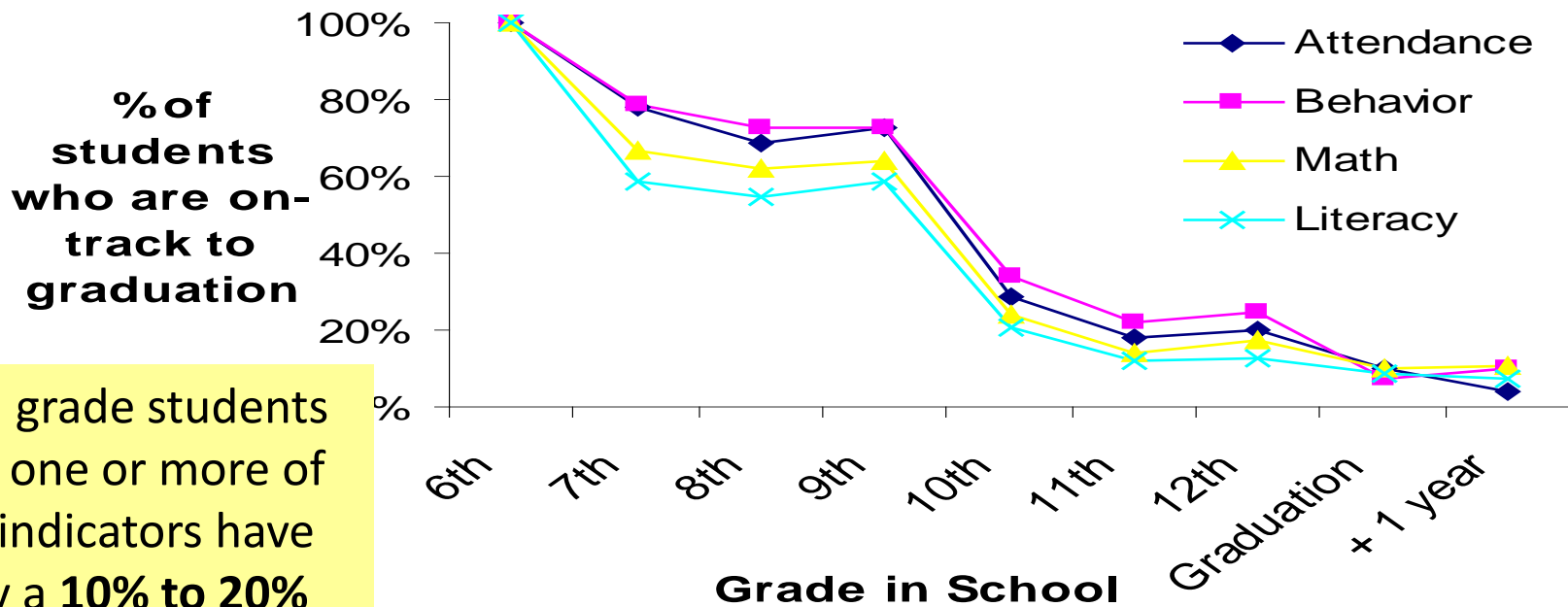# Indicators and Influencers?

Poor attendance

Behavior marks

Course failure

Dropouts can be identified as early as 6th grade

Sixth Graders (1996-97) with an Early Warning Indicator

% of students who are on-track to graduation

Legend:
- Attendance
- Behavior
- Math
- Literacy

Y-axis: 100%, 80%, 60%, 40%, 20%, %

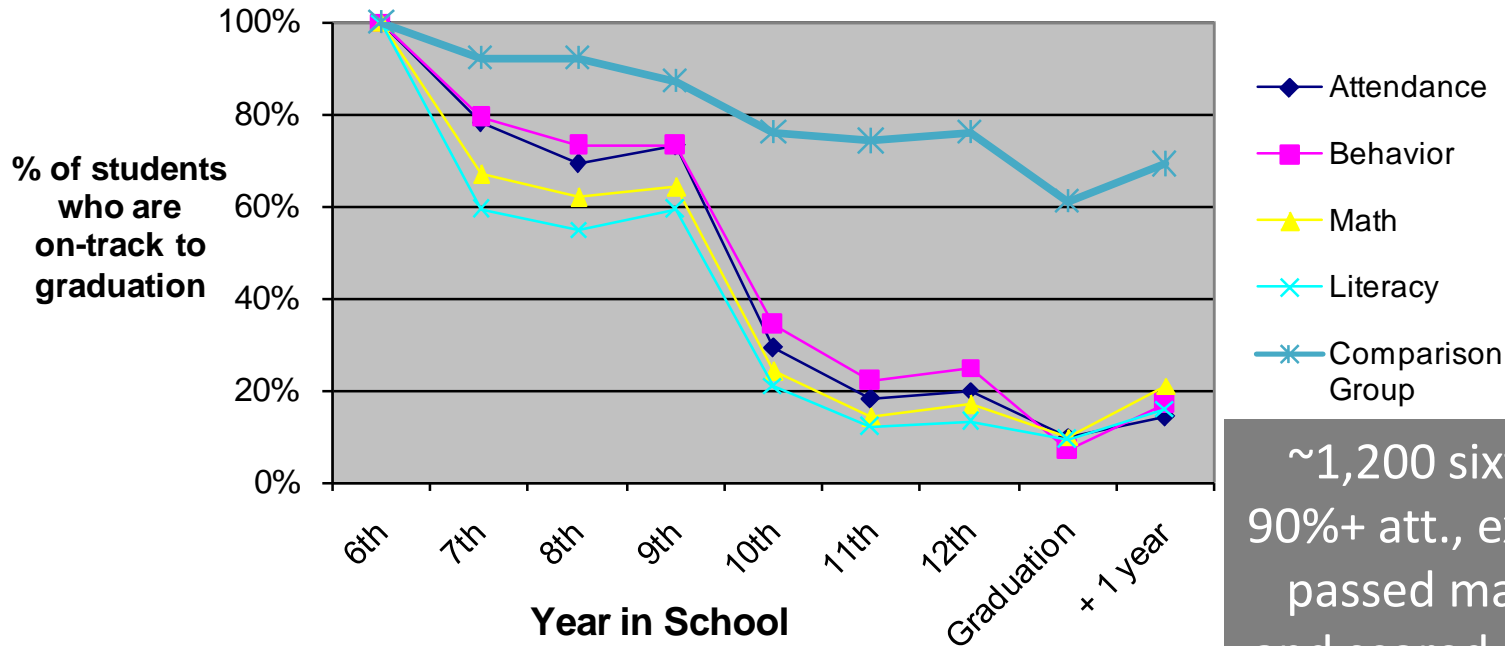X-axis (Grade in School): 6th, 7th, 8th, 9th, 10th, 11th, 12th, Graduation, + 1 year

Sixth grade students with one or more of the indicators have only a **10% to 20% chance of graduating** from high school on time or within one year of expected graduation

Note: Early Warning Indicator graph from Philadelphia research which has been replicated in 10 cities. Robert Balfanz and Liza Herzog, Center for Social Organization of Schools at Johns Hopkins University; Philadelphia Education Fund

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Comparison Group

Philadelphia Sixth Graders with an Early Warning Indicator, Followed through to High School Graduation

% of students who are on-track to graduation

Legend:
- Attendance
- Behavior
- Math
- Literacy
- Comparison Group

X-axis: Year in School (6th, 7th, 8th, 9th, 10th, 11th, 12th, Graduation, + 1 year)

Y-axis: 0% to 100%

~1,200 sixth graders with 90%+ att., excellent behavior passed math and English, and scored at or above basic on the 5th grade PSSA

Los Angeles Course Failure
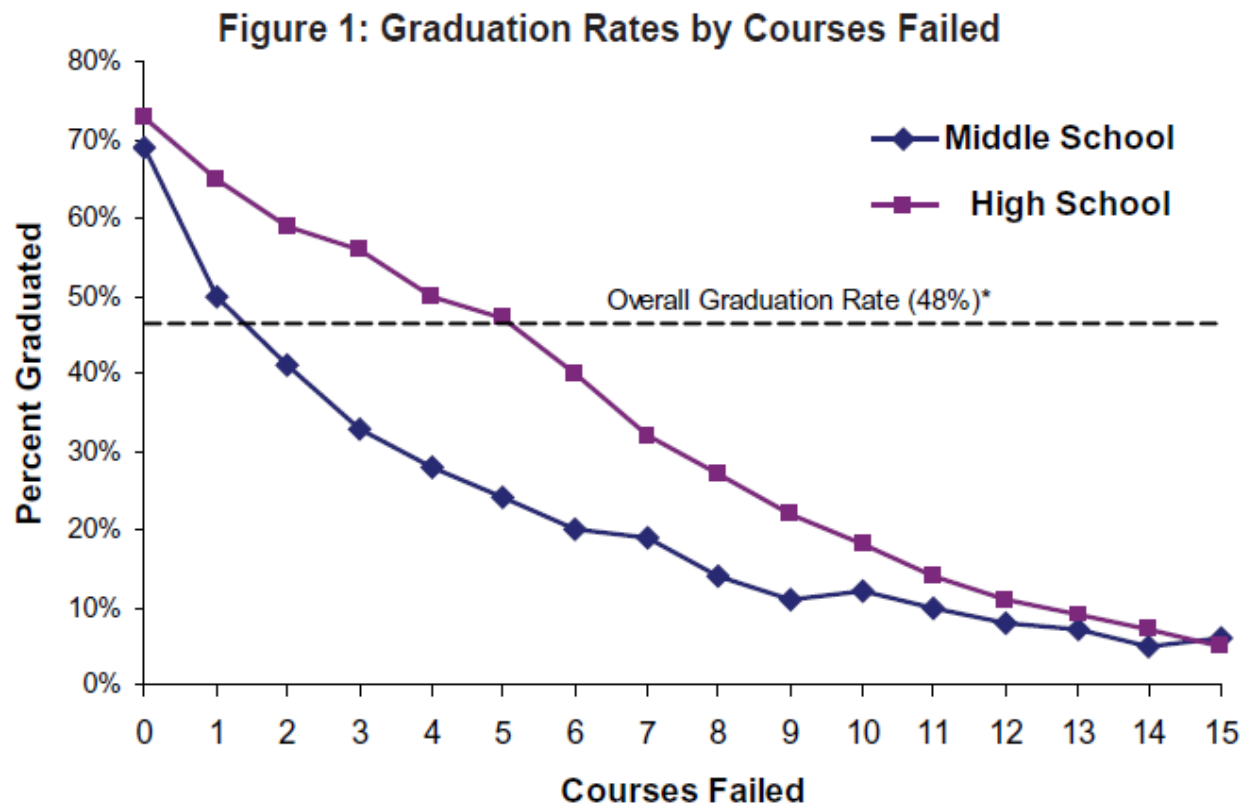
Figure 1: Graduation Rates by Courses Failed

What Factors Predict High School Graduation in the Los Angeles Unified School District?
Silver, D., Saunders, M. (University of California, Los Angeles), Zarate, E. (University of California, Irvine)

Success Factors – The A,B,Cs

- A study in Chicago has shown that GPA is the strongest predictor of college graduation.
  - More than 60% of students who graduated with a 3.6 GPA or higher completed a four-year degree within six years compared to slightly more than a quarter with GPAs between 2.6 and 3.0
    - *Consortium on Chicago School Research, 2006

- **Good News:** Students are resilient and usually signal before dropping out.

- Students usually start with one indicator and develop more indicators over time.

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HOW DO WE ORGANIZE THE DATA INTO USEFUL INFORMATION?

HOW DO WE ORGANIZE AND RESPOND TO THE DATA?

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Determining On- and Off-Track Indicators

9th Grade	10th Grade	11th Grade	12th Grade	Expected Graduation
Are there common behaviors or characteristics for students who do or don't make it through the path to the expected outcome?				

Off-track

- Research-Based
- Need Intervention
- Probability
- Majority of Students

On-Track

On and Off-Track Indicators

Off-track

Sliding

On-Track
High School Graduation

On-Track
Postsecondary Success

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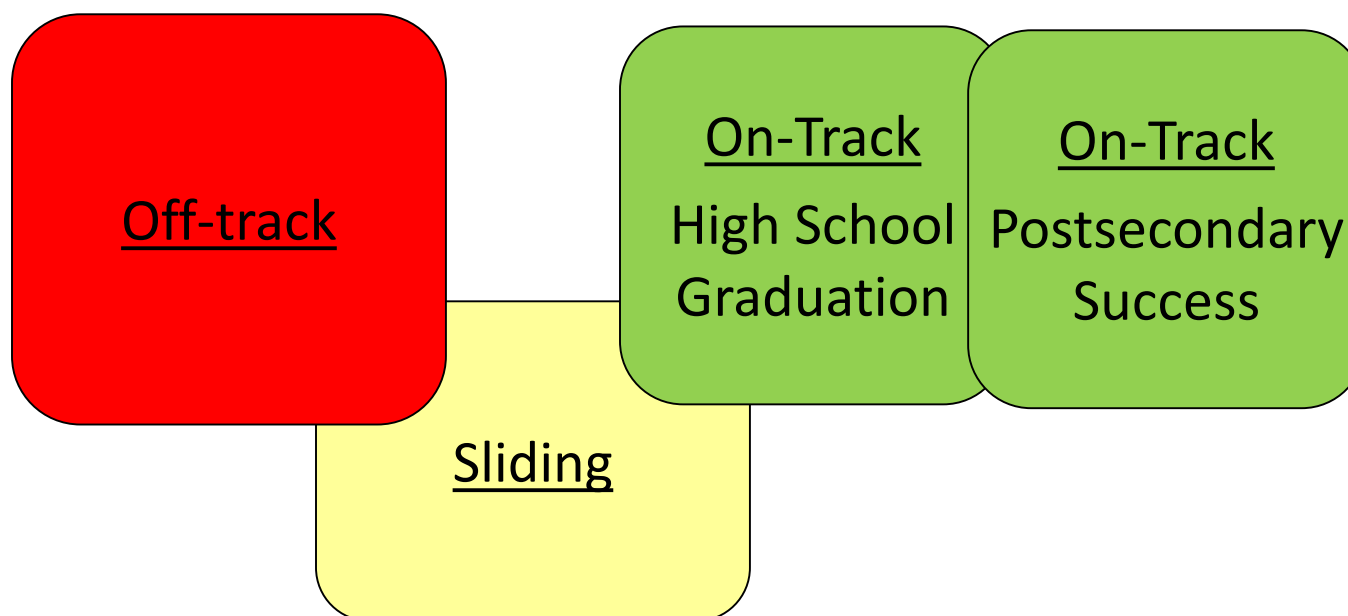
Research Takeaways - Attendance

- **Students who are missing 10% or more of school need intervention.**
- But it is the students who miss 5 or fewer days in the year who thrive.
- Attention should be paid to students who miss more than 5 days but less than 10%

Tracking	Data
Off-Track	Less Than 90%
On-Track	Greater Than 90%
College Ready	Greater Than 95%

Research Takeaways - Behavior

- **Students with sustained mild misbehavior fall off track in larger numbers**.

- It is important to track more minor as well as major incidents.

- Students who are suspended once need intervention to make sure they are not suspended again.

Tracking	Data
Off-Track	1 or More Suspensions **And/or** Mild Sustained Behavior
On-Track	No Suspensions

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Research Takeaways – Course Performance

- **Course Performance is as important for students' long-term success as test scores.**

- Students with multiple Ds and Fs seldom graduate.

- Students with B or better averages succeed in college.

Tracking	Data
Off-Track	Failing ELA and/or Math
On-Track	Passing ELA and/or Math
College Ready	B or Better

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Attendance, Behavior, Course Performance

	Attendance	Behavior	Course Perf.
Off-Track	Less than 90%	1+ suspension and/or mild sustained Behavior	Failing ELA and/or Math
On-Track	Greater than 90%	No suspensions or mild mis-behavior	Passing ELA and/or Math
College Ready	Greater than 95%		B or Better

Lessons Learned

- Use data to create a holistic view of students

- Organize data in multiple, user-friendly versions

- Analyze data with a purpose and determine specific action steps

- Use data as a tool not a weapon

Data Collection with a Purpose

Identify Off-Track Students

Develop an Intervention Plan

Organize that Data into Information

Student	Attendance		Behavior (referrals)		Course Performance			
	13-14 year	Sept	13-14 year	Sept	Math Q4	Math Sept.	ELA Q4	ELA Sept
#John	96%	5 days	7	0	B	68%	A	77%
#Adrian	93%	0	2	4, 1 Susp.	A	88%	C	53%
#Samuel	99%	0, 10 tardy	14	2	B	82%	D	55%
#Erica	81%	5	1	1	C	56%	B	87%

Step #1

Student level report for 2-3 students

- What trends do you notice?

- What supports/interventions/responses would you take at your school?

EWI Data

DIPLOMAS NOW

Q1

		Talent Development								Success Highways						
Gender	Grade	Absent	Tardy	Present	Suspensions	ELA	Math	Science	Soc Stud	Education	Confidence	Connections	Stress	Well-Being	Motivation	Academic Risk Index
F	6	0	0	100%	0					1	1	1	1	3	1	
M	6	0	0	100%	0	C	F	C	D	1	1	1	2	3	1	60-69%
M	6	1	1	97%	0	C	C	C	D	1	1	2	1	2	1	
F	6	10	0	74%	0	B	C	C	C	3	3	1	1	1	3	
F	6	2	0	92%	0			F	C	3	3	3	3	3	3	
M	6	1	0	98%	0	C	D	C	C	3	3	1	2	2	3	
M	6	1	0	98%	1	B	C	F	C	1	3	3	3	3	3	
F	6	2	0	94%	0	A	A	B	B	2	3	3	3	2	3	
M	6	1	0	97%	0	C	B	F	C	1	1	2	2	3	2	
M	6	1	0	97%	0	C	B	F	C	1	1	2	2	3	2	
M	6	9	2	71%	1	F	F	F	F	1	1	1	1	1	2	80-100%
F	6	5	0	87%	0	B	C	A	B	3	2	2	3	2	3	
M	6	0	0		0											

Step #2

Full class ABCs and resiliency

- What trends do you notice?

- What supports/interventions/responses would you take at your school?

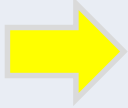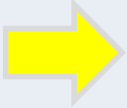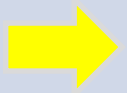# WHAT'S NEXT?
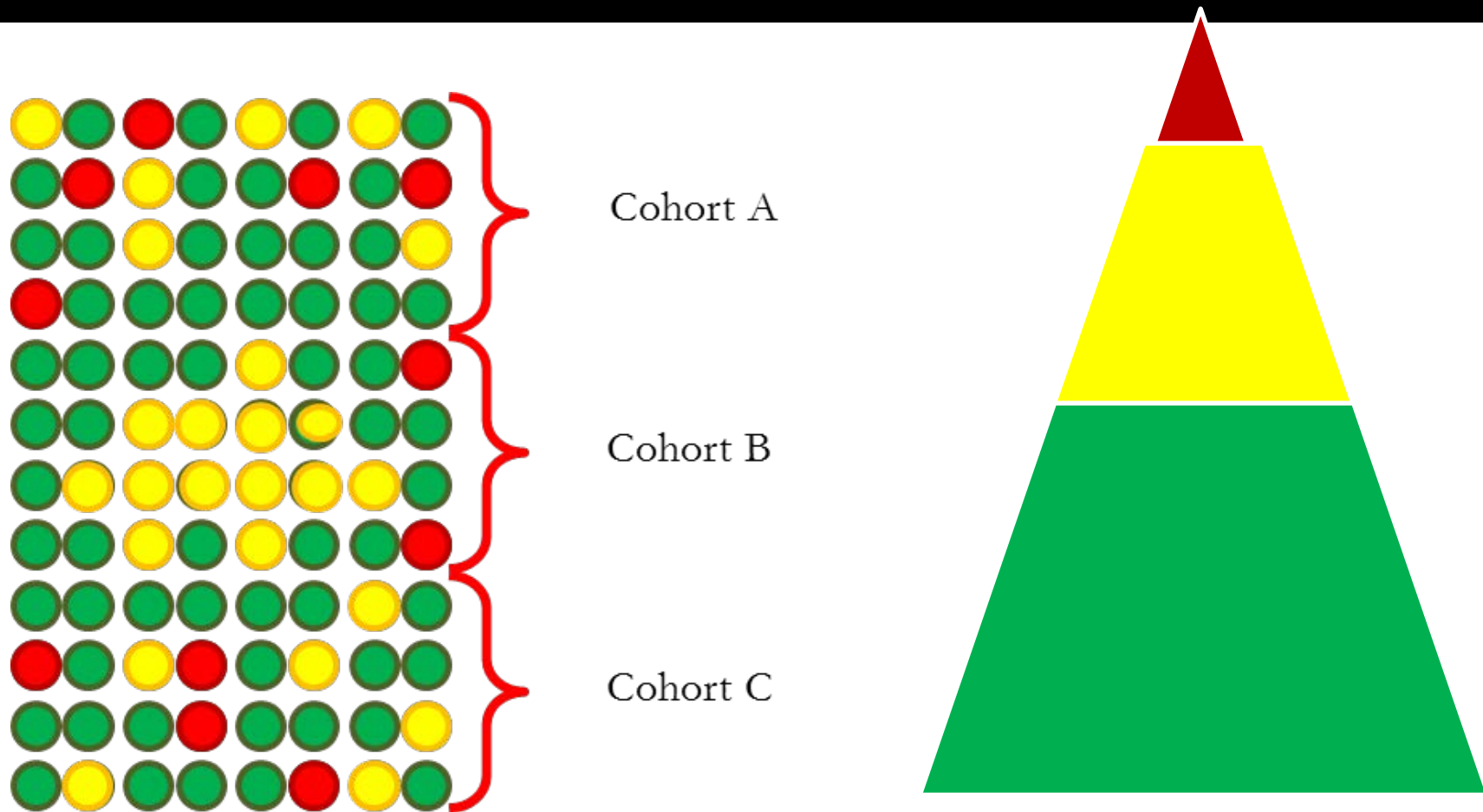
Student Data

Student	Attendance		Behavior (referrals)		Course Performance					
	Sept	09-10	Sept	09-10	Math Sept.	Math Q4	Change	ELA Sept	ELA Q4	Change
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#Samuel	0, 10 tardy	99%	2	14	82%	B	➡	55%	D	➡
#Erica	5	81%	1	1	56%	C	⬇	87%	B	➡

What a grade level looks like?

Cohort A

Cohort B

Cohort C

	Tier I Whole school	Tier II	Tier III Most Intensive
Attendance	• Weekly attendance recognition • Perfect attendance celebration (monthly) • Team competition for attendance	• Check and Connect • Wake up calls • Buddy System with another student • Recognition for improved attendance	• Home visit by counselor • Individual contract with student and parent
Behavior	• Cardinal Cash (Caught you doing something good) • Freshman Seminar lessons • Academy meetings • Outside Speakers	• Peer Mediation group • Daily Behavior contract • In-class interventions (seating, pairing, activity	• PREVENTION – Gang intervention group in the neighborhood • Visit one on one with social worker • Individual counselor sessions

How do we meet around these indicators?

- If its less then 20 than an individual counselor, social worker, or graduation coach can lead the effort.

- If its between 20 and 50 then a dedicated team of staff members-e.g. keeping students on track students support team can lead the effort.

- If its more than 50 than grade level or small learning community teacher teams will need to play a critical role. In some schools they are organized and supported by a "graduation" or "EWS" coach.

EWI Meetings

An interdisciplinary teacher team meeting to coordinate, create, and monitor interventions for students who are exhibiting early warning indicators.

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Recommendations

- Be creative and flexible with meetings

- Prioritize students based on teachers' recommendations and data

- Assess effectiveness of interventions and initiatives regularly
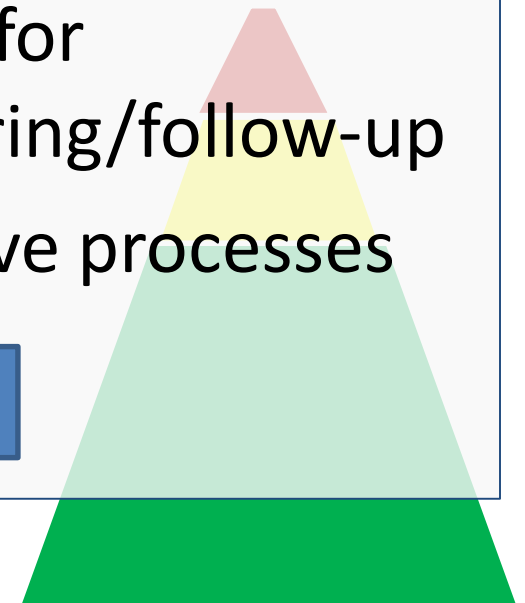
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