

# **Improving Educational Opportunities: A Randomized Evaluation Study of a High School Dropout Prevention Program**

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# BACKGROUND

- Importance of addressing high dropout rates, particularly in urban districts
- Recent federal dropout prevention evaluations indicated “most programs did not reduce dropping out,” primarily because programs were not sufficiently tailored to the particular needs of particular students (Dynarski and Gleason, 2002).

# Common Characteristics of Effective Dropout Prevention Programs

- 1) personalizing the experience of high school to increase student engagement through mentoring or counseling programs
- 2) focusing on increasing student attendance and achievement (tutoring or other academic support)
- 3) helping students to see a connection between high school work and life after high school

# Research Context

Implementation of the Educational Opportunity Program in two Baltimore high poverty neighborhood high schools involved:

A facilitator for 50-60 students who sought to encourage students regarding:

- Attendance
- Academic coursework
- Personal issues

# Research Context

Underlying theory of action:

Greater personalization of the high school experience would increase student engagement and attachment to school and result in reduced dropout outcomes.

# Research Questions

Did students assigned to program ultimately have better outcomes than the control group:

- Higher attendance
- Higher rate of on-time promotion
- Higher graduation rate/lower dropout rate

# Research Design

- Random assignment of incoming 9<sup>th</sup> grade students in 2004-05 to treatment and control groups in two urban high schools
- Longitudinal multivariate analysis of student outcomes over four years, through on-time graduation date in 2008

# Sample Characteristics

	% Male	% African American	% Special Ed	% F/RL
EOP (n=117)	52.1%	91.5%	31.6%	82.1%
Control (n=108)	51.9%	90.7%	25.9%	84.3%

No significant differences



# Sample Characteristics

Avg. 8<sup>th</sup> grade Attendance

EOP 83% Control 80% (difference not significant)

EOP students had significantly higher 8<sup>th</sup> grade test scores, but high level of missing data

Differences in 7<sup>th</sup> grade test scores (much less missing data) were not significant

# Data Sources

- Student level administrative records
- Student Survey and focus groups in Year 1
- Program facilitator log records and yearly interviews

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# RESEARCH FINDINGS

# Program Implementation

Program Facilitators reported high levels of implementation:

- monthly meetings with most students still enrolled in school
- several parental conferences and home visits each month
- frequent meetings with teachers and administrators
- occasional referrals of students for additional services (employment, tutoring services, social services/family counseling, and mentoring).

# Study Implementation Problems

- Study agreement to include all students still on roll by November 1 of Year 1
- Facilitators excluded additional students still on roll but not successfully contacted by end of first semester from further outreach
- These students stayed in the data analysis, but were not considered program students by facilitators; outcomes could have been different if outreach implementation continued

# Student Opinions of Program

- Majorities of program students surveyed at each school at the end of 9<sup>th</sup> grade felt EOP helped them with attendance and doing well with school
- Males were more likely to respond positively to the program than females (who had higher 8<sup>th</sup> grade attendance and achievement than males)

# Achievement Outcomes

On-time graduation rates (excluding students who transferred out of district) were:

35.0% for EOP students

27.5% for control students

Difference not statistically significant

# Achievement Outcomes

Potential graduation rates (graduates plus students still enrolled in school, excluding students who transferred out of district) were:

55.0% for EOP students

42.9% for control students

( $F=2.82$ ,  $p=.095$ ), effect size = .24



# Achievement Outcomes

Logistic Regression Outcomes  
Graduation vs. Non-Graduation  
(transfers excluded)

	Odds Ratio	p-value
Male	.41	.010
8 <sup>th</sup> Grade Attendance	1.05	.001
EOP	1.47	.269

# Achievement Outcomes

Logistic Regression Outcomes  
Graduation/Still in School vs. Non-Graduation  
(transfers excluded)

	Odds Ratio	p-value
Male	.45	.018
8 <sup>th</sup> Grade Attendance	1.07	.000
EOP	1.68	.125

# Additional Analyses

- Exclusion of “disputed students” results in:
  - a nearly significant coefficient for EOP ( $p=.07$ ) in the logistic regression model for graduation/still in school vs. non-graduation
  - a non-significant coefficient for EOP ( $p=.223$ ) in the logistic regression model for graduation vs. non-graduation
  - This analysis is questionable since it could not exclude similar students from control group (no clear rules to follow as in study design)

# Attendance Outcomes

Attendance rates for EOP and control students not significantly different

	2004-05	2005-06	2006-07	2007-08
EOP	78%	74%	72%	75%
Control	73%	74%	74%	74%

# On-Time Promotion Outcomes

On-time promotion rates for EOP somewhat (but not significantly) higher than for control students

	On-time 10 <sup>th</sup>	On-time 11 <sup>th</sup>	On-time 12 <sup>th</sup>
EOP	57.0%	40.0%	45.0%
Control	53.3%	34.8%	33.7%

# Study Limitations

Problem in implementing the “rules” of defining program participants affects analysis

Qualitative data collection among student participants supported for only first year

Inability to track GED completion rates for both EOP and control groups

# Conclusions

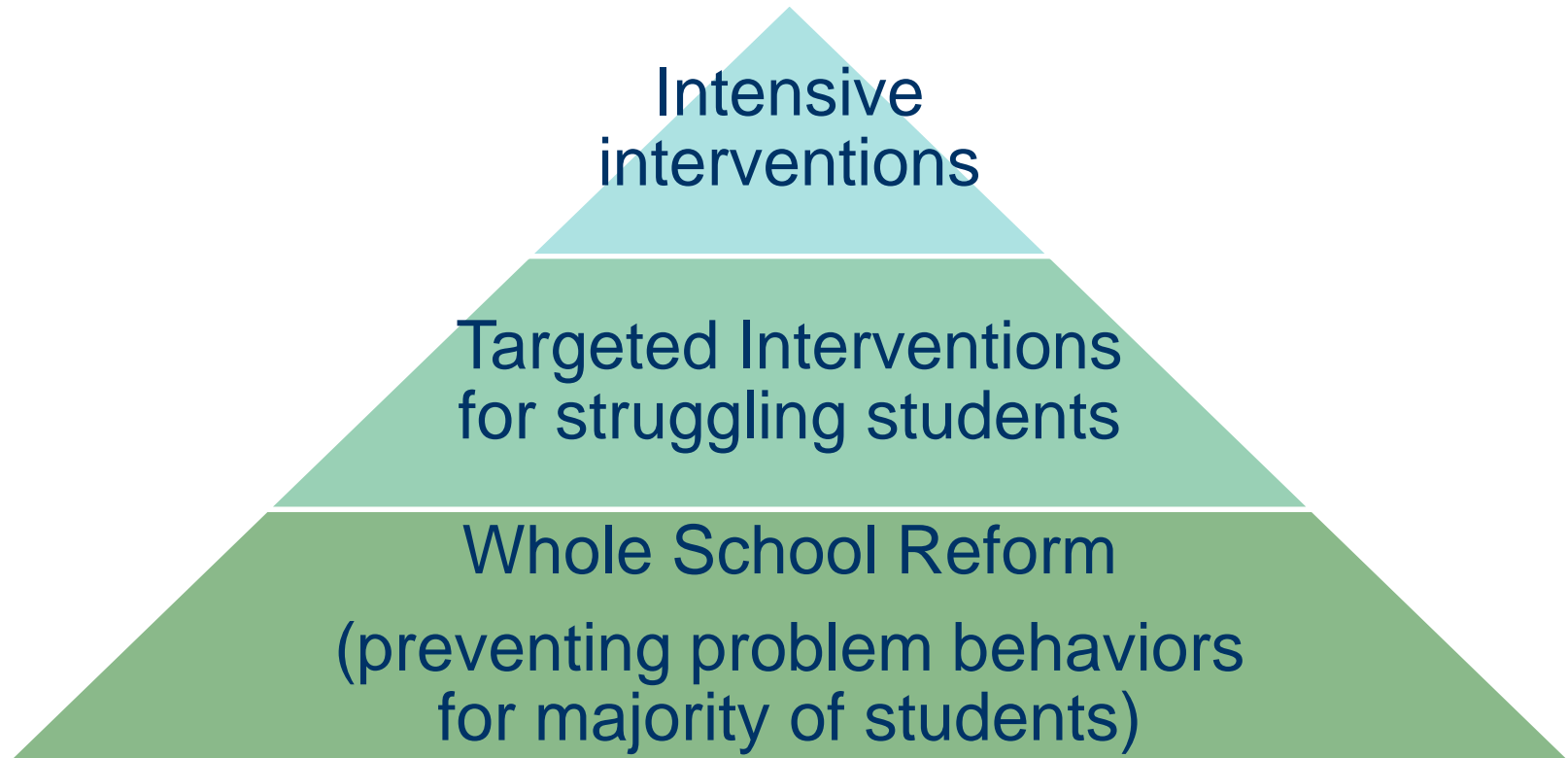
The program effects were small, even though implementation was high

- Programs that begin in 9<sup>th</sup> grade have difficulty addressing entrenched problem of low attendance that began during middle school
- Program did not address instructional quality or whole school climate issues

- A patchwork of separate, non-integrated programs is generally not an effective approach to dropout prevention
- All issues need to be addressed simultaneously in a systematic, integrated way
- Need comprehensive approach based on prevention, early warning systems, and systematic interventions

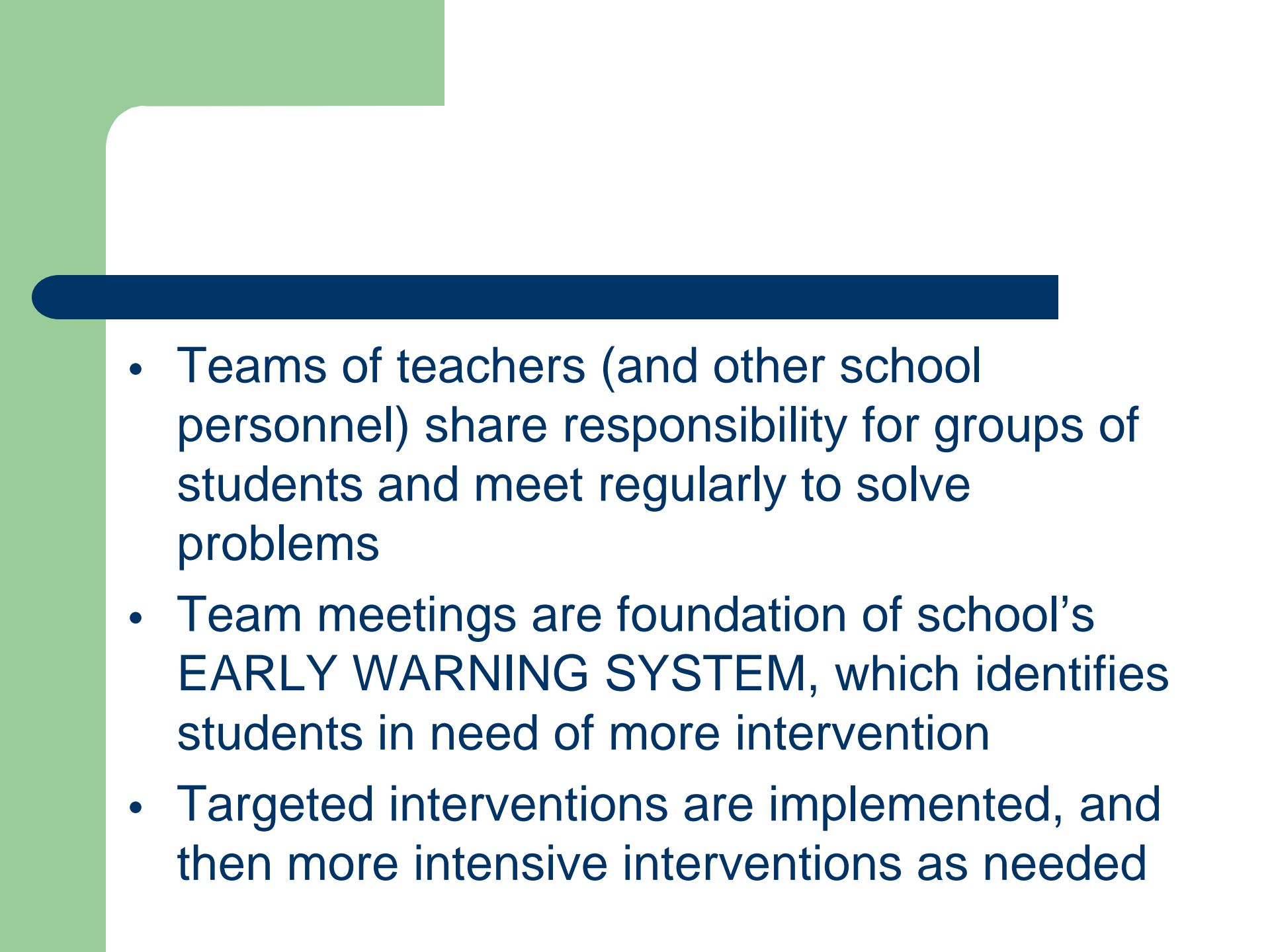


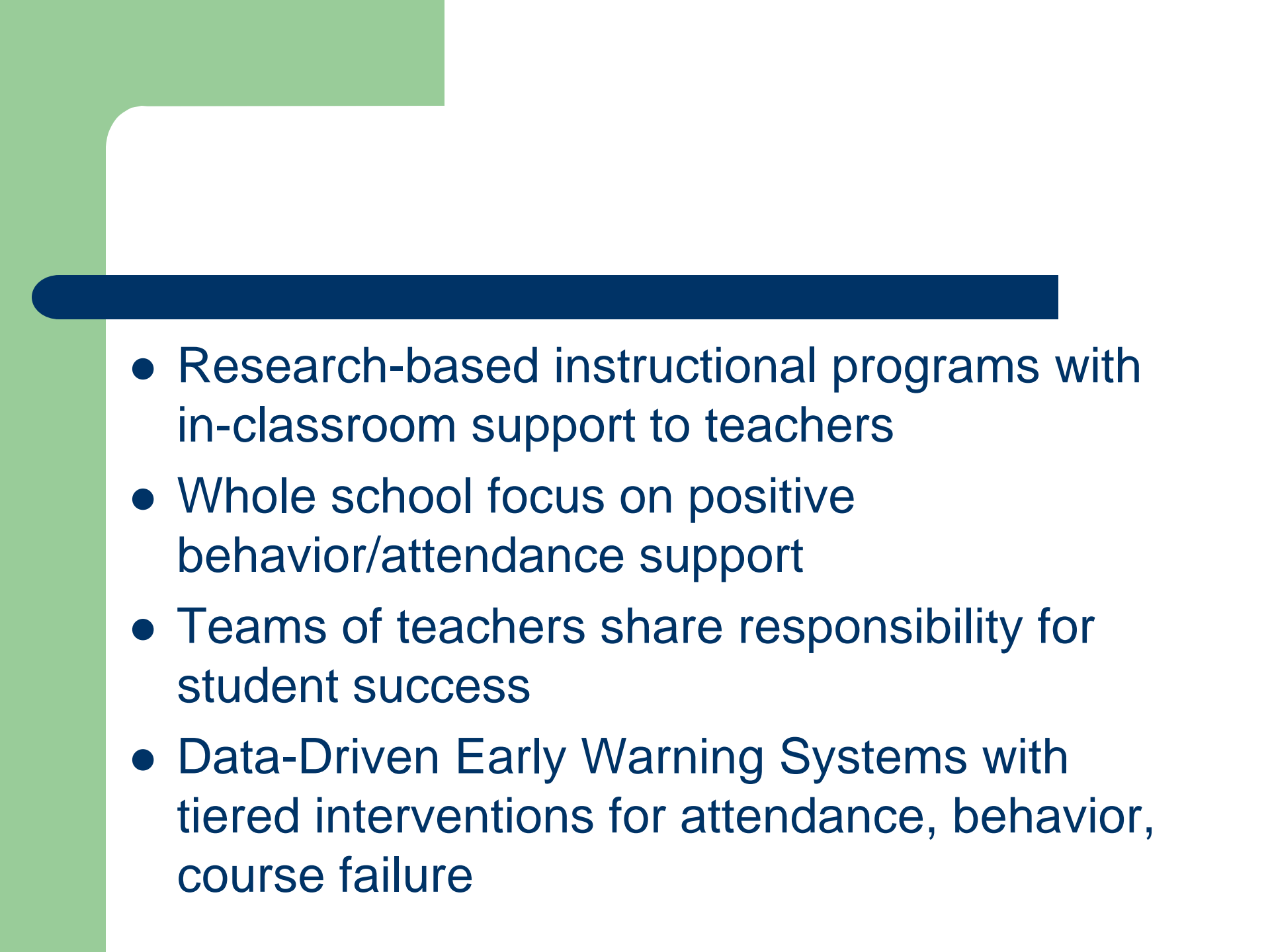
# The Need for a More Integrated Approach to Dropout Prevention



# 3-Tiered Schoolwide Prevention Model

1. Primary Level -- Schoolwide programs aimed at alleviating 75% or so of the problem behaviors (attendance, behavior, course performance)
2. Secondary Level -- Targeted shepherding for the 15% to 20% of students who need additional supports beyond the schoolwide efforts
3. Tertiary Level -- Intensive efforts involving specialists (counselors, social workers, tutors) for the 5% to 10% who need more clinical types of support

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- Teams of teachers (and other school personnel) share responsibility for groups of students and meet regularly to solve problems
  - Team meetings are foundation of school's **EARLY WARNING SYSTEM**, which identifies students in need of more intervention
  - Targeted interventions are implemented, and then more intensive interventions as needed

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- Research-based instructional programs with in-classroom support to teachers
  - Whole school focus on positive behavior/attendance support
  - Teams of teachers share responsibility for student success
  - Data-Driven Early Warning Systems with tiered interventions for attendance, behavior, course failure

**For More Information:**

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