

# **Identifying Students At-Risk for Dropping Out of High School: Overview of a Tool for Developing Early Warning Systems**

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# Network of Content Centers and Regional Comprehensive Centers

## Five Content Centers (CCs)

- ***National High School Center***
- Assessment and Accountability Comprehensive Center
- Center on Innovation and Improvement
- *National Comprehensive Center for Teacher Quality*
- *Center on Instruction*



## Regional Comprehensive Centers (RCCs)

(16 Regional Centers)



## State Education Agencies (SEAs)



## Local Education Agencies (LEAs)

- Serve as the central source of research and information on high school improvement for the Regional Comprehensive Centers
- Identify, summarize and disseminate information on:
  - latest research and innovations
  - useful programs, tools, and products
  - high-quality technical assistance relating to high schools and their diverse student populations
- Build capacity of RCCs to promote and support high school improvement at all levels

## True/ False Quiz

Nearly one-third of all high school students leave the public school system before graduating.	T	F
1.2 million students drop out of high school each year – a projected 12 million over the next decade.	T	F
Fifteen percent of U.S. high schools produce 50 percent of the country's dropouts.	T	F
It is hard to acquire good data that can predict whether a student is likely to drop out of high school.	T	F

## This Presentation

- Overview of early warning systems to identify potential high school dropouts
  - Background on academic indicators of high school dropout
  - Lessons from research on “high yield” academic indicators
- Demonstration of data tool - Building EWS in schools
- Research-based dropout prevention interventions
- Building EWS in districts and states

## Ninth Grade is a Critical Year

- Ninth grade is a “make or break year”
  - More students fail 9th grade than any other grade in high school
  - A disproportionate number of students who are held back in 9th grade subsequently drop out
- By the end of 9th grade or even during the first semester, powerful indicators exist that can predict whether students will complete high school
  - Engagement
  - Course performance
  - “On-Track” Indicator

Herlihy, C. (2007). *State and district-level supports for successful transition into high school*. Washington, DC: National High School Center.

Allensworth, E., & Easton, J.Q. (2007). *What matters for staying on-track and graduating in Chicago Public High Schools: A close look at course grades, failures and attendance in the freshman year*. Chicago: Consortium on Chicago School Research.

# What are the Key 9<sup>th</sup> Grade Indicators?

## Engagement

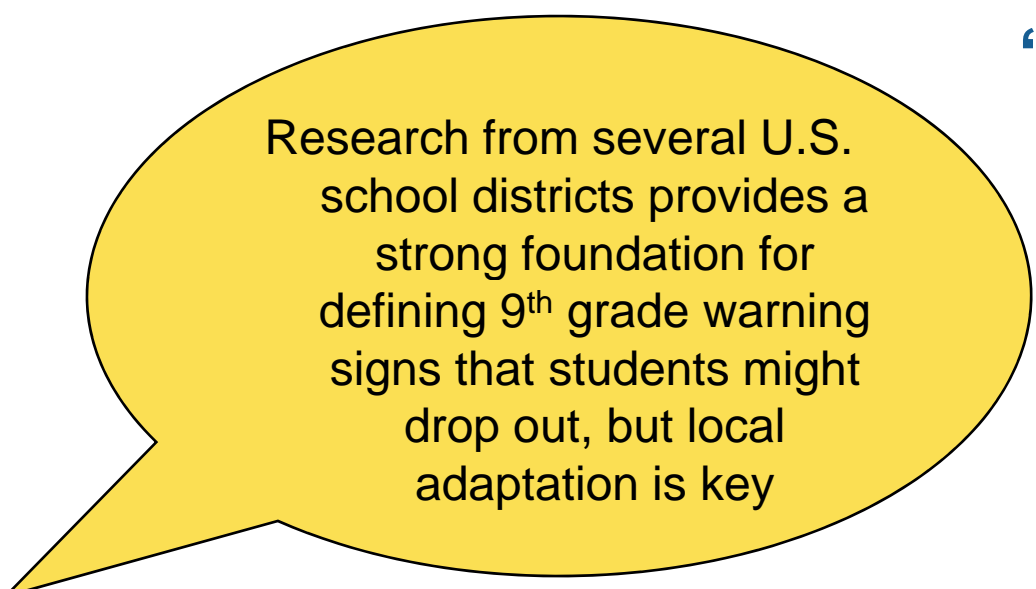
- Attendance/  
absenteeism

## Course Performance

- Course grades
- Number of credits earned

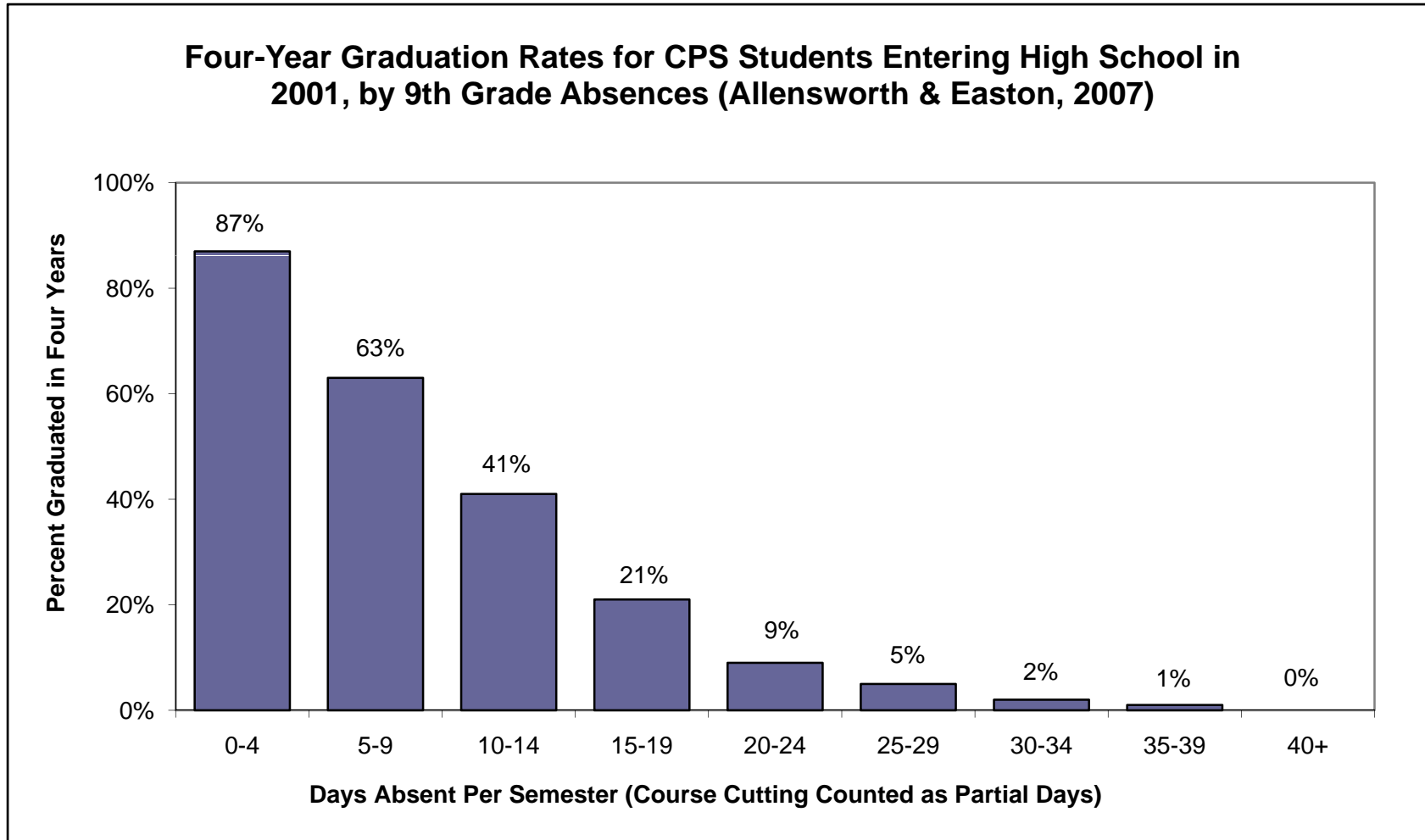
## “On-track” Indicator

- Core course performance & accumulated credits

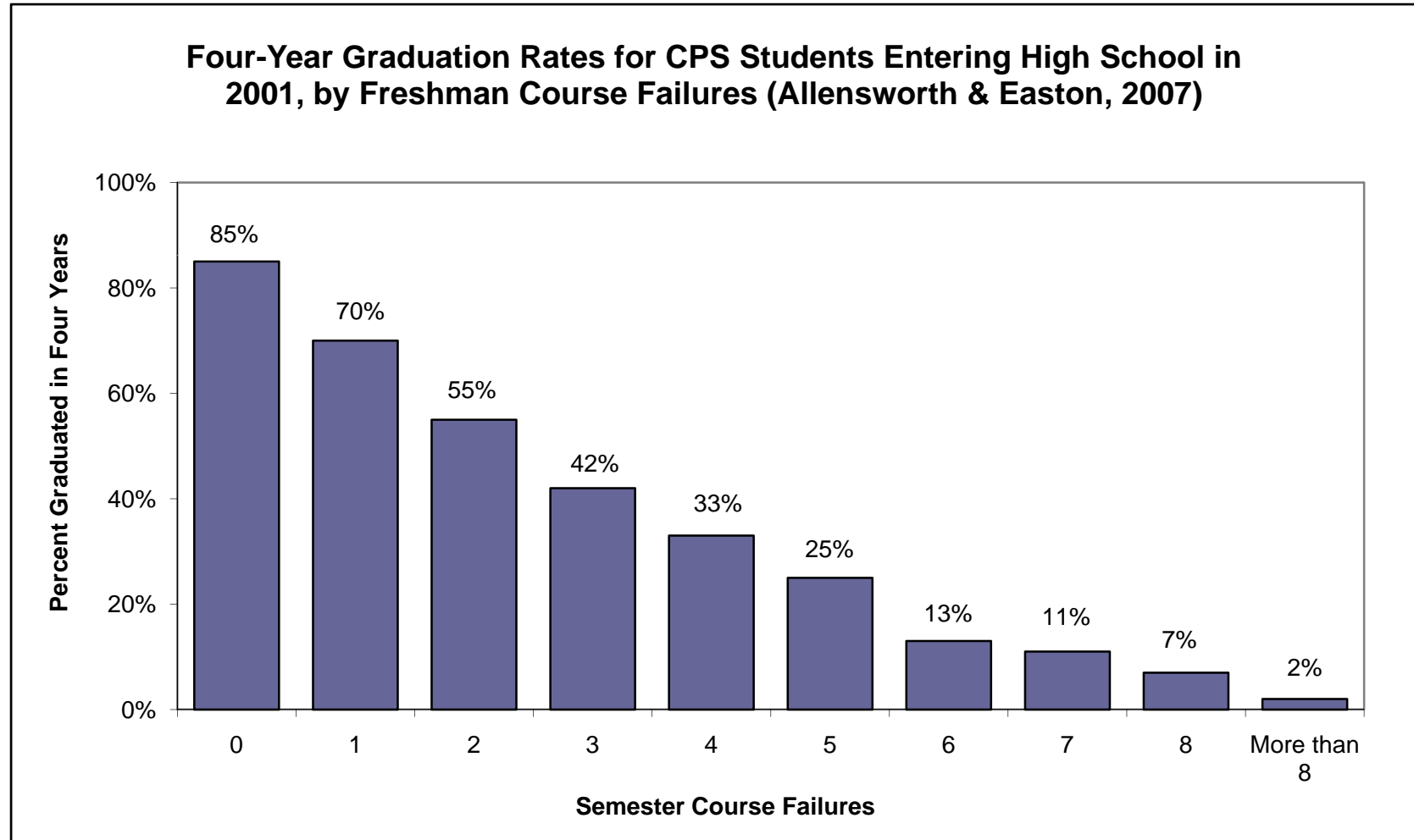


Research from several U.S. school districts provides a strong foundation for defining 9<sup>th</sup> grade warning signs that students might drop out, but local adaptation is key

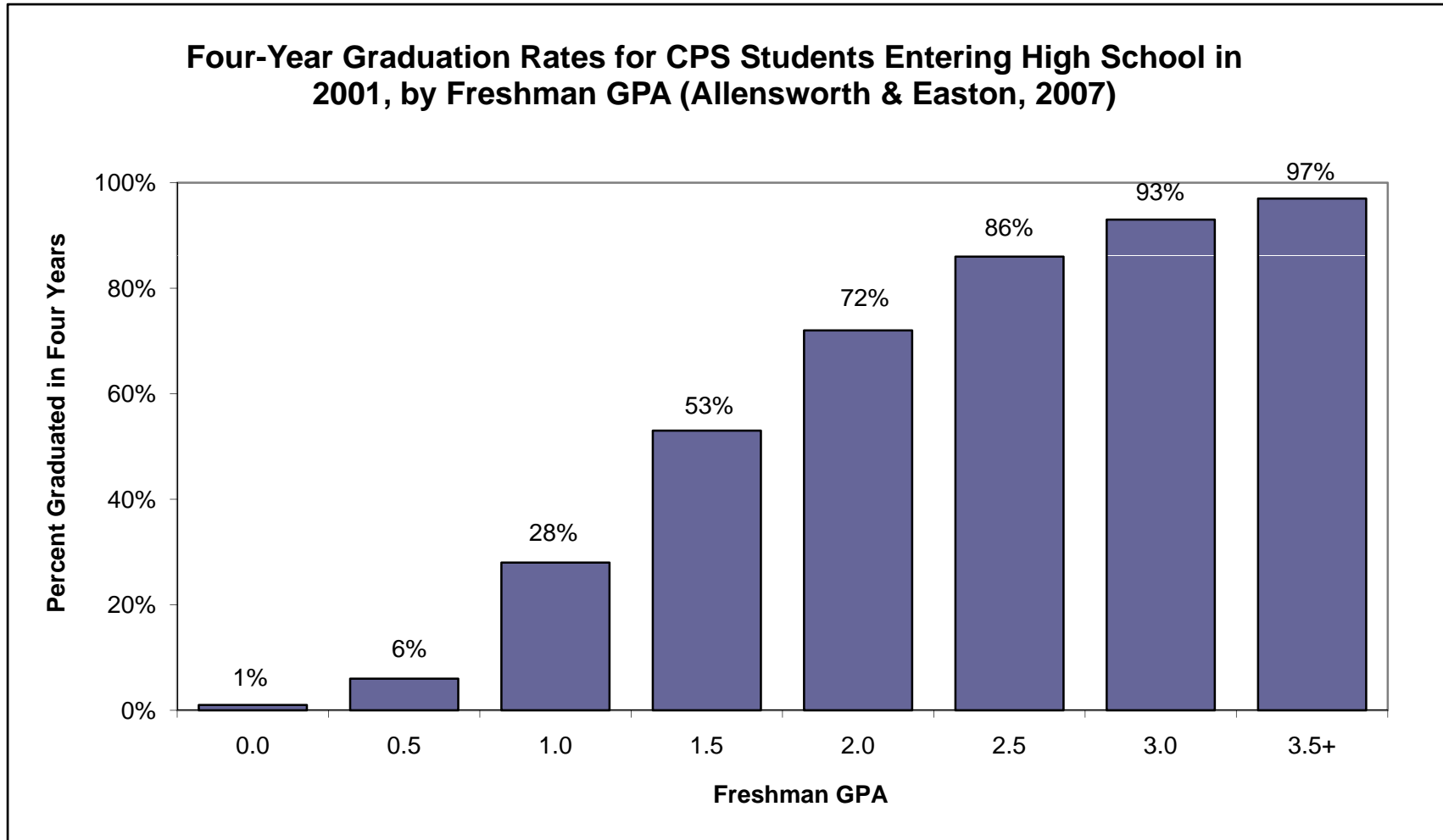
# “High-Yield” Academic Indicators: Attendance



# “High-Yield” Academic Indicators: Course Failures



# “High-Yield” Academic Indicators: GPA



## Chicago's "On-track" Indicator

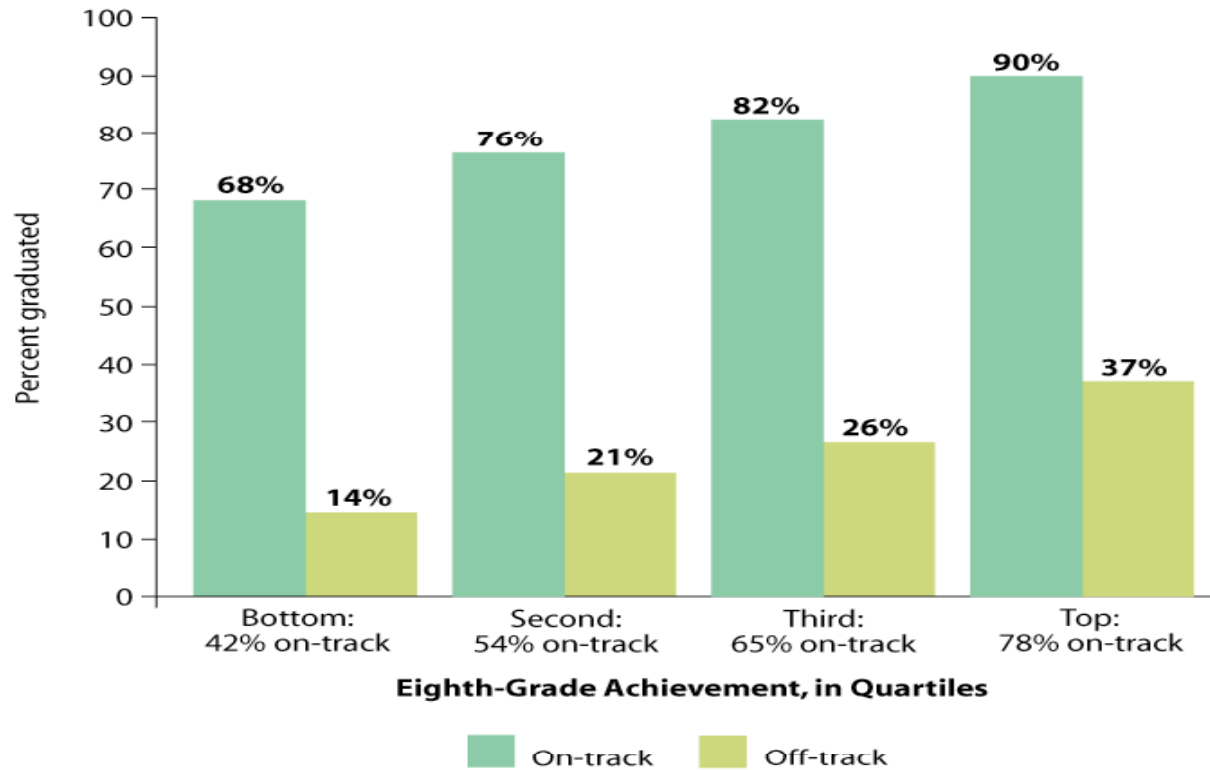
Students are "on-track", if they:

- 1) have not failed more than one semester long core course, **AND**
- 2) have accumulated enough credits for promotion to the 10th grade.

Number of Semesters with Fs in Core Courses	# of Credits Accumulated Freshman Year	
	Less than 5	5 or more
2 or more courses	Off-track	Off-track
0 or 1 courses	Off-track	On-track

# On-Track Indicator

**Four-Year Graduation Rates by On-Track Status after Freshman Year and Incoming Reading and Mathematics Achievement**  
*Students entering high school in September 2000*



Source: Allensworth & Easton (2005)

## “High Yield” 9<sup>th</sup> Grade Indicators

Indicators	Benchmark ( <b>red flag</b> )
Absenteeism	Missing 10% or more of instructional time
Course failures	One or more failed course
Grade point average	2.0 or lower (on a 4-point scale)
“On-track”	Fail two or more semester core courses, or accumulate fewer credits than the number required for promotion to the 10th grade

## Building Early Warning Systems in High Schools

- Demonstration of simple tool designed to help high schools use data they already have for dropout prevention
  - [http://www.betterhighschools.org/pubs/ews\\_guide.asp](http://www.betterhighschools.org/pubs/ews_guide.asp)
  - <http://www.betterhighschools.org/pubs/EWStool.xls>

# Dropout Prevention Strategies

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- Focus on achievement in core courses
- Content recovery courses
- Tiered approaches
- Tutoring as an academic support
- Attendance and behavior monitors
- Advisories and team teaching
- Counseling and mentoring
- Small learning communities and school within a school for greater personalization
- Partnerships between high schools and feeder middle schools
- Ninth grade transition programs
- Support for students with disabilities outside of school
- Career and college awareness
- Family engagement
- Community engagement

# District and State Roles in Building and Using Early Warning Systems

## The District Role in Developing Early Warning Systems to Identify Potential Dropouts

- Readiness
- Local Adaptation
- Identification
- Accountability

- Taking inventory of readily available data and data elements collected
- Developing tools for use by district and school to support the key elements of the warning system
  - Data Collection
    - Data elements
    - Data systems
    - Accessibility of data
- Training staff
  - Data analysis for identifying key indicators
  - Using the early warning systems tool

- Conducting data analysis for the local context
  - Vertical analysis
  - Historical analysis
  - Persistent problems
  - Continuous analysis
- Resource: Jerald, C. (2006). *Identifying potential dropouts: Key lessons for building an early warning data system*. Washington, DC: Achieve, Inc.  
([http://www.achieve.org/files/FINAL-dropouts\\_0.pdf](http://www.achieve.org/files/FINAL-dropouts_0.pdf))

### Questions for Analysis

What percentage of students *with each risk factor (or combination)*...

1. Dropped out?
2. Graduated (in 4 or 5 years)?

What percentage of students *without each risk factor (or combination)*...

1. Dropped out?
2. Graduated (in 4 or 5 years)?

	Displayed Early Warning Sign in 9 <sup>th</sup> Grade?	
Graduated in 4 (or 5) Years?	YES	NO
YES	<i>False Positive (or Effective Intervention)</i>	<b>Accurate Prediction</b>
NO	<b>Accurate Prediction</b>	<i>False Negative</i>

- Identifying areas of need (e.g., schools, student subgroups)
- Targeting resources to support schools
  - intervention strategies for at-risk students
  - collaboration among high schools across the district or region

- Developing strategies to refine and improve continuously the predictive power of indicators in the local context
- Including the on-track indicator as an accountability measure for schools in the district

# The State Role in Developing Early Warning Systems to Identify Potential Dropouts

## The State Role

- Readiness
  - Inventory
  - Tools
  - Training
- Targeted Assistance
  - Allocating resources based on critical areas of need
  - Identifying “drop-out factories” (Balfanz & Legters, 2004) (<http://www.msnbc.msn.com/id/21532193>)
- Accountability
  - Progress
  - Interventions
- Communication

**For more information from the  
National High School Center on Dropout  
Prevention and  
Early Warning Systems:**

<http://www.betterhighschools.org/topics/DropoutWarningSigns.asp>