

# NATIONAL STUDENT ATTENDANCE, ENGAGEMENT, AND SUCCESS CENTER



## 2018 National Convening

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Baltimore, Maryland



**NSAESC**

National Student Attendance, Engagement, and Success Center

NATIONAL STUDENT ATTENDANCE, ENGAGEMENT, AND SUCCESS CENTER

# LESSONS LEARNED FROM IMPLEMENTING EARLY WARNING INTERVENTION AND MONITORING SYSTEMS

Jenny Scala | Senior Researcher | American Institutes for Research

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MAKING  
RESEARCH  
RELEVANT

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# American Institutes for Research

Established in 1946, with headquarters in Washington, DC, American Institutes for Research (AIR) is an independent, nonpartisan, not-for-profit organization that conducts behavioral and social science research and delivers technical assistance both domestically and internationally.

As one of the largest behavioral and social science research organizations in the world, AIR is committed to empowering communities and institutions with innovative solutions to the most critical challenges in education, health, workforce, and international development.

# Agenda

1. An overview to early warning systems
2. Key early warning indicators
3. Lessons learned from early warning intervention and monitoring system (EWIMS) randomized control trial
4. Overview of EWIMS and resources

# Introductions

- Name
- Role and location
- Share two things:
  - Why you were interested in this session
  - One thing that will make this session successful for you



designed by  freepik.com

## Early warning systems

- What's an EWS outside of education?



# Key Terms

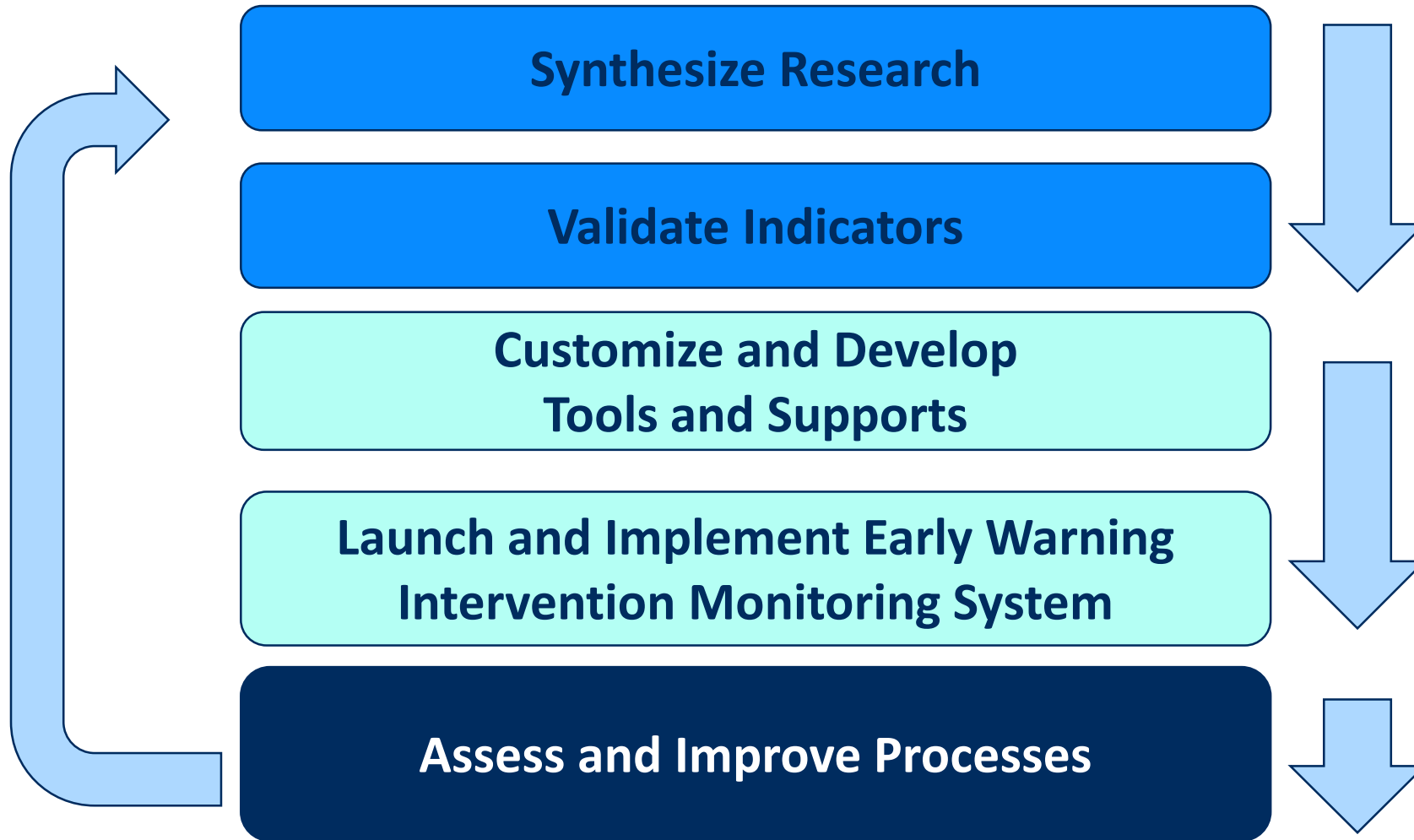
- Early warning indicators (EWI): measures that determine if a student is at risk of educational outcome of interest; should be valid and reliable
- Early warning system (EWS): process of using EWI data to identify at-risk students early and take action to get students back on track
- Early warning intervention and monitoring system (EWIMS): AIR's seven-step EWS implementation model; EWIMS research base meets ESSA evidence
- Outcome of interest: an EWS needs to have an outcome of interest; most common is on-time high school graduation

# AIR's Early Warning System History

- National High School Center
  - Free Excel tool for high school and middle school (downloaded more than 30,000 times)
  - Free implementation support
- Validated early warning indicators for states and districts
- Conducted external evaluations of other early warning system programs
- Provided technical assistance in over 30 states



# AIR's EWS Implementation Pathway



# What is an EWS?

An EWS:

- Uses readily available school data
- Relies on indicators that predict students' likelihood of meeting a desired outcome (e.g., high school graduation, college readiness)
- Includes a tool for educators to target student interventions
- Provides information to educators so that adults can take actions to support at-risk students in a timely manner

# Key Early Warning Indicators: ABCs

# Common Early Warning Indicators for High School Graduation



Attendance



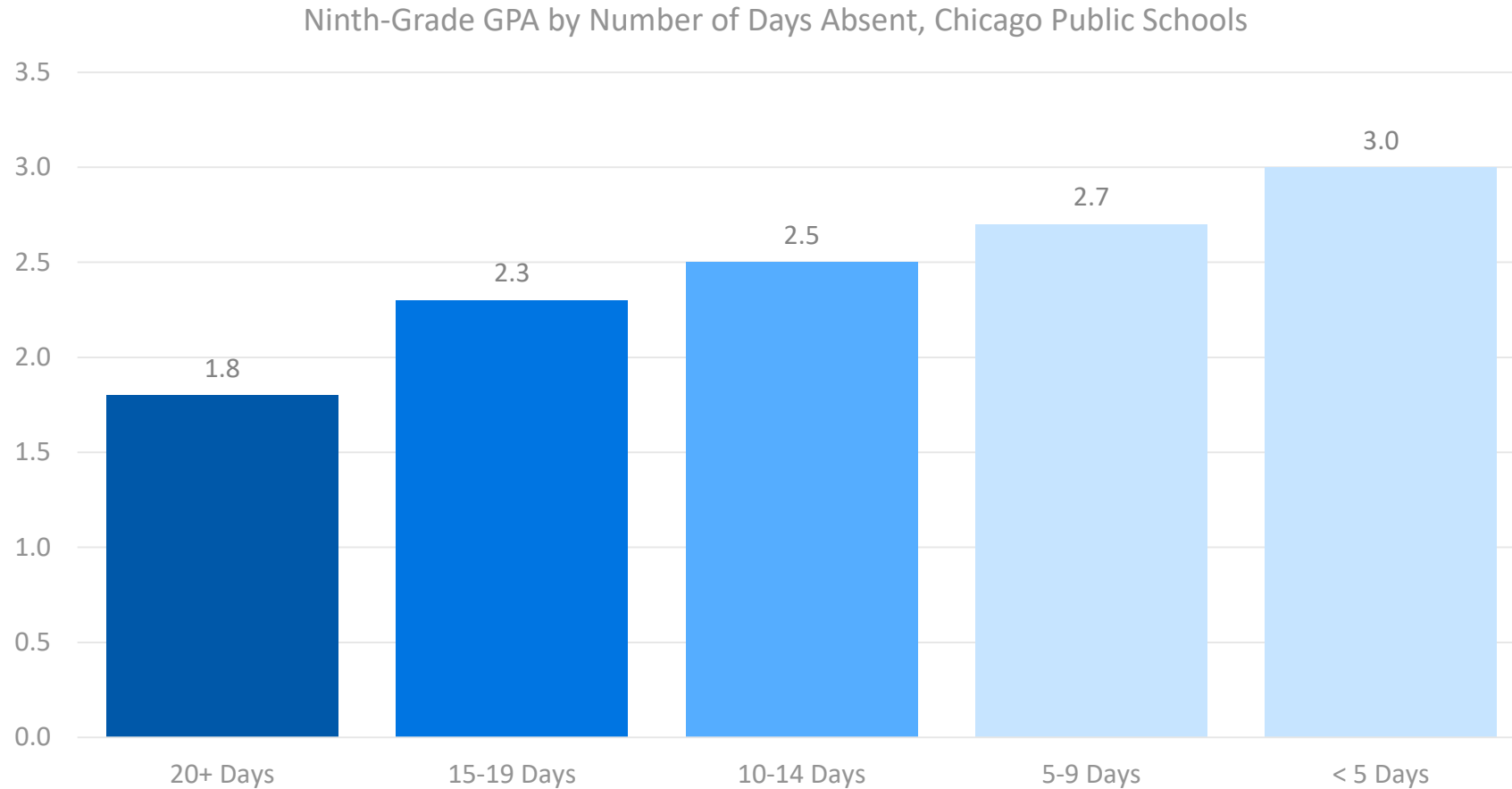
Behavior



Course  
Performance

Images from Freepic and Eucalyp on flaticon.com

# A Few Absences Can Add Up



(Allensworth et al, 2015)

# Early Warning Indicators

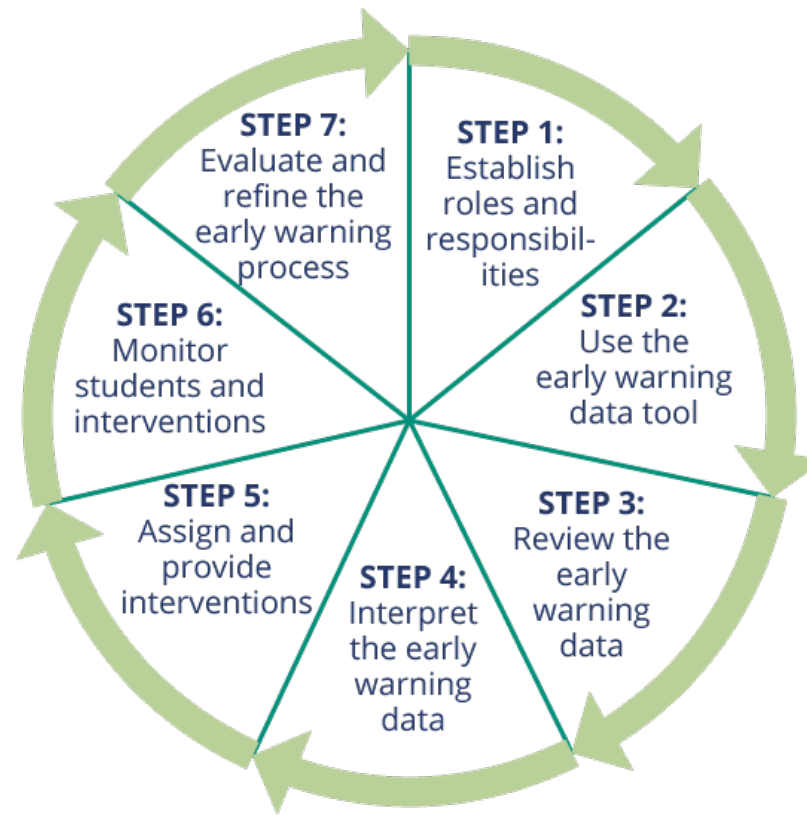
*Early warning indicators are used only for prediction—they do not cause students to drop out. Rather, they should be treated as symptoms of the dropout process that is in progress.*

Research from several U.S. school districts provides a strong foundation for early warning indicators, but  
**local adaptation is key.**

# Lessons Learned from Implementing an Early Warning System

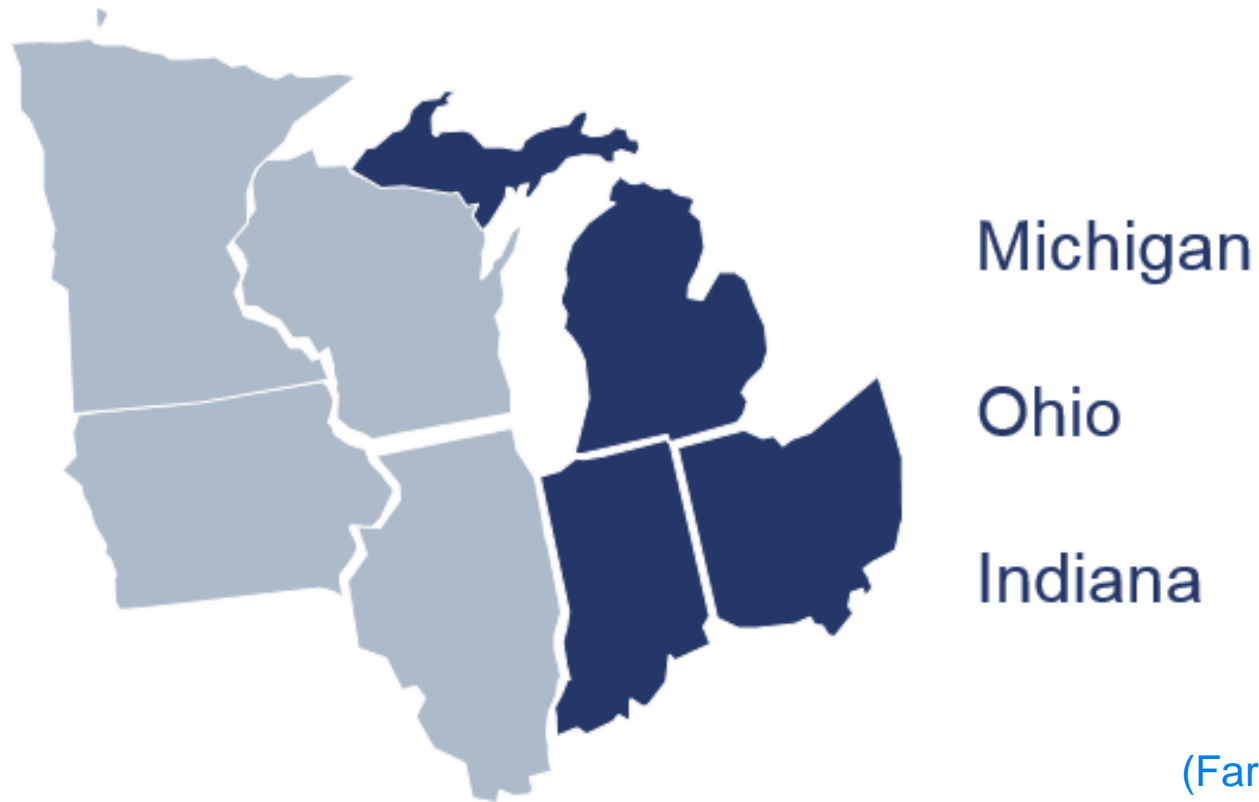
The study of the Early Warning Intervention and Monitoring System

# Early Warning Intervention and Monitoring System (EWIMS)





# On-Time Graduation Project Study by REL Midwest



(Faria et al, 2017)

# EWIMS School Sample

73

participating schools

**86%** average four-year graduation rate

**321** average grade 9 school enrollment

**38%** rated as "high" on initial data capacity

# 50 Percent of Students Flagged as At Risk in the EWS Tool

12 percent of students flagged for both chronic absence and course failures



30 percent for chronic absence



26 percent for failing one or more courses

24 percent for a low GPA



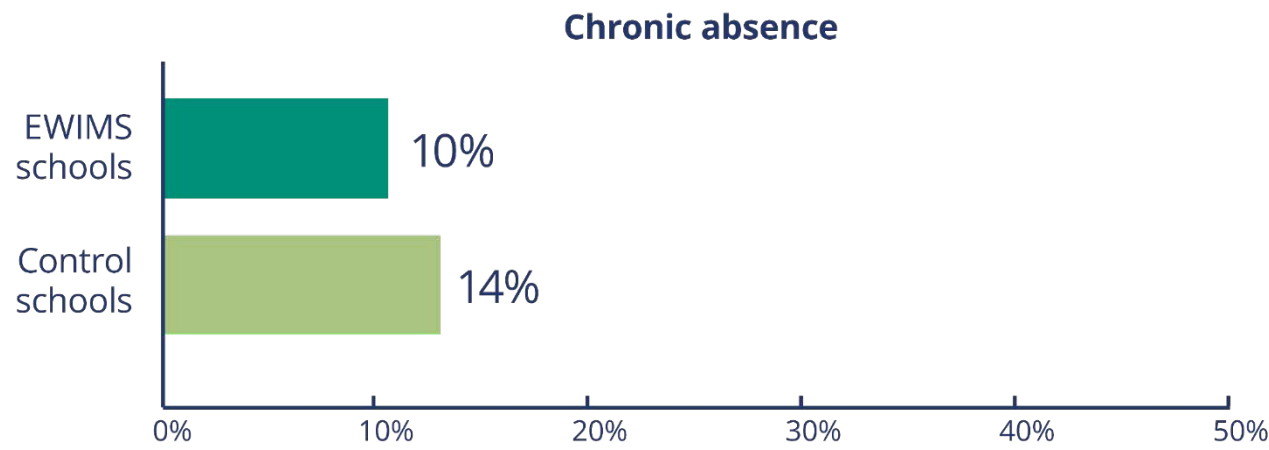
6 percent for suspensions

# Results: Attendance



A lower percentage of students were at risk due to chronic absence in schools implementing EWIMS compared to control schools

★ Statistically Significant

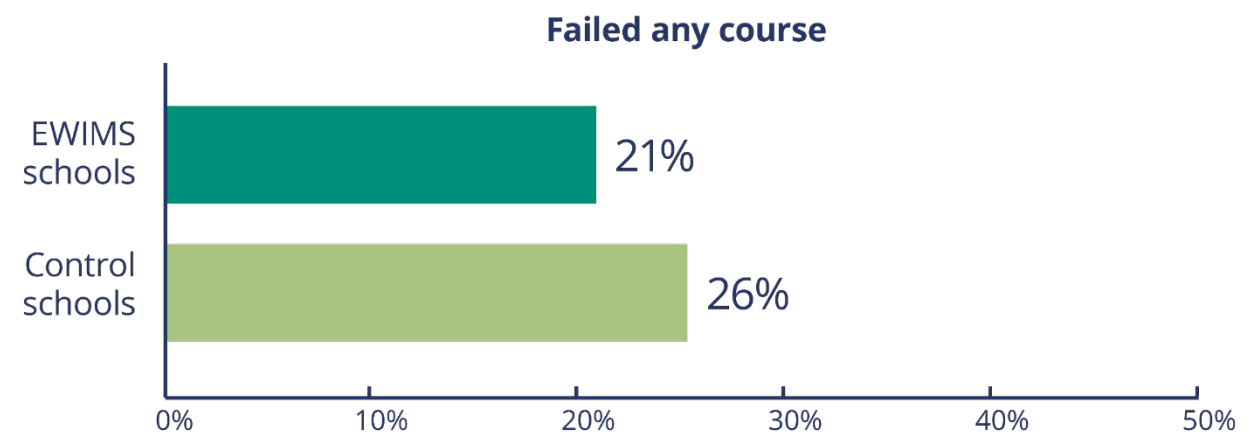


# Results: Course Performance

A lower percentage of students were at risk due to course failure in schools implementing EWIMS compared to control schools



★ Statistically Significant

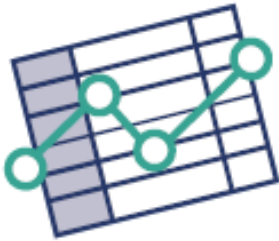


# Interesting Realization

*All schools* reported using data to support high school graduation, but ***only EWIMS schools*** had statistically significant impacts for improving attendance and course performance.

# Implementation Challenges

Common **challenges** included:



**Difficulty importing  
data into the tool**



**Staff turnover**  
*(challenges getting new  
team members up to speed)*



**Limited staff time to  
fully implement EWIMS**

# Discussion Time

- What questions does this raise?
- What resonates for you?
- What do you want to learn more about?
- What similar experiences do you have?

Introduce yourself to someone you don't know, discuss these questions, and be prepared to report out.

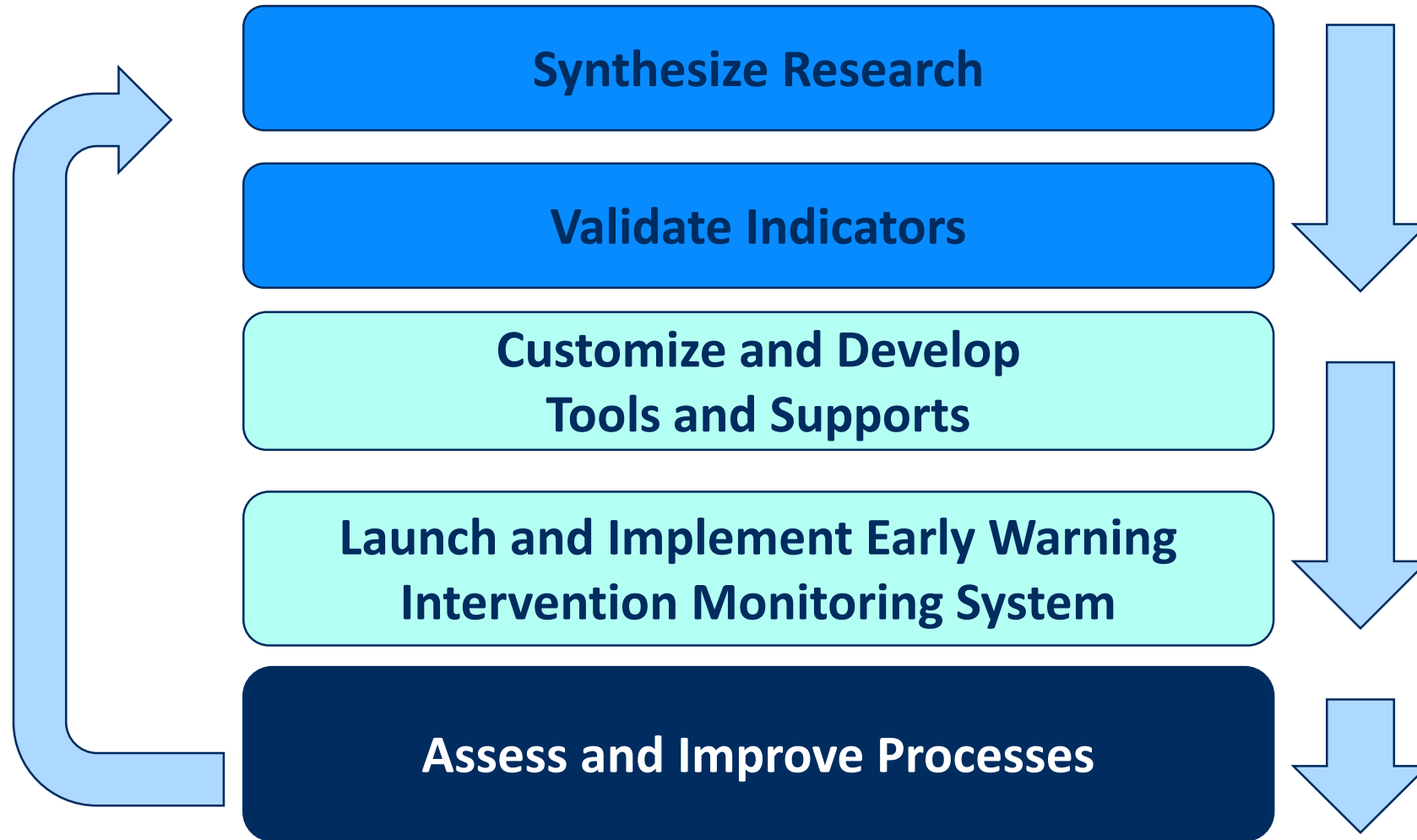


# Lessons Learned

- School Level
  - Empower action through effective leadership
  - Beware overwhelming staff
  - Take a whole-student, whole-school approach
- District Level
  - Empower schools
  - Identify and address district-wide needs
  - Streamline access to data

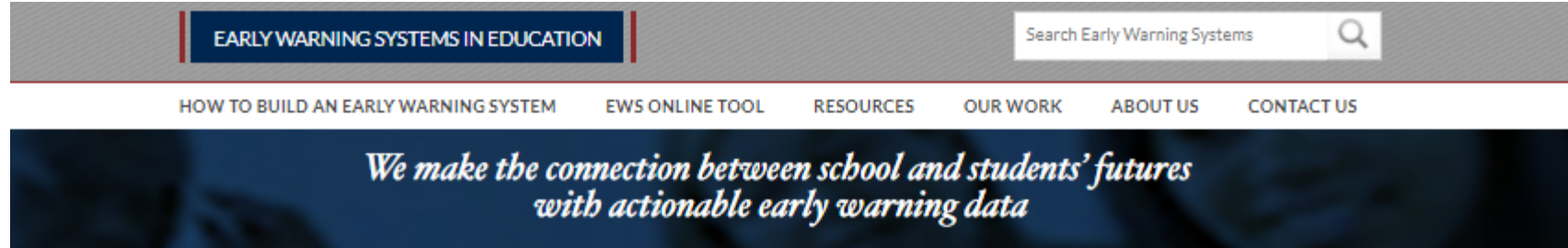
Source: O'Cummings & Therriault, 2015

# AIR's EWS Implementation Pathway



# Resources and Questions

<http://www.earlywarningsystems.org>



## Early Warning Systems Pathway

### The Implementation Path

States, districts, and schools use research-based indicators to identify students at-risk of failing to meet key educational milestones such as reading at grade level, on-time graduation, or college readiness and college persistence. By identifying students early, educators can target interventions and supports to help students to achieve readiness and success. From the early stages of planning through evaluating results, AIR works with education leaders to customize and refine early warning systems based on the best available research and evidence. See how we help schools, districts, and states develop effective early warning systems.



Synthesize  
Research



Validate Indicators



Customize Tools  
and Supports



Launch and  
Implement



Assess and  
Improve

# EWS Resources



- IES Early Warning Systems Learning Series  
<https://ies.ed.gov/ncee/edlabs/projects/ews.asp>



- REL West: A Practitioner's Guide to Implementing an Early Warning System  
<https://ies.ed.gov/ncee/edlabs/projects/project.asp?ProjectID=396>

# On-Time Graduation Project Study Results



- Getting Students On Track For Graduation: Impacts of the Early Warning Intervention and Monitoring System After One Year  
[https://ies.ed.gov/ncee/edlabs/regions/midwest/publications/career\\_readiness.aspx](https://ies.ed.gov/ncee/edlabs/regions/midwest/publications/career_readiness.aspx)



# Questions?



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- Allensworth, E. M. & Easton, J.Q., *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, IL: Consortium on Chicago School Research at the University of Chicago, 2007), <http://ccsr.uchicago.edu/sites/default/files/publications/07%20What%20Matters%20Final.pdf>.
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- Balfanz, R., *Putting middle grades students on the graduation path* (Policy and Practice Brief) (Baltimore, MD: Johns Hopkins University, Everyone Graduates Center, 2009), [https://www.amle.org/portals/0/pdf/articles/Policy\\_Brief\\_Balfanz.pdf](https://www.amle.org/portals/0/pdf/articles/Policy_Brief_Balfanz.pdf).



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# References

Scott, L., Manship, K., O’Cummings, M., Heppen, J. & Therriault, S., *College enrollment outcome: Early warning system indicators and thresholds* (unpublished research) (Washington, DC: American Institutes for Research, n.d.).

JENNY SCALA

SENIOR RESEARCHER

[JSCALA@AIR.ORG](mailto:JSCALA@AIR.ORG)

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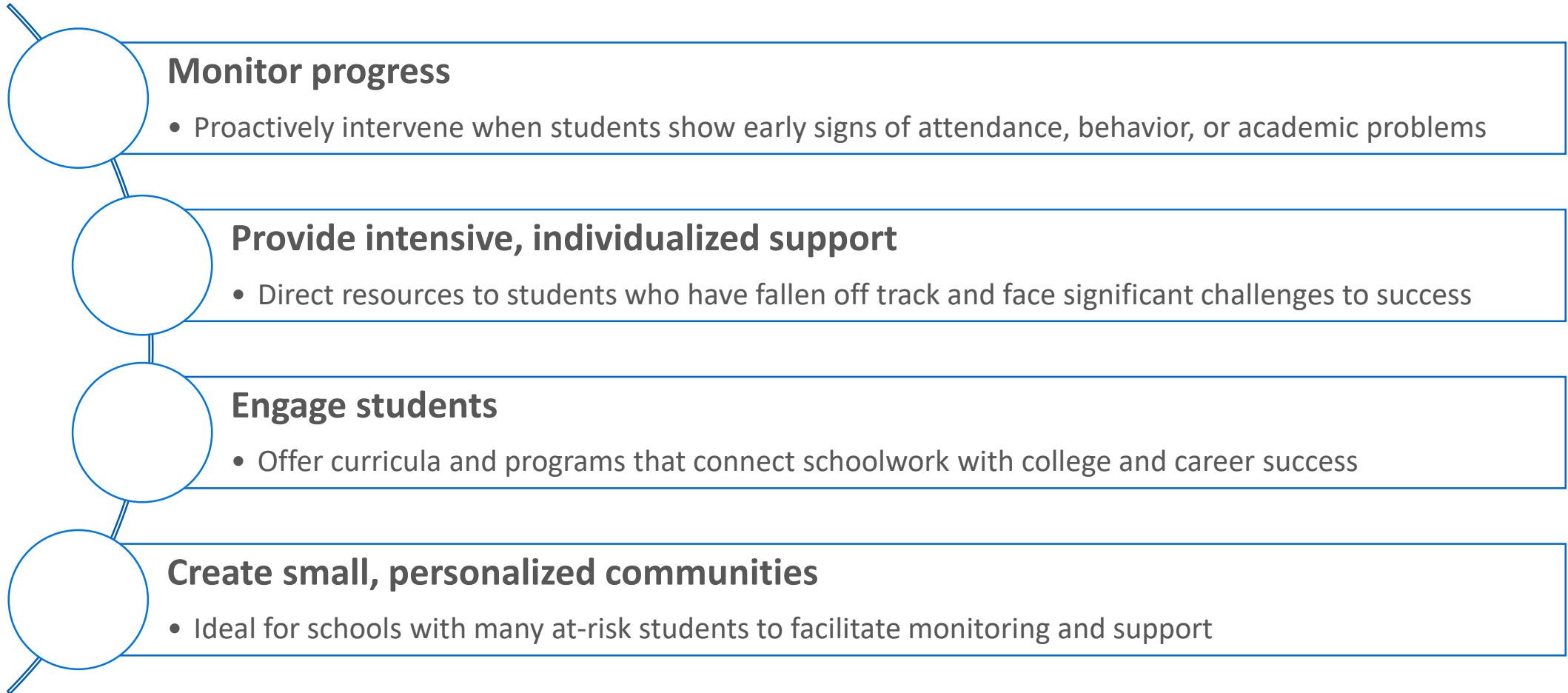
THANK YOU

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# Extra Slides

# Preventing Drop Out in Secondary School: Recommendations



(Rumberger et al, 2017)