

## National High School Center

Across the United States, almost 7,000 high school students drop out of school each day. The National High School Center at AIR developed an early warning systems tool that provides accurate and timely data to identify students most at risk for dropping out of high school. The center's tool allows districts to dig deeper into their data, see patterns, and uncover the reasons behind students' poor performance. Administrators implementing the system say that the tool has focused their attention on how schools operate, calling the process "eye-opening."

"I looked at [the center's early warning system] as a way to get an idea of who those kids were that were at risk for dropping out," said a Michigan Department of Education administrator. "It has expanded into really looking at how schools do their business day to day."

The center's early warning system is used in 68 districts in six states, and the center's tool has been downloaded more than 20,000 times. The federally funded center operated by AIR serves as the nation's central source of information and expertise on high school improvement and will run through spring 2013.



## Designing Effective Interventions to Improve College & Career Readiness



## American Institutes for Research

American Institutes for Research (AIR) conducts and applies the best behavioral and social science research and evaluation toward improving people's lives, with a special emphasis on the disadvantaged. A not-for-profit organization, AIR is a national leader in teaching and learning improvement, providing research, assessment, evaluation, and technical assistance to ensure that all students have access to a high-quality, effective education.



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*Making Research Relevant*

One in every four public school students in the United States fails to graduate from high school. Many students who do graduate and go on to college struggle to receive a degree. Less than 25 percent of students from low-income families graduate from college within six years.

Educators need accurate and timely data to systematically identify students most likely to drop out or graduate from high school ill-equipped to succeed in college and careers. Early warning systems can be powerful tools that provide information to change educators' practices and guide students back on track.

American Institutes for Research (AIR) offers the complete set of services—each stage leads to a validated early warning system that allows state-, district-, and school-level staff to intervene effectively and redirect their efforts so that students graduate on time and are prepared to succeed in college and careers.

The College and Career Readiness team at AIR understands that early warning systems are effective only if staff are able to act on the data. AIR puts our work to the actionable test at each stage.

**Research.** AIR researchers explore the indicators that signal students' eventual readiness for college. We look beyond high school graduation to understand the benchmarks at each grade level that correlate to college and career success.

**Design.** AIR's design team knows the demands faced by state, district, and school staff. Our flexible approach allows us to work around state and district data constraints and find alternative avenues to accurate data that reveal important patterns in student behavior and achievement. We create tools that support the use of the early warning system, allowing educators to pull the right data at the right time to respond effectively.

**Implementation and Ongoing Support.** We translate research and evidence-based practices into effective models that work given the specific needs of individual states and districts. Our staff listen to you and customize our approach to fit your context. We then work with school and district staff to analyze the data and design interventions to improve the outcomes for struggling students.



**Research – Indicators of College Success.** AIR researchers are undertaking analyses that will shape the field's understanding of the policies and practices most likely to increase the number of students who graduate from high school ready for college. The report, which will be released in 2013, explores the relationship between high school indicators (such as attendance), when students took Algebra 1, whether students completed four years of English language arts courses, and other variables on their college attendance and first-year completion rates.

**Design – Massachusetts Early Warning Indicator System.** Every Massachusetts public school student, from kindergarten to 12th grade, is now designated at high, moderate, or low risk of meeting key educational benchmarks. This early warning system model developed by AIR identifies the key benchmarks at each critical stage—early elementary, late elementary, middle school, and high school—that research suggests students must meet to be prepared to succeed. The design allows schools to identify individual students who need extra support and lets districts determine the needs of schools based on the risk levels of students served.

**Implementation – Chicago Public Schools, Career and Technical Education (CTE).** The Career and Technical Education Early Warning System created by AIR provides Chicago Public Schools with real-time information in a single location to target interventions to the approximately 20,000 students participating in CTE courses annually. To create the tool, AIR interviewed and surveyed staff at all levels—teachers, counselors, principals, and district administrators—to understand the type of information they needed, when they needed it, and how they would use it to work with students to improve their achievement.

**Ongoing Support – Virginia Early Warning System (VEWS).** After collaborating on the development of a statewide system to identify high school students who are at risk of dropping out of high school, AIR worked intensively with two low-performing school districts to use the data to intervene with at-risk students. AIR created a process—based on principles designed to capture innovation—that brought the two districts together to seek advice from each other. The process allowed the districts to dig deeper, see the trends in their data, and think systemically about how to address the issues contributing to their students' struggles.

## Beyond High School, Beyond Dropout Prevention

Once a student falls behind in fundamental skills, he or she is likely to remain behind.

AIR designs early warning systems for each critical stage in a student's education so that struggling students can be given the support they need before it is too late.

- Are students reading at grade level by the end of third grade?
- Are middle school students high school ready?
- How can you ensure that students are ready for college and careers?
- What indicators predict the likelihood that a student will persist in college?

The answers to these questions are crucial to students' success. States and districts are currently using early warning systems designed by AIR to find these answers. AIR's analyses of predictive indicators of success is shaping the field's understanding of what it takes to prepare college and career ready students who can flourish in the 21st century economy.

