



College and Career Readiness Indicators, Early Childhood Education through 12th Grade

The following tables from the College & Career Readiness & Success Center at American Institutes for Research’s (AIR) November 2013 report *Predictors of Postsecondary Success* identify indicators, predictors, and other potential factors of future success at grade spans ranging from early childhood education through high school.

Table 1. Early Childhood Correlates of School Readiness and Elementary Performance

Early Childhood		
Indicator	Predictor	Other Potential Factor
	<ul style="list-style-type: none"> ■ Participation in child care and early education^a ■ Early approaches to learning^b ■ Positive “school readiness risk profile”^c 	<ul style="list-style-type: none"> ■ Cognitive understanding and cognitive control^d ■ Positive play interaction behaviors at home and school^e ■ Emergent literacy^f ■ Working memory skills^g ■ Social-emotional learning^h ■ Attention span persistenceⁱ

^aMagnuson, Meyers, Rhum, & Waldfogel, 2004; ^bLi-Grining et al., 2010; ^cHair et al., 2006; ^dLeerkes, Paradise, O’Brien, Calkins, & Lange, 2008; ^eCoolahan et al., 2000; Dilalla et al., 2004; Fantuzzo & McWayne, 2002; ^fDoctoroff, Greer, & Arnold, 2006; ^gGathercole et al., 2003; ^hDenham & Brown, 2010; ⁱMcClelland et al., 2012

Table 2. Elementary School Correlates of Elementary and Middle Grades Success and Secondary Readiness

Elementary School		
Indicator	Predictor	Other Potential Factor
<ul style="list-style-type: none"> ■ Reading by the third grade^a ■ < 10 percent absenteeism in elementary school^b 	<ul style="list-style-type: none"> ■ Being rated highly by teachers on attention span and classroom participation^c ■ High scores on the Social Skills Rating System^d 	<ul style="list-style-type: none"> ■ Social competence^e

^aThe Annie E. Casey Foundation, 2010; Hernandez, 2012; ^bChang & Mariajose, 2008; ^cAlexander, Entwisle, & Dauber, 1993; ^dMalecki & Elliot, 2002; ^eWelsh, Parke, Widaman, & O’Neil, 2001

EXHIBIT E3

Table 3. Middle Grades Correlates of Secondary Success and Postsecondary Readiness

Middle Grades		
Indicator	Predictor	Other Potential Factor
<ul style="list-style-type: none"> ■ < 20 percent absenteeism in the middle grades^a ■ Remaining at the same school through the middle grades^b ■ Receiving no unsatisfactory behavior grades in sixth grade^c ■ Passing all ELA and mathematics courses and meeting benchmarks on state exams^d ■ Passing Algebra I in the eighth grade^e ■ NAEP mathematics score of > 292 in eighth grade^f ■ Meeting the following benchmarks on college preparatory exams: ACT EXPLORE test scores of English 13, mathematics 17, science 20 and reading 15^g; SAT-9 score > 50th percentile^h 	<ul style="list-style-type: none"> ■ Taking rigorous coursework in the middle gradesⁱ ■ High scores on the Grit-S and Grit-O scales^j 	<ul style="list-style-type: none"> ■ Social-emotional and decision-making skills^k

^aBalfanz, 2009; Balfanz, Herzog, & Mac Iver, 2007; Rumberger, 1995; Rumberger & Larson, 1998; ^bMac Iver, Durham, Plank, Farley-Ripple, & Balfanz, 2008; Rumberger & Larson, 1998; ^cBalfanz et al., 2007; ^dBalfanz et al., 2007; Cumpton, Schexnayder, & King, (2012); ^eKurlaender, Reardon, & Jackson, 2008; Wimberly & Noeth, 2005; ^fLee, 2013; ^gACT, 2008; ^hSilver & Saunders, 2008; ⁱAtanda, 1999; Wimberly & Noeth, 2005; ^jDuckworth & Quinn, 2009; ^kFleming et al., 2005

EXHIBIT E3

Table 4. High School Correlates of Secondary and Postsecondary Success

High School and Career and Technical Education		
Indicator	Predictor	Other Potential Factor
<ul style="list-style-type: none"> ■ < 10 percent absences^a ■ No more than one failure of ninth-grade subjects^b ■ Completing the following mathematics sequence: Algebra II (ninth grade), geometry (10th grade), Algebra III and trigonometry or higher (11th grade), precalculus or calculus (12th grade)^c ■ 3.0+ HS GPA^d ■ AP Exam: 3 or higher; IB Exam: 4 or higher^e ■ Dual enrollment participation^f ■ Passing state exams^g ■ FAFSA completion^h ■ Meeting the following benchmarks on national assessments: 10th grade NELS⁶ Scale Score > 54; 12th grade NAEP Score > 320; 12th grade ECLS⁷ Score > 141ⁱ ■ Meeting the following benchmarks on college preparatory exams: SAT > 1550⁸; PLAN⁹ test scores: English 15, reading 17, mathematics 19, and science 21; ACT scores: English 18, mathematics 22, reading 21, and science 24^j ■ Participation in the following: summer bridge programs, school year transition programs, senior year transition courses, and early assessment and intervention programs ■ College Knowledge target outreach programs such as: multiyear college-readiness programs, embedded college counseling, and college-readiness lessons^k 	<ul style="list-style-type: none"> ■ Few school transfers between grades^l ■ Early Assessment Program (EAP) and Preliminary Scholastic Aptitude Test (PSAT) completion^m 	<ul style="list-style-type: none"> ■ Participation in SEL interventionⁿ ■ Meeting with academic advisor^o ■ ACT Work Keys^p, NWRC based on Equipped for the Future standards, and the CASAS Workforce ■ Skills Certification System^q

^aAllensworth & Easton, 2007; ^bKemple, Segeritz, & Stevenson, 2013; ^cKlepfer & Hull, 2012; ^dMishook et al., 2012; ^eNagaoka et al., 2009; Wiley et al., 2010; ^fKarp et al., 2007; ^gCumpton et al., 2012; ^hNagaoka et al., 2009; ⁱLee, 2012, 2013; ^jACT, 2012; ^kBarnett et al., 2012; Mishook et al., 2012; ^lRumberger & Larson, 1998; ^mMishook et al., 2012; ⁿTaylor & Dymnicki, 2007; ^oKlepfer & Hull, 2012; ^pBragg & Ruud, 2007; ^qDarche & Stern, 2013