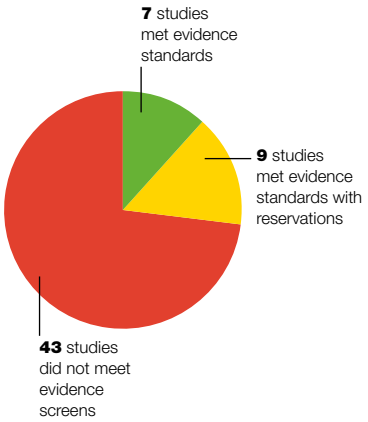
What Works Clearinghouse

ies INSTITUTE OF EDUCATION SCIENCES

WWC identified 59 studies of 16 dropout prevention programs



The findings in this topic report summarize the first wave of WWC dropout prevention intervention reports prepared in 2006–07. www.whatworks.ed.gov

Dropout prevention programs are school- and community-based initiatives that aim to keep students in school and encourage them to complete their high school education. To be included in the What Works Clearinghouse (WWC) review, programs have to operate within the United States and include dropout prevention as one of their primary objectives. Programs that aim primarily to address risky behaviors correlated with dropping out—such as delinquency, drug use, and teen pregnancy—are not included. The reviewed programs provide a mix of services, such as counseling, monitoring, school restructuring, curriculum redesign, financial incentives, and community services to mitigate factors impeding academic success.

The review focused on three outcome domains: staying in school, progressing in school, and completing school. The WWC looked at 59 studies of 16 dropout prevention programs that qualified for our review. Of these, 16 studies of 11 programs met WWC evidence standards—7 without reservations and 9 with reservations. The five other programs did not have studies that met WWC evidence screens.

In looking at the three outcome domains for the 11 programs:

- *ALAS (Achievement for Latinos through Academic Success)* had potentially positive effects on staying in school and on progressing in school
- *Career Academies* had potentially positive effects on staying in school and on progressing in school
- *Check & Connect* had positive effects on staying in school and potentially positive effects on progressing in school

Five other programs had potentially positive effects in one domain. Three had no discernible effects in any of the three domains.

Dropout prevention in practice

Mentoring and monitoring students. In a large urban high school, students at risk of dropping out are paired with "monitors," who regularly assess their academic progress and intervene as soon as students appear to be struggling. Monitors work with students to identify social services in the community that will help them address problems that may be hindering their academic success. They also provide ongoing feedback and encouragement.

Dropout prevention in practice

Alternative high schools. To reduce dropping out, students struggling academically in regular high schools can earn their diplomas and continue on to postsecondary education at a small alternative school on a community college campus. The school's interdisciplinary curriculum focuses on developing critical thinking skills and providing individualized attention from a team of teachers. The school offers career-oriented courses and internships. Faculty and students have access to the college's educational resources and facilities, and students can take college-level classes.

Dropout prevention in practice

Schoolwide restructuring. Under another approach to dropout prevention, schools are reorganized into small "learning communities"—including ninth-grade academies for first-year students and career academies for those in upper grades—to reduce student isolation and anonymity. As part of the schoolwide restructuring, schools introduce a new curriculum that emphasizes high academic standards and provides all students with a college-preparatory academic sequence—with a focus on English and math instruction.

Absence of conflict of interest

Several studies in the WWC review of dropout prevention programs were conducted by Mathematica Policy Research, Inc. (MPR). Because the principal investigator for the WWC review is an MPR staff member, these MPR studies were rated by staff from Caliber, an ICF International Company, which also prepared the corresponding intervention reports. These reports were then reviewed by MPR staff, as well as the WWC Technical Review Team and external peer reviewers.

Intervention Ratings for Dropout Prevention

Each dropout prevention program that had at least one study meeting WWC standards (with or without reservations) received a rating of effectiveness in one or more of the three outcome domains: staying in school, progressing in school, and completing school. The rating aims to characterize the evidence in a given domain, taking into account the quality of the research design, the statistical significance of the findings, the size of the difference between participants in the intervention and comparison conditions and the consistency in findings across studies.

The research evidence can be rated as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative (see the WWC Intervention Rating Scheme). Table 1 shows the effectiveness ratings for the 11 dropout prevention interventions (empty cells indicate that no evidence was reported).

Table 1 Effectiveness ratings for 11 dropout prevention programs in three domains

Intervention name	Staying in school		Progressing in school		Completing school	
	Rating of effectiveness	Extent of evidence	Rating of effectiveness	Extent of evidence	Rating of effectiveness	Extent of evidence
ALAS (Achievement for Latinos through Academic Success) *(no website available)*	Potentially positive	Small	Potentially positive	Small		
Career Academies *(http://www.ncacinc.org)*	Potentially positive	Small	Potentially positive	Small	No discernible	Small
Check & Connect *(http://ici.umn.edu/checkandconnect)*	Positive	Small	Potentially positive	Small	No discernible	Small
Financial Incentives for Teen Parents to Stay in School *(no website available)*	Potentially positive	Moderate to large	No discernible	Small	No discernible	Moderate to large
High School Redirection *(no website available)*	Mixed	Moderate to large	Potentially positive	Moderate to large	No discernible	Moderate to large
Middle College High School *(http://www.mcnc.us)*	No discernible	Small			No discernible	Small
Project GRAD *(http://www.projectgrad.org)*			No discernible	Small	No discernible	Small
Quantum Opportunity Program *(http://www.eisenhowerfoundation.org/qop.php)*			No discernible	Small	No discernible	Small
Talent Development High Schools *(http://www.csos.jhu.edu/tdhs)*			Potentially positive	Small		
Talent Search *(http://www.ed.gov/programs/triotalent/index.html)*					Potentially positive	Moderate to large
Twelve Together *(no website available)*	Potentially positive	Small	No discernible	Small		

Note: WWC intervention reports describe each program and provide information on the students, cost, and scope of use. To view the intervention reports, please click on the program name or go to www.whatworks.ed.gov. When available, websites offering additional information about the program are included after the program name.

Key

- Positive effects: strong evidence of a positive effect with no overriding contrary evidence
- Potentially positive effects: evidence of a positive effect with no overriding contrary evidence
- Mixed effects: evidence of inconsistent effects
- No discernible effects: no affirmative evidence of effects
- Potentially negative effects: evidence of a negative effect with no overriding contrary evidence
- Negative effects: strong evidence of a negative effect with no overriding contrary evidence

Average improvement indices

The WWC computes an average improvement index for each domain and each study as well as a domain average improvement index across studies of the same intervention (see the Technical Details of WWC-Conducted Computations).

The improvement index represents the difference between the percentile rank of the average student in the intervention condition and the percentile rank of the average student in the comparison condition. It can take on values between –50 and +50, with positive numbers denoting results favorable to the intervention group. Unlike the rating of effectiveness, which is based on four factors, the improvement index is based only on the size of the difference between the intervention and the comparison conditions.[1]

Staying in school

The staying in school domain includes measures of whether the student remained enrolled in school or dropped out of school without earning a high school diploma or GED certificate. We reviewed outcomes in this domain for seven dropout prevention programs, and the average improvement index ranged from –3 to +42 percentile points (figure 1).

Progressing in school

The progressing in school domain includes measures of credits earned, grade promotion, and whether the student is making normal progress toward graduation. We reviewed outcomes in this domain for nine programs, and the average improvement index ranged from –6 to +30 percentile points (figure 2).

Completing school

The completing school domain includes measures of whether the student earned a high school diploma or received a GED certificate. We reviewed outcomes in this domain for eight programs, and the average improvement index ranged from –3 to +17 percentile points (figure 3).

Figure 1 Staying in school: average improvement

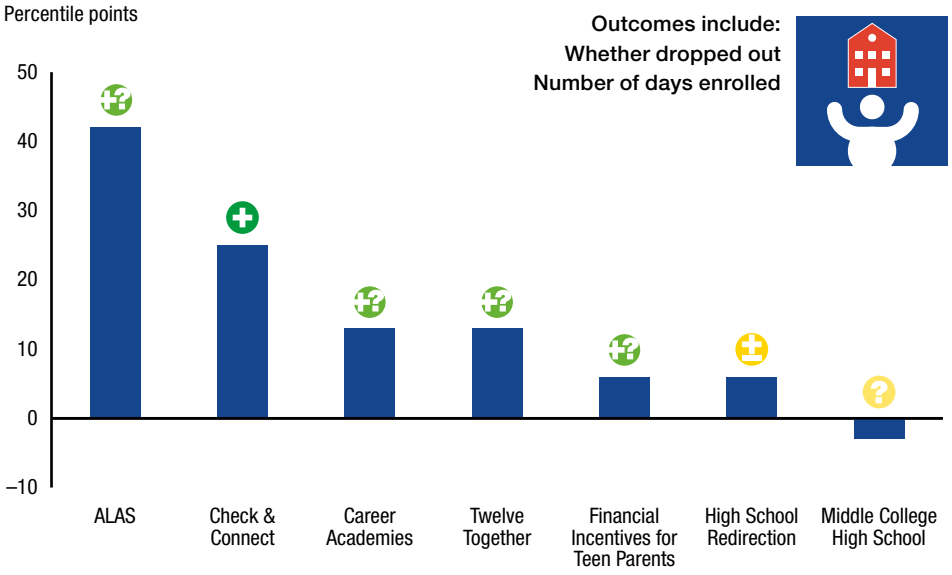
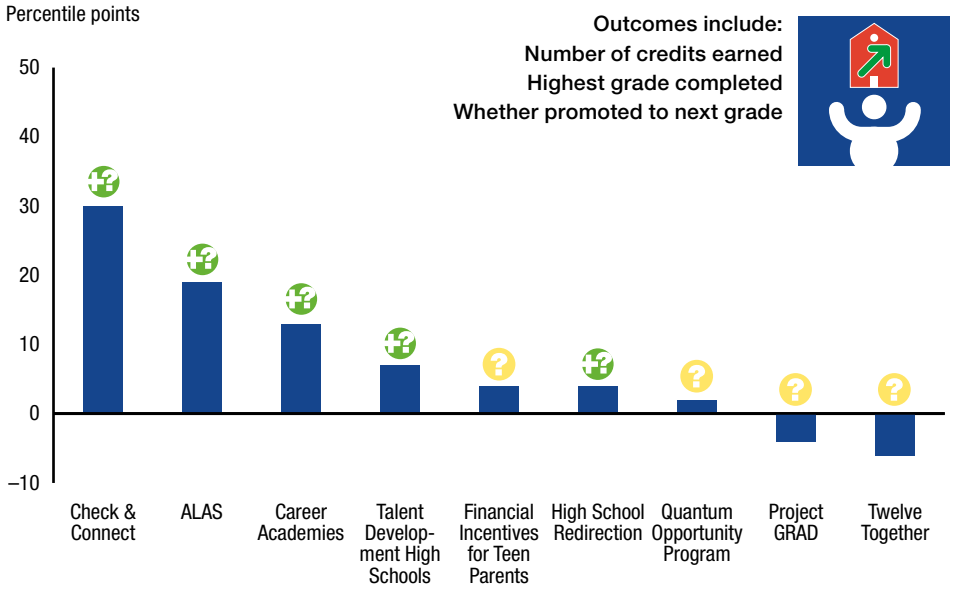


Figure 2 Progressing in school: average improvement



1. To enable comparisons across interventions, improvement indices are calculated from student-level findings. For further details please see Technical Details of WWC-Conducted Computations.

Figure 3 Completing school: average improvement

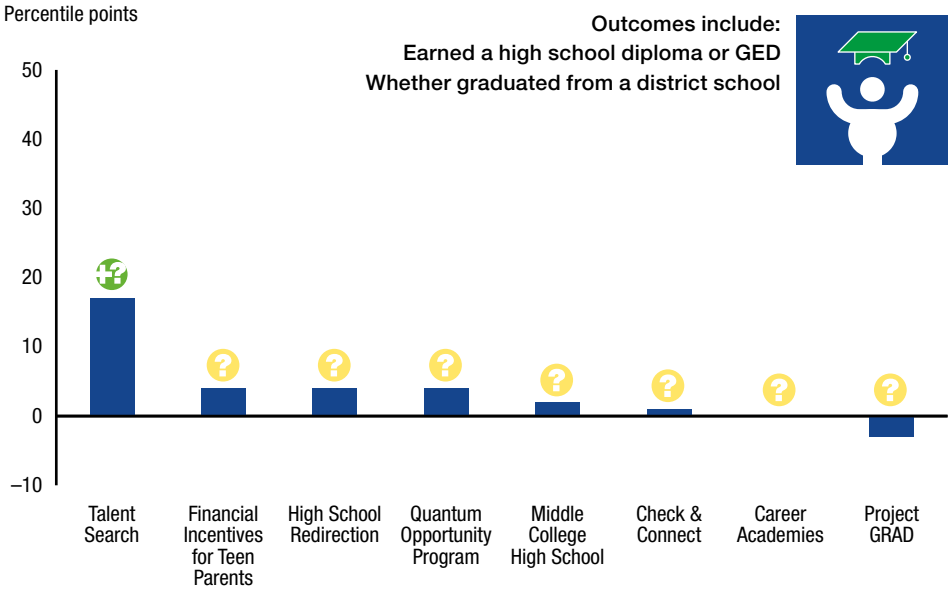


Table 2 Interventions reviewed with no studies meeting WWC evidence screens[1]

Belief Academy *(no website available)*
Coca-Cola Valued Youth Program *(http://www.idra.org/Coca-Cola_Valued_Youth_Program.htm)*
National Guard Youth ChalleNGe Corps *(http://www.ngycp.org)*
Project COFFEE *(http://www.oxps.org/NEW%20COFFEE%20II/newcoffee.htm)*
Talent Development Middle Grades Program *(http://web.jhu.edu/CSOS/tdmg/index.html)*

1. The table includes all eligible programs considered for the WWC dropout prevention review with no studies meeting evidence standards.

For more information about studies reviewed and WWC methodology, please see the Dropout Prevention Technical Appendices.

Appendix

Appendix A1 Extent of evidence

Intervention name	Staying in school			Progressing in school			Completing school		
	Number of studies	Sample size (schools/ students)	Extent of evidence[1]	Number of studies	Sample size (schools/ students)	Extent of evidence[1]	Number of studies	Sample size (schools/ students)	Extent of evidence[1]
ALAS (Achievement for Latinos through Academic Success)	1	1/94	Small	1	1/81	Small	0	0	na
Career Academies	1	9/345	Small	1	9/316	Small	1	9/360	Small
Check & Connect	2	nr/238	Small	1	nr/92	Small	1	nr/144	Small
Financial Incentives for Teen Parents to Stay in School	2	nr/1,819	Moderate to large	1	nr/913	Small	2	nr/1,819	Moderate to large
High School Redirection	3	3/1,634	Moderate to large	2	2/732	Moderate to large	3	3/1,510	Moderate to large
Middle College High School	1	1/394	Small	0	0	na	1	1/394	Small
Project GRAD	0	0	na	1	13/nr	Small	1	13/nr	Small
Quantum Opportunity Program	0	0	na	1	11/766	Small	1	11/915	Small
Talent Development High Schools	0	0	na	1	11/nr	Small	0	0	na
Talent Search	0	0	na	0	0	na	2	200+/9,854	Moderate to large
Twelve Together	1	9/219	Small	1	9/219	Small	0	0	na

na = not applicable/not studied
nr = not reported

1. A rating of "moderate to large" requires at least two studies and two schools across studies in one domain and a total sample size across studies of at least 350 students or 14 classrooms. Otherwise, the rating is "small."

Appendix A2 Targeted population

Intervention name	Students targeted by the intervention	Students in reviewed studies same as full target population?
ALAS (Achievement for Latinos through Academic Success)	Middle school students deemed at risk of dropping out; served throughout their three years of middle or junior high school	Yes
Career Academies	High school students; program originally served only at-risk students; now serves a more general student population	No. Studies reviewed focused only on at-risk students.
Check & Connect	Middle and high school students deemed at risk of dropping out; served throughout their time in middle or high school	No. Studies reviewed focused only on high school students.
Financial Incentives for Teen Parents to Stay in School	Teen parents receiving cash assistance	Yes
High School Redirection	High school students who have dropped out or are considered at risk of dropping out	Yes
Middle College High School	High school students who have dropped out or are considered at risk of dropping out	Yes
Project GRAD	Serves all students in a participating high school, as well as its feeder elementary and middle schools	No. Studies reviewed focused only on high school students.
Quantum Opportunity Program	Students from high schools with high dropout rates; support provided for four to five years beginning in the ninth grade	Yes
Talent Development High Schools	School-wide reform serving all students in a participating high school	Yes
Talent Search	Low-income middle and high school students; middle and high school students whose parents did not earn high school degrees	No. Studies reviewed focused only on high school students.
Twelve Together	Middle and early high school students; serves a mix of those at high risk of academic failure as well as those at lower risk; services provided for one year	No. Studies reviewed focused only on middle school students.

Appendix A3 Characteristics of interventions

Intervention name	Academic approach	Support services
ALAS (Achievement for Latinos through Academic Success)	Regular school curriculum supplemented with special classes on problem solving skills	Close monitoring of attendance, regular feedback to parents and students on performance, case management, and counseling
Career Academies	School-within-a-school approach operating within a regular high school; coursework organized around a career theme	Internships and mentors from local employers that reinforce the specific career theme of the academy
Check & Connect	Regular school curriculum supplemented with tutoring as needed	Close monitoring of attendance, mentoring, case management, and family outreach
Financial Incentives for Teen Parents to Stay in School	Does not include an academic component	Bonuses and sanctions applied to the welfare grant to encourage school attendance and improved academic performance; case management
High School Redirection	Alternative high school model focusing on basic skills acquisition, remedial reading instruction, and accelerated credit accumulation	Onsite child care, limited extracurricular activities
Middle College High School	Alternative high school operating on a college campus; college-preparatory curriculum emphasizing individualized attention and the development of critical thinking skills	Community service opportunities, internships, peer support, and specialized counseling
Project GRAD	Model uses regular school curriculum at the high school level; includes curriculum reforms at the elementary and middle school level focused on reading and math instruction	College scholarships for students performing well academically, six-week academic summer program on a college campus, counseling on college preparation and admissions
Quantum Opportunity Program	Regular school curriculum supplemented with tutoring, computer-assisted learning, and life skills instruction	Case management, mentoring, transportation assistance, child care, and financial incentives to promote participation
Talent Development High Schools	School restructured into small "learning communities," curriculum emphasizes college preparation and reading and math instruction	Ongoing technical assistance and professional development for school staff
Talent Search	Regular school curriculum supplemented with tutoring and study skills assistance	Career exploration, aptitude assessment, academic advising, college campus visits, college and financial aid application assistance, assistance with preparing for college entrance exams
Twelve Together	Regular school curriculum supplemented with homework assistance	Weekly peer support sessions led by trained adult facilitators, college campus visits, social events

Appendix A4 Summary of statistically significant[1] or substantively important[2] positive findings

Intervention name	Staying in school		Progressing in school		Completing school	
	Statistically significant positive findings	Findings across outcomes	Statistically significant positive findings	Findings across outcomes	Statistically significant positive findings	Findings across outcomes
ALAS (Achievement for Latinos through Academic Success)						
Larson & Rumberger, 2005 (randomized controlled trial)	Enrollment: end of grade 9	Statistically significant, Substantively important	On track to graduate on time: end of 9th grade	Statistically significant, Substantively important	na	na
Career Academies						
Kemple, 2004 (randomized controlled trial)	Dropped out of school	Statistically significant, Substantively important	Total credits earned Credits earned met graduation requirements	Statistically significant, Substantively important	None	ns, nsi
Check & Connect						
Sinclair, Christenson, Evelo, & Hurley, 1998 (randomized controlled trial)	Dropped out of school	Statistically significant, Substantively important	Credits earned	Statistically significant, Substantively important	None	ns, nsi
Sinclair, Christenson, & Thurlow, 2005 (randomized controlled trial with attrition problems)	Dropped out of school	Statistically significant, Substantively important	na	na	None	ns, nsi
Financial Incentives for Teen Parents to Stay in School						
Long, Gueron, Wood, Fisher, & Fellerath, 1996 (randomized controlled trial)	None	ns, nsi	None	ns, nsi	None	ns, nsi
Mauldon, Malvin, Stiles, Nicosia, & Seto, 2000 (randomized controlled trial with attrition problems)	Dropped out of school	Statistically significant, nsi	na	na	None	ns, nsi
High School Redirection						
Dynarski & Wood, 1997—Stockton study (randomized controlled trial with control group crossover)	Number of days enrolled: year 1 Number of days enrolled: year 2	Statistically significant, Substantively important	Total credits earned: end of year 4	Statistically significant, Substantively important	None	ns, nsi
Dynarski & Wood, 1997—Wichita study (randomized controlled trial)	None	ns, nsi	None	ns, nsi	None	ns, nsi
Dynarski & Wood, 1997—Cincinnati study (randomized controlled trial)	None	ns, nsi	na	na	None	ns, nsi

(continued)

Appendix A4 Summary of statistically significant[1] or substantively important[2] positive findings *(continued)*

Intervention name	Staying in school		Progressing in school		Completing school	
	Statistically significant positive findings	Findings across outcomes	Statistically significant positive findings	Findings across outcomes	Statistically significant positive findings	Findings across outcomes
Middle College High School						
Dynarski, Gleason, Rangarajan, & Wood, 1998 (randomized controlled trial)	None	ns, nsi	na	na	None	ns, nsi
Project GRAD						
Snipes, Holton, Doolittle, & Sztejnberg, 2006 (quasi-experimental design)	na	na	None	ns, nsi	None	ns, nsi
Quantum Opportunity Program						
Schirm, Stuart & McKie, 2006 (randomized controlled trial with differential attrition)	na	na	None	ns, nsi	None	ns, nsi
Talent Development High Schools						
Kemple, Herlihy, & Smith, 2005 (quasi-experimental design)	na	na	Total credits earned: end of year 2 Enrolled in 10th grade: end of year 2	Statistically significant, nsi	na	na
Talent Search						
Constantine, Seftor, Martin, Silva, & Myers, 2006—Texas study (quasi-experimental design)	na	na	na	na	Earned high school diploma/GED	Statistically significant, Substantively important
Constantine, Seftor, Martin, Silva, & Myers, 2006—Florida study (quasi-experimental design)	na	na	na	na	Earned high school diploma/GED	Statistically significant, Substantively important
Twelve Together						
Dynarski, Gleason, Rangarajan, & Wood, 1998 (randomized controlled trial with differential attrition)	Dropped out of school	ns, Substantively important	None	ns, nsi	na	na

ns = not statistically significant
nsi = not substantively important
na = not studied

1. According to WWC criteria, if a program finds a statistically significant effect, there is less than a 5% chance that this difference is due to chance. The level of statistical significance was calculated by the WWC and, where necessary, corrects for clustering within classrooms or schools and for multiple comparisons. For an explanation about the clustering comparison, see the WWC Tutorial on Mismatch. For the formulas the WWC used to calculate statistical significance, see the Technical Details of WWC-Conducted Computations.
2. For rating purposes, the WWC considered the statistical significance of the findings and the magnitude of the effect, also called the effect size. An average effect size is the sum of all the effect sizes of the student outcomes in a study in a single domain divided by the number of those outcomes. The WWC considers an average effect size across all student outcomes in one study in a given domain to be substantively important if it is equal to or greater than 0.25.

Appendix A5 Methodology

Fifty-eight studies provided data on 16 dropout prevention interventions and were classified for the strength of their design. To be fully reviewed, a study had to be a randomized controlled trial or a quasi-experimental design with evidence of equating between the treatment and comparison groups.

Evidence screens

Quasi-experiments eligible for review include those equating through matching or statistical adjustment, regression discontinuity designs, and single case designs. No studies based on the latter two types of designs were identified for the dropout prevention review. We are currently developing evidence standards for regression discontinuity designs and single case designs.

The review considered the properties of measurement instruments, the percentage of students, classrooms, or schools in the study sample that were not included in the reported results, and any sample characteristics or events that might serve as alternative explanations for the observed effect. For details please see the WWC Evidence Standards. Long-term outcomes were preferred over immediate outcomes for inclusion in our analysis of program effects.

The research evidence for programs that have at least one study meeting WWC evidence standards with or without reservations is summarized in individual intervention reports posted on the WWC website. See http://www.whatworks.ed.gov. So far, 16 studies of 11 dropout prevention interventions have met evidence standards with or without reservations. The lack of evidence for the remaining programs does not mean that those programs are ineffective; some programs have not yet been studied using a study design that permits the WWC to draw any conclusions about their effectiveness. And for some studies, not enough data were reported (such as descriptive statistics of the findings) to enable us to confirm statistical findings.

Rating of effectiveness

Each dropout prevention intervention that had at least one study meeting WWC standards with or without reservations received a rating of effectiveness in at least one outcome domain. The rating of effectiveness aims to characterize the existing evidence base in a given domain. The intervention effects based on the research evidence can be rated as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative.

The rating of effectiveness takes into account four factors: the quality of the research design, the statistical significance of the findings, the size of the difference between participants in the intervention and the comparison conditions, and the consistency in findings across studies (see the WWC Intervention Rating Scheme).

The level of statistical significance was reported by the study authors or, where necessary, calculated by the WWC to correct for clustering within classrooms or schools and for multiple comparisons. Because of these corrections, the level of statistical significance as calculated by the WWC may differ from the one originally reported by the study authors. For an explanation, see the WWC Tutorial on Mismatch. For the formulas that we used to calculate statistical significance, see Technical Details of WWC-Conducted Computations. If the average effect size across all outcomes in one study in a single domain is at least 0.25, it is considered substantively important, contributing toward the rating of effectiveness. See the technical appendices of the dropout prevention intervention reports for further details.

Extent of evidence

The evidence base rating represents the size and number of independent samples that were assessed for the purposes of analysis of the program effects. A “moderate/large” evidence base requires at least two studies and two schools across studies within one domain, and a total sample size across studies of at least 350 students or 14 classrooms. Otherwise, the evidence is considered to be “small”. The WWC is currently working to define a “large” evidence base. This term should not be confused with external validity, as other facets of external validity—such as variations in settings, important subgroups of

Appendix A5 Methodology *(continued)*

students, implementation, and outcomes measures—were not taken into account for the purposes of this rating.

Improvement index

The WWC computes an improvement index for each individual finding. In addition, within each outcome domain, the WWC computes an average improvement index for each domain and each study as well as a domain average improvement index across studies of the same intervention (see the Technical Details of WWC-Conducted Computations). The improvement index represents the difference between the percentile rank of the average student in the intervention condition and the percentile rank of the average student in the comparison condition. The improvement index can take on values between –50 and +50, with positive numbers denoting results favorable to the intervention group. Unlike the rating of effectiveness, the improvement index is based only on the size of the difference between the intervention and the comparison conditions.

Appendix A6 References

Met WWC standards

ALAS (Achievement for Latinos through Academic Success)

Larson, K. A., & Rumberger, R. W. (1995). ALAS: Achievement for Latinos through Academic Success. In H. Thornton (Ed.), *Staying in school. A technical report of three dropout prevention projects for junior high school students with learning and emotional disabilities*. Minneapolis, MN: University of Minnesota, Institute on Community Integration.[1]

Additional sources:

Gándara, P., Larson, K. A., Mehan, H., & Rumberger, R. W. (1998). *Capturing Latino students in the academic pipeline.* Berkeley, CA: Chicano/Latino Policy Project.[2]

Larson, K. A. (1989). Task-related and interpersonal problem solving training for increasing school success in high-risk young adolescents. *Remedial and Special Education*, *10*(5), 32–42.

Larson, K. A., & Rumberger, R. W. (1995). Doubling school success in highest-risk Latino youth: Results from a middle school intervention study. In R. F. Macías and R. G. García Ramos (Eds.), *Changing Schools for Changing Students*. Santa Barbara: University of California Linguistic Minority Research Institute.

Rumberger, R. W., & Larson, K. A. (1994). Keeping high-risk Chicano students in school: Lessons from a Los Angeles junior high school dropout prevention program. In R. J. Rossi (Ed.), *Educational Reforms for At-Risk Students* (pp. 141–162). New York: Teachers College Press.

Career Academies

Kemple, J. J. (2004). *Career Academies: Impacts on labor market outcomes and educational attainment.* New York: MDRC.

Additional sources:

Kemple, J. J., & Snipes, J. C. (2000). *Career Academies: Impacts on students' engagement and performance in high school.* New York: MDRC.

Kemple, J. J., & Rock, J. L. (1996). *Career Academies: Early implementation lessons from a 10-site evaluation.* New York: MDRC.

Check & Connect

Sinclair, M. F., Christenson, S. L., Evelo, D. L., & Hurley, C. M. (1998). Dropout prevention for youth with disabilities: Efficacy of a sustained school engagement procedure. *Exceptional Children, 65*(1), 7–21.

Additional sources:

Christenson, S. L., Sinclair, M. F., Thurlow, M. L., & Evelo, D. (1999). Promoting student engagement with school using the Check & Connect model. *Australian Journal of Guidance & Counseling, 9*(1), 169–184.

Sinclair, M. F., Christenson, S. L., Lehr, C. A., & Anderson, A. R. (2003). Facilitating student engagement: Lessons learned from Check & Connect longitudinal studies. *The California School Psychologist, 8*(1), 29–42.

Financial Incentives for Teen Parents to Stay in School

Long, D., Gueron, J. M., Wood, R. G., Fisher, R., & Fellerath, V. (1996). *LEAP: Three-year impacts of Ohio's welfare initiative to improve school attendance among teenage parents.* New York: MDRC.

Additional sources:

Bloom, D., Kopp, H., Long, D., & Polit, D. (1991). *LEAP: Implementing a welfare initiative to improve school attendance among teenage parents.* New York: MDRC.

Bos, J. M., & Fellerath, V. (1997). *LEAP: Final report on Ohio's welfare initiative to improve school attendance among teenage parents.* New York: MDRC.

High School Redirection

Wichita study

Dynarski, M., & Wood, R. (1997). *Helping high-risk youth: Results from the Alternative Schools Demonstration Program.* Princeton, NJ: Mathematica Policy Research.

Additional sources:

Rubenstein, M. (1995). *Giving students a second chance: The evolution of the Alternative Schools Demonstration Program.* Washington, DC: Policy Studies Associates.

Appendix A6 References *(continued)*

Weinbaum, A. T., & Baker, A. M. (1991). *Final implementation report: High School Redirection replication project.* New York: Academy for Educational Development.

Cincinnati study

Dynarski, M., & Wood, R. (1997). *Helping high-risk youth: Results from the Alternative Schools Demonstration Program.* Princeton, NJ: Mathematica Policy Research.

Additional sources:

Rubenstein, M. (1995). *Giving students a second chance: The evolution of the Alternative Schools Demonstration Program.* Washington, DC: Policy Studies Associates.

Weinbaum, A. T., & Baker, A. M. (1991). *Final implementation report: High School Redirection replication project.* New York: Academy for Educational Development.

Middle College High School

Dynarski, M., Gleason, P., Rangarajan, A., & Wood, R. (1998). *Impacts of dropout prevention programs: Final report. A research report from the School Dropout Demonstration Assistance Program evaluation.* Princeton, NJ: Mathematica Policy Research, Inc.

Additional sources:

Dynarski, M., & Gleason, P. (1998). *How can we help? What we have learned from evaluations of federal dropout-prevention programs.* Princeton, NJ: Mathematica Policy Research, Inc.

Hershey, A., Adelman, N., & Murray, S. (1995). *Helping kids succeed: Implementation of the School Dropout Demonstration Assistance Program.* Princeton, NJ: Mathematica Policy Research, Inc.

Rosenberg, L., & Hershey, A. (1995). *The cost of dropout prevention programs.* Princeton, NJ: Mathematica Policy Research, Inc.

Met WWC standards with reservations

Check & Connect

Sinclair, M. F., Christenson, S. L., & Thurlow, M. L. (2005). Promoting school completion of urban secondary youth with emotional or behavioral disabilities. *Exceptional Children, 71*(4), 465–482.

Additional source:

Sinclair, M. F., Christenson, S. L., Evelo, D. L., Hurley, C. M., Kau, M. Y., Logan, D. T., Thurlow, M. L., & Westberry, D. (2001). *Persistence Plus: Using Check & Connect procedures to improve service delivery and positive post-school outcomes for secondary students with serious emotional disturbance*. (CDFA No. 84.237H). Minneapolis, MN: University of Minnesota, Institute on Community Integration.

Financial Incentives for Teen Parents to Stay in School

Mauldon, J., Malvin, J., Stiles, J., Nicosia, N., & Seto, E. (2000). *Impact of California's Cal-Learn Demonstration Project: Final report.* Berkeley, CA: University of California, UC DATA.

High School Redirection: Stockton study

Dynarski, M., & Wood, R. (1997). *Helping high-risk youth: Results from the Alternative Schools Demonstration Program.* Princeton, NJ: Mathematica Policy Research.

Additional sources:

Rubenstein, M. (1995). *Giving students a second chance: The evolution of the Alternative Schools Demonstration Program.* Washington, DC: Policy Studies Associates.

Weinbaum, A. T., & Baker, A. M. (1991). *Final implementation report: High School Redirection replication project.* New York: Academy for Educational Development.

Project GRAD

Houston Study

Snipes, J. C., Holton, G. I., Doolittle, F., & Sztejnberg, L. (2006). *Striving for student success: The effect of Project GRAD on high school student outcomes in three urban school districts.* New York, NY: MDRC.

Quantum Opportunity Program

Schirm, A., Stuart, E., & McKie, A. (2006). *The Quantum Opportunity Program demonstration: Final impacts*. Washington, DC: Mathematica Policy Research, Inc.

Appendix A6 References *(continued)*

Additional sources:

Maxfield, M., Castner, L., Maralani, V., & Vencill, M. (2003). *The Quantum Opportunity Program demonstration: Implementation findings*. Washington, DC: Mathematica Policy Research, Inc.

Maxfield, M., Schirm, A., & Rodriguez-Planas, N. (2003). *The Quantum Opportunity Program demonstration: Implementation and short-term impacts*. Washington, DC: Mathematica Policy Research, Inc.

Schirm, A., & Rodriguez-Planas, N. (2004). *The Quantum Opportunity Program demonstration: Initial post-intervention impacts*. Washington, DC: Mathematica Policy Research, Inc.

Schirm, A., Rodriguez-Planas, N., Maxfield, M., & Tuttle, C. (2003). *The Quantum Opportunity Program demonstration: Short-term impacts*. Washington, DC: Mathematica Policy Research, Inc.

Talent Development High Schools

Kemple, J., Herlihy, C. & Smith, T. (2005). *Making progress toward graduation: Evidence from the talent development high school model.* New York: MDRC.

Additional source:

Kemple, J. & Herlihy, C. (2004). *The Talent Development High School Model: Context, components, and initial impacts on ninth-grade students' engagement and performance.* New York: MDRC.

Talent Search

Texas Study

Constantine, J. M., Seftor, N. S., Martin, E. S., Silva, T., & Myers, D. (2006). *A study of the effect of the Talent Search program on secondary and postsecondary outcomes in Florida, Indiana, and Texas: Final report from phase II of the national evaluation*. Report prepared by Mathematica Policy Research for the U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, Policy and Program Studies Service. Washington, DC: U.S. Department of Education.

Florida Study

Constantine, J. M., Seftor, N. S., Martin, E. S., Silva, T., & Myers, D. (2006). *A study of the effect of the Talent Search program on secondary and postsecondary outcomes in Florida, Indiana, and Texas: Final report from phase II of the national evaluation*. Report prepared by Mathematica Policy Research for the U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, Policy and Program Studies Service. Washington, DC: U.S. Department of Education.

Twelve Together

Dynarski, M., Gleason, P., Rangarajan, A., & Wood, R. (1998). *Impacts of dropout prevention programs: Final report. A research report from the School Dropout Demonstration Assistance Program evaluation.* Princeton, NJ: Mathematica Policy Research, Inc.

Additional sources:

Dynarski, M., & Gleason, P. (1998). *How can we help? What we have learned from evaluations of federal dropout-prevention programs.* Princeton, NJ: Mathematica Policy Research, Inc.

Hershey, A., Adelman, N., & Murray, S. (1995). *Helping kids succeed: Implementation of the School Dropout Demonstration Assistance Program.* Princeton, NJ: Mathematica Policy Research, Inc.

Rosenberg, L., & Hershey, A. (1995). *The cost of dropout prevention programs.* Princeton, NJ: Mathematica Policy Research, Inc.

Did not meet evidence screens

Belief Academy

Edgar, E., & Johnson E. (1995). *Belief Academy: Dropout prevention and intervention project targeting middle school youth with learning disabilities and emotional/behavioral disorders at risk for dropping out of school. Project Evaluation 1990–1995*. Washington, DC: U.S. Department of Education, Office of Special Education Programs.[3]

Appendix A6 References *(continued)*

Career Academies

Dayton, C., & Weisberg, A. (1987). *School-to-work and academy demonstration programs: 1986-87 evaluation report* (Policy Paper No. PC87-11-12-EMCF). Berkeley, CA: Policy Analysis for California Education.[3]

Additional source:

Dayton, C. (1988). *"Jobs for the Disadvantaged" graduate follow-up survey* (Policy Paper No. PP88-5-6). Berkeley, CA: Policy Analysis for California Education.

Dayton, C., Weisberg, A., & Stern, D. (1989). *California Partnership Academies: 1987–88 evaluation report* (Policy Paper No. PP89-9-1). Berkeley, CA: Policy Analysis for California Education.[3]

Additional sources:

Dayton, C., Reller, D., & Evans, J. (1987). *Peninsula Academies replication: 1985-86 evaluation report* (Report No. PC87-1-1-WFHF). Berkeley, CA: Policy Analysis for California Education.

Dayton, C., Weisberg, A., Stern, D., & Evans, J. (1988). *Peninsula Academies replication: 1986-87 evaluation report* (Policy Paper No. PP88-4-3). Berkeley, CA: Policy Analysis for California Education.

Stern, D., Dayton, C., Paik, I., Weisberg, A., & Evans, J. (1988). Combining academic and vocational courses in an integrated program to reduce high school dropout rates: Second-year results from replications of the California Peninsula Academies. *Educational Evaluation and Policy Analysis, 10*(2), 161–170.

Stern, D., Dayton, C., Paik, I., & Weisberg, A. (1989). Benefits and costs of dropout prevention in a high school program combining academic and vocational education: Third-year results from replications of the California Peninsula Academies. *Educational Evaluation and Policy Analysis, 11*(4), 405–416.

Elliott, M. N., Hanser, L. M., & Gilroy, C. L. (2002). Career Academies: Additional evidence of positive student outcomes. *Journal of Education for Students Placed at Risk, 7*(1), 71–90.[3]

Hanser, L., & Stasz, C. (1999). *The effects of enrollment in the Transportation Career Academy program on student outcomes.* Santa Monica, CA: RAND.[3]

Maxwell, N., & Rubin, L. (2000). *High school career academies: A pathway to educational reform in urban school districts?* Kalamazoo, MI: Upjohn Institute for Employment Research.[4]

Additional sources:

Maxwell, N. (2001). Step to college: Moving from the high school career academy through the 4-Year University. *Evaluation Review, 25*(6), 619–654.

Maxwell, N., & Rubin, L. (1997). *The relative impact of a career academy on post-secondary work and education skills in urban, public high schools* (Discussion Paper No. 97-2). Hayward, CA: California State University, Human Investment Research and Education Center.

Maxwell, N., & Rubin, L. (2001). *Career academy programs in California: Outcomes and implementation.* Berkeley, CA: University of California, California Policy Research Center.

Reller, D. J. (1984). *The Peninsula Academies: Final technical evaluation report.* Palo Alto, CA: American Institutes for Research.[3]

Additional sources:

Reynolds, D. F. (1984). *The Peninsula Academies: Third yearly interim report.* Palo Alto, CA: American Institutes for Research.

Reynolds, D. F., & Reeves, J. K. (1983). *The Peninsula Academies: Second yearly interim report.* Palo Alto, CA: American Institutes for Research.

Check & Connect

Anderson, A. R., Christenson, S. L., Sinclair, M. F., & Lehr, C. A. (2004). Check & Connect: The importance of relationships for promoting engagement with school. *Journal of School Psychology, 42*, 95–113.[5]

Lehr, C. A., Sinclair, M. F., & Christenson, S. L. (2004). Addressing student engagement and truancy prevention during the elementary school years: A replication study of the Check &

Appendix A6 References *(continued)*

Connect model. *Journal of Education for Students Placed At-Risk, 9*(3), 279–301.[6]

Additional sources:

Sinclair, M. F. & Lehr, C. A. (2001). *Dakota County: Elementary Check & Connect programs. Program evaluation 2001 summary report*. Minneapolis, MN: University of Minnesota, Institute on Community Integration.

Sinclair, M. F. & Lehr, C. A. (2000). *Dakota County: Elementary Check & Connect programs. Annual summative program evaluation report*. Minneapolis, MN: University of Minnesota, Institute on Community Integration.

Sinclair, M. F. & Kaibel, C. (2002). *Dakota County: Secondary Check & Connect programs. Program evaluation 2002 final summary report*. Minneapolis, MN: University of Minnesota, Institute on Community Integration.[7]

Thorton, H. E. (Ed.). (1995). *Staying in school: A technical report of three dropout prevention projects for middle school students with learning and emotional disabilities. Technical report 1990–1995*. ABC dropout prevention and intervention series. Washington, DC: U.S. Department of Education.[8]

Coca-Cola Valued Youth Program

Cardenas, J. A., Montecel, M. R., Supik, J. D., & Harris, R. J. (1992). The Coca-Cola Valued Youth Program: Dropout prevention strategies for at-risk students. *Texas Researcher, 3,* 111–130.[3]

Robledo, M. R., Cardenas, J. A., Garcia, Y. M., Montemayor, A. M., Ramos, M. G., Supik, J. D., & Villarreal, A. (1990). *Partners for Valued Youth: Dropout prevention strategies for at-risk language minority students. A technical report*. Washington, DC: IDRA/Development Associates.[5]

High School Redirection

Baker, A. M. (1992). Using a theory of dropout prevention to determine the effectiveness of the High School Redirection replication program. *Dissertation Abstracts International 52*(08), 2761A. (UMI No. 9136351)[7]

Foley, E., & Crull, P. (1984). *Educating the at-risk adolescent: More lessons from alternative high schools.* A report. New York: Public Education Association.[7]

Middle College High School

Cavalluzzo, L., Jordan, W., & Corallo, C. (2002). *Case studies of high schools on college campuses: An alternative to the traditional high school program.* Charleston, WV: AEL.[7]

Cullen, C. L. (1991). *Middle College High School: Its organization and effectiveness.* (Doctoral dissertation, Columbia University). *Dissertation Abstracts International, 52,* 358.[3]

Heard, F. B. (1988). *An assessment of the Tennessee Statewide School-College Collaborative for Educational Excellence: The Middle College High School.* (Doctoral dissertation, Nova University). (ERIC Document Reproduction Service No. ED249637)[3]

Lieberman, J. E. (1986). *Middle College: A ten year study.* (ERIC Document Reproduction Service No. ED271153)[3]

Lieberman, J. E. (1992). *A final report to the Ford Foundation on Middle College replication.* Long Island City, NY: LaGuardia Community College.[5]

National Guard Youth ChalleNGe Corps

Wenger, J. W., & Hodari, A. K. (2004). *Final analysis of evaluation of homeschool and ChalleNGe program recruits*. Alexandria, VA: CNA Corporation.[5]

Garcia, F. E., Gasch, J. L., Wenger, J. W., & Ray, B. D. (2001). *Evaluation of the pilot program for home school and ChallenGe program recruits*. Alexandria, VA: CNA Corporation.[7]

Project COFFEE

Turtle Mountain Study

Hayward, B. J., & Tallmadge, K. G. (1995). *Strategies for keeping kids in school: Evaluation of dropout prevention and reentry projects in vocational education. Final report*. Washington, DC: American Institutes for Research, Research Triangle Institute, and RMC Research Corporation, Arlington, VA.[3]

Appendix A6 References *(continued)*

Fort Totten Study

Hayward, B. J., & Tallmadge, K. G. (1995). *Strategies for keeping kids in school: Evaluation of dropout prevention and reentry projects in vocational education. Final report*. Washington, DC: American Institutes for Research, Research Triangle Institute, and RMC Research Corporation, Arlington, VA.[3]

Fort Berthold Study

Hayward, B. J., & Tallmadge, K. G. (1995). *Strategies for keeping kids in school: Evaluation of dropout prevention and reentry projects in vocational education. Final report*. Washington, DC: American Institutes for Research, Research Triangle Institute, and RMC Research Corporation, Arlington, VA.[3]

Fort Yates Study

Hayward, B. J., & Tallmadge, K. G. (1995). *Strategies for keeping kids in school: Evaluation of dropout prevention and reentry projects in vocational education. Final report*. Washington, DC: American Institutes for Research, Research Triangle Institute, and RMC Research Corporation, Arlington, VA.[3]

Project GRAD

Opuni, K. (1999). *Project GRAD: Graduation Really Achieves Dreams. 1998–99 program evaluation report.* Houston, TX: University of Houston.[7]

Opuni, K. & Ochoa, M (2002). *Project GRAD: A comprehensive school reform model.* Houston, TX: University of Houston.[7]

Atlanta study

Snipes, J. C., Holton, G. I., Doolittle, F., & Sztejnberg, L. (2006). *Striving for student success: The effect of Project GRAD on high school student outcomes in three urban school districts.* New York, NY: MDRC.[9]

Columbus study

Snipes, J. C., Holton, G. I., Doolittle, F., & Sztejnberg, L. (2006). *Striving for student success: The effect of Project GRAD on high school student outcomes in three urban school districts.* New York, NY: MDRC.[9]

Quantum Opportunity Program

Hahn, A., Leavitt, T., & Aaron, P. (1994). *Evaluation of the Quantum Opportunities Program (QOP): Did the program work? A report on the post secondary outcomes and cost effectiveness of the QOP program (1989–1993)*. Waltham, MA: Brandeis University, Center for Human Resources.[10]

Talent Development High Schools

Balfanz, R., Legters, N., & Jordan, W. (2004). *Catching up: Impact of the Talent Development ninth grade instructional interventions in reading and mathematics in high-poverty high schools*. Baltimore, MD: Johns Hopkins University, CRESPAR.[5]

McPartland, J., Balfanz, R., Jordan, W., & Legters, N. (1998). Improving climate and achievement in a troubled urban high school through the Talent Development model. *Journal of Education for Students Placed at Risk*, *3*(4), 337–361.[3]

McPartland, J., Legters, N., Jordan, W., & McDill, E. L. (1996). *The Talent Development High School: Early evidence of impact on school climate, attendance, and student development* (Report No. 2). Baltimore, MD: Johns Hopkins University, CRESPAR.[7]

Talent Development Middle Grades

Herlihy, C., & Kemple, J. (2004). T*he Talent Development Middle School model: Context, components, and initial impacts on students' performance and attendance.* New York: MDRC.[5]

Mac Iver, D., Plank, S., & Balfantz, R. (2000). *Working together to become proficient readers. Early impact of the Talent Development Middle School's student team literature program.* Baltimore: Johns Hopkins University, Center for Research on the Education of Students Placed At Risk (CRESPAR).[5]

Mac Iver, D., & Plank, S. (1996). *The Talent Development Middle School. Creating a motivational climate conducive to Talent Development in middle schools: Implementation and effects of student team reading*. Baltimore: Johns Hopkins University,

Appendix A6 References *(continued)*

Center for Research on the Education of Students Placed At Risk (CRESPAR).[5]

Plank, S., & Young, E. (2000). *Lessons for scaling up: Evaluations of the Talent Development Middle School's student team literature program.* Baltimore: Johns Hopkins University, Center for Research on the Education of Students Placed At Risk (CRESPAR).[5]

Talent Search

Brewer, E. W., & Landers, J. M. (2005). A longitudinal study of the Talent Search program. *Journal of Career Development, 31,* 195–208.[8]

Indiana study

Constantine, J. M., Seftor, N. S., Martin, E. S., Silva, T., & Myers, D. (2006). *A study of the effect of the Talent Search program on secondary and postsecondary outcomes in Florida, Indiana, and Texas: Final report from phase II of the national evaluation*. Report prepared by Mathematica Policy Research for the U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, Policy and Program Studies Service. Washington, DC: U.S. Department of Education.[5]

Franklin, P. (1985). *Helping disadvantaged youth and adults enter college: An assessment of two Federal programs*. Washington, DC: College Entrance Examination Board.[5]

Green, C. M. (2003). An assessment of the influence of a Talent Search program on the academic and career goals of program participants. *Dissertation Abstracts International,* Wayne State University. (UMI No. 3086430)[5]

Simelton, V. E. (1994). *An evaluation of the Educational Talent Search Program at the University of Arkansas at Little Rock*. Unpublished doctoral dissertation, University of Arkansas.[5]

Twelve Together

Orr, M. T. (1987). *Keeping students in school. A guide to effective dropout prevention services.* San Francisco: Jossey-Bass Inc.[3]

1. The study also analyzed students served by *ALAS* who had learning disabilities or who were classified as emotionally disturbed. This analysis did not meet WWC standards because it was a quasi-experimental design with pretest differences between the participant and comparison groups that were not controlled in the analysis.
2. This analysis focused on a subsample of the initially randomly assigned sample (81 of 94 students). It meets WWC standards with reservations because different rules were used to exclude students from the treatment group and the control group. Here, the additional study is treated as a subgroup analysis, which does not affect the intervention rating of effectiveness.
3. Lack of evidence for baseline equivalence: the study, which used a quasi-experimental design, did not establish that the comparison group was equivalent to the intervention group at baseline.
4. Severe overall attrition: the study, which used a quasi-experimental design, lost a large proportion of its sample from the pretest to the posttest.
5. The outcome measures are not relevant to this review.
6. The sample is not appropriate to this review: the study did not include middle school or high school students.
7. Does not use a strong causal design: the study did not use a comparison group.
8. Does not use a strong causal design: the study used a nonequivalent comparison group.
9. Does not use a strong causal design: there was only one intervention school, so the analysis could not separate the effect of the intervention from other factors.
10. The study, which began as a randomized controlled trial, allowed for the replacement of subjects who left the program, creating a quasi-experimental design. The study also had high attrition rates, so it did not pass WWC evidence screens.