Dropout prevention interventions 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, interventions have to operate within the United States and include dropout prevention or dropout recovery as one of their primary objectives. The interventions reviewed 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 focuses on three outcome domains: staying in school, progressing in school, and completing school. As of September 2008, the WWC looked at 84 studies of 22 dropout prevention interventions that qualified for review. Of these, 23 studies of 16 interventions meet WWC evidence standards—11 without reservations and 12 with reservations. The six other interventions have no studies that meet WWC eligibility or evidence screens.

In looking at the three outcome domains for the 16 interventions, four interventions had positive or potentially positive effects in two domains:

- **Accelerated Middle Schools** had potentially positive effects on staying in school and positive effects on progressing in school.
- **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.

Eight other interventions had potentially positive effects in one domain. Four had no discernible effects in any of the three domains.

**Absence of conflict of interest**

Several studies in the WWC review of dropout prevention interventions 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 external peer reviewers.

**Intervention Ratings for Dropout Prevention**

Each dropout prevention intervention 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 ratings characterize evidence in a 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 16 dropout prevention interventions (empty cells indicate that studies meeting standards did not report findings in that domain).
### Table 1  Effectiveness ratings for 16 dropout prevention interventions in three domains

<table>
<thead>
<tr>
<th>Intervention name</th>
<th>Staying in school</th>
<th>Progressing in school</th>
<th>Completing school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerated Middle Schools (no website available)</td>
<td>+</td>
<td>Medium to large</td>
<td>+</td>
</tr>
<tr>
<td>ALAS (Achievement for Latinos through Academic Success)</td>
<td>+</td>
<td>Small</td>
<td>+</td>
</tr>
<tr>
<td>ALAS (Achievement for Latinos through Academic Success) (<a href="http://www.ndpc-sd.org/documents/Evidence_Based_Practices/ALAS_Model_Description.pdf">http://www.ndpc-sd.org/documents/Evidence_Based_Practices/ALAS_Model_Description.pdf</a>)</td>
<td>+</td>
<td>Small</td>
<td>+</td>
</tr>
<tr>
<td>Career Academies (<a href="http://hacinc.com">http://hacinc.com</a>)</td>
<td>+</td>
<td>Small</td>
<td>+</td>
</tr>
<tr>
<td>Check &amp; Connect (<a href="http://icl.umn.edu/checkandconnect">http://icl.umn.edu/checkandconnect</a>)</td>
<td>+</td>
<td>Small</td>
<td>+</td>
</tr>
<tr>
<td>Financial Incentives for Teen Parents to Stay in School (no website available)</td>
<td>+</td>
<td>Small</td>
<td>+</td>
</tr>
<tr>
<td>First Things First (<a href="http://www.ire.org">http://www.ire.org</a>)</td>
<td>+</td>
<td>Medium to large</td>
<td>+</td>
</tr>
<tr>
<td>High School Redirection (no website available)</td>
<td>+</td>
<td>Medium to large</td>
<td>+</td>
</tr>
<tr>
<td>Job Corps (<a href="http://www.jobcorps.dol.gov/about.htm">http://www.jobcorps.dol.gov/about.htm</a>)</td>
<td>+</td>
<td>Small</td>
<td>+</td>
</tr>
<tr>
<td>Job Corps (no website available)</td>
<td>+</td>
<td>Small</td>
<td>+</td>
</tr>
<tr>
<td>Middle College High School (<a href="http://www.mcnc.us">http://www.mcnc.us</a>)</td>
<td>+</td>
<td>Small</td>
<td>+</td>
</tr>
<tr>
<td>Middle College High School (<a href="http://www.mcnc.us">http://www.mcnc.us</a>)</td>
<td>+</td>
<td>Small</td>
<td>+</td>
</tr>
<tr>
<td>New Chance (no website available)</td>
<td>+</td>
<td>Small</td>
<td>+</td>
</tr>
<tr>
<td>Project GRAD (<a href="http://www.projectgrad.org">http://www.projectgrad.org</a>)</td>
<td>+</td>
<td>Small</td>
<td>+</td>
</tr>
<tr>
<td>Quantum Opportunity Program (<a href="http://www.eisenhowerfoundation.org/qop.php">http://www.eisenhowerfoundation.org/qop.php</a>)</td>
<td>+</td>
<td>Small</td>
<td>+</td>
</tr>
<tr>
<td>Talent Development High Schools (<a href="http://www.csos.jhu.edu/tdhs">http://www.csos.jhu.edu/tdhs</a>)</td>
<td>+</td>
<td>Small</td>
<td>+</td>
</tr>
<tr>
<td>Twelve Together (no website available)</td>
<td>+</td>
<td>Small</td>
<td>+</td>
</tr>
</tbody>
</table>

### 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

### Note

WVC intervention reports describe each intervention and provide information on the students, cost, and scope of use. To view the intervention reports, please click on the intervention name or go to http://ies.ed.gov/ncee/wwc/.

When available, websites offering additional information about the intervention are included after the intervention name.

*A rating of “medium 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.”

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**WWC Topic Report**  Dropout Prevention

**September 2008**
Average improvement indices
The WWC computes an average improvement index for each domain and each study and 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, as well as the number of school days enrolled. The WWC reviewed outcomes in this domain for 9 dropout prevention interventions, 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, whether the student is making normal progress toward graduation, and highest grade completed. The WWC reviewed outcomes in this domain for 11 interventions, and the average improvement index ranged from −6 to +35 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. The WWC reviewed outcomes in this domain for 11 interventions, and the average improvement index ranged from −3 to +17 percentile points (figure 3).

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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.

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Note: Bold text indicates interventions with a medium to large extent of evidence.
Table 2  Interventions reviewed with no studies meeting WWC eligibility or evidence screens

Belief Academy (no website available)
Coca-Cola Valued Youth Program (http://www.idra.org/Coca-Cola_Valued_Youth_Program.html)
National Guard Youth ChalleNGe Corps (http://www.ngycp.org)
New Century High Schools Initiative (http://www.newvisions.org/schools/hchs/index.asp)
Project COFFEE (http://www.o MPS.org)
Talent Development Middle Grades Program (http://web.jhu.edu/CSOS/tdmg/index.html)

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

Figure 3  Completing school: average improvement

Outcomes may include:
Earned a high school diploma or GED
Earned a high school diploma from a district school

Note: Bold text indicates interventions with a medium to large extent of evidence.

For more information about studies reviewed and WWC methodology, please see the Dropout Prevention Technical Appendices.
### Appendix A1  Extent of evidence

<table>
<thead>
<tr>
<th>Intervention name</th>
<th>Staying in school</th>
<th>Progressing in school</th>
<th>Completing school</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of studies</td>
<td>Sample size (schools/students)</td>
<td>Extent of evidence</td>
</tr>
<tr>
<td>Accelerated Middle Schools</td>
<td>3</td>
<td>14/848</td>
<td>Medium to large</td>
</tr>
<tr>
<td>ALAS (Achievement for Latinos through Academic Success)</td>
<td>1</td>
<td>1/94</td>
<td>Small</td>
</tr>
<tr>
<td>Career Academies</td>
<td>1</td>
<td>9/345</td>
<td>Small</td>
</tr>
<tr>
<td>Check &amp; Connect</td>
<td>2</td>
<td>nr/238</td>
<td>Small</td>
</tr>
<tr>
<td>Financial Incentives for Teen Parents to Stay in School</td>
<td>2</td>
<td>nr/1,819</td>
<td>Medium to large</td>
</tr>
<tr>
<td>First Things First</td>
<td>1</td>
<td>16/nr</td>
<td>Small</td>
</tr>
<tr>
<td>High School Redirection</td>
<td>3</td>
<td>3/1,634</td>
<td>Medium to large</td>
</tr>
<tr>
<td>Job Corps</td>
<td>0</td>
<td>0</td>
<td>na</td>
</tr>
<tr>
<td>JOBSTART</td>
<td>0</td>
<td>0</td>
<td>na</td>
</tr>
<tr>
<td>Middle College High School</td>
<td>1</td>
<td>1/394</td>
<td>Small</td>
</tr>
<tr>
<td>New Chance</td>
<td>0</td>
<td>0</td>
<td>na</td>
</tr>
<tr>
<td>Project GRAD</td>
<td>0</td>
<td>0</td>
<td>na</td>
</tr>
<tr>
<td>Quantum Opportunity Program</td>
<td>0</td>
<td>0</td>
<td>na</td>
</tr>
<tr>
<td>Talent Development High Schools</td>
<td>0</td>
<td>0</td>
<td>na</td>
</tr>
<tr>
<td>Talent Search</td>
<td>0</td>
<td>0</td>
<td>na</td>
</tr>
<tr>
<td>Twelve Together</td>
<td>1</td>
<td>9/219</td>
<td>Small</td>
</tr>
</tbody>
</table>

**na** = not applicable/not studied  
**nr** = not reported

1. A rating of “medium 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

<table>
<thead>
<tr>
<th>Intervention name</th>
<th>Students targeted by the intervention</th>
<th>Students in reviewed studies same as full target population?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerated Middle Schools</td>
<td>Middle school students who are behind grade level</td>
<td>Yes</td>
</tr>
<tr>
<td>ALAS (Achievement for Latinos through Academic Success)</td>
<td>Middle school students deemed at risk of dropping out; served throughout their three years of middle or junior high school</td>
<td>Yes</td>
</tr>
<tr>
<td>Career Academies</td>
<td>High school students; intervention originally served only at-risk students; now serves a more general student population</td>
<td>No. Studies reviewed focused only on at-risk students.</td>
</tr>
<tr>
<td>Check &amp; Connect</td>
<td>Middle and high school students deemed at risk of dropping out; served throughout their time in middle or high school</td>
<td>No. Studies reviewed focused only on high school students.</td>
</tr>
<tr>
<td>Financial Incentives for Teen Parents to Stay in School</td>
<td>Teen parents receiving cash assistance</td>
<td>Yes</td>
</tr>
<tr>
<td>First Things First</td>
<td>Students in elementary, middle, and high schools serving significant proportions of economically disadvantaged students</td>
<td>No. Studies reviewed focused only on high school students.</td>
</tr>
<tr>
<td>High School Redirection</td>
<td>High school students who have dropped out or are considered at risk of dropping out</td>
<td>Yes</td>
</tr>
<tr>
<td>Job Corps</td>
<td>Economically disadvantaged youth, most of whom lack a high school diploma or GED certificate</td>
<td>Yes</td>
</tr>
<tr>
<td>JOBSTART</td>
<td>Young disadvantaged high school dropouts</td>
<td>Yes</td>
</tr>
<tr>
<td>Middle College High School</td>
<td>High school students who have dropped out or are considered at risk of dropping out</td>
<td>Yes</td>
</tr>
<tr>
<td>New Chance</td>
<td>Young welfare mothers without a high school diploma or GED certificate</td>
<td>Yes</td>
</tr>
<tr>
<td>Project GRAD</td>
<td>Serves all students in a participating high school, as well as its feeder elementary and middle schools</td>
<td>No. Studies reviewed focused only on high school students.</td>
</tr>
<tr>
<td>Quantum Opportunity Program</td>
<td>Students from high schools with high dropout rates; support provided for four to five years beginning in the ninth grade</td>
<td>Yes</td>
</tr>
<tr>
<td>Talent Development High Schools</td>
<td>School-wide reform serving all students in a participating high school</td>
<td>Yes</td>
</tr>
<tr>
<td>Talent Search</td>
<td>Low-income middle and high school students; middle and high school students whose parents did not earn high school degrees</td>
<td>No. Studies reviewed focused only on high school students.</td>
</tr>
<tr>
<td>Twelve Together</td>
<td>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</td>
<td>No. Studies reviewed focused only on middle school students.</td>
</tr>
</tbody>
</table>
## Appendix A3  Characteristics of interventions

<table>
<thead>
<tr>
<th>Intervention name</th>
<th>Academic approach</th>
<th>Support services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerated Middle Schools</td>
<td>An additional year of curriculum is covered during a student’s one to two years in the intervention</td>
<td>Small class sizes, tutoring, attendance monitoring, counseling, and family outreach</td>
</tr>
<tr>
<td>ALAS (Achievement for Latinos through Academic Success)</td>
<td>Regular school curriculum supplemented with special classes on problem-solving skills</td>
<td>Close monitoring of attendance, regular feedback to parents and students on performance, case management, and counseling</td>
</tr>
<tr>
<td>Career Academies</td>
<td>School-within-a-school approach operating within a regular high school; coursework organized around a career theme</td>
<td>Internships and mentors from local employers that reinforce the specific career theme of the academy</td>
</tr>
<tr>
<td>Check &amp; Connect</td>
<td>Regular school curriculum supplemented with tutoring as needed</td>
<td>Close monitoring of attendance, mentoring, case management, and family outreach</td>
</tr>
<tr>
<td>Financial Incentives for Teen Parents to Stay in School</td>
<td>Does not include an academic component</td>
<td>Bonuses and sanctions applied to the welfare grant to encourage school attendance and improved academic performance; case management</td>
</tr>
<tr>
<td>First Things First</td>
<td>Theme-based small learning communities, family and student advocate system, and instructional improvements</td>
<td>Students assigned an advocate, typically one of their teachers, who serves as a mentor and a liaison between the school and the student’s family</td>
</tr>
<tr>
<td>High School Redirection</td>
<td>Alternative high school model focusing on basic skills acquisition, remedial reading instruction, and accelerated credit accumulation</td>
<td>Onsite child care, limited extracurricular activities</td>
</tr>
<tr>
<td>Job Corps</td>
<td>Remedial education, GED preparation, vocational training, job placement assistance</td>
<td>Residential living services, counseling, health services, social-skills training, and a biweekly living allowance</td>
</tr>
<tr>
<td>JOBSTART</td>
<td>Basic academic skills instruction, GED preparation, occupational skills training, job placement assistance</td>
<td>Training-related support services, such as transportation assistance and childcare</td>
</tr>
<tr>
<td>Middle College High School</td>
<td>Alternative high school operating on a college campus; college-preparatory curriculum emphasizing individualized attention and the development of critical thinking skills</td>
<td>Community service opportunities, internships, peer support, and specialized counseling</td>
</tr>
<tr>
<td>New Chance</td>
<td>GED preparation classes and a parenting and life skills curriculum, followed by occupational training and job placement assistance</td>
<td>Case management and child care</td>
</tr>
<tr>
<td>Project GRAD</td>
<td>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</td>
<td>College scholarships for students performing well academically, six-week academic summer program on a college campus, counseling on college preparation and admissions</td>
</tr>
<tr>
<td>Quantum Opportunity Program</td>
<td>Regular school curriculum supplemented with tutoring, computer-assisted learning, and life skills instruction</td>
<td>Case management, mentoring, transportation assistance, child care, and financial incentives to promote participation</td>
</tr>
<tr>
<td>Talent Development High Schools</td>
<td>School restructured into small “learning communities,” curriculum emphasizes college preparation and reading and math instruction</td>
<td>Ongoing technical assistance and professional development for school staff</td>
</tr>
<tr>
<td>Talent Search</td>
<td>Regular school curriculum supplemented with tutoring and study skills assistance</td>
<td>Career exploration, aptitude assessment, academic advising, college campus visits, college and financial aid application assistance, assistance with preparing for college entrance exams</td>
</tr>
<tr>
<td>Twelve Together</td>
<td>Regular school curriculum supplemented with homework assistance</td>
<td>Weekly peer support sessions led by trained adult facilitators, college campus visits, social events</td>
</tr>
</tbody>
</table>
## Appendix A4  Summary of statistically significant\(^1\) or substantively important\(^2\) positive findings

<table>
<thead>
<tr>
<th>Intervention name</th>
<th>Staying in school</th>
<th>Progressing in school</th>
<th>Completing school</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive findings</td>
<td>Findings across outcomes</td>
<td>Positive findings</td>
</tr>
<tr>
<td><strong>Accelerated Middle Schools</strong></td>
<td>Dropped out of school</td>
<td>ns, Substantively important</td>
<td>Highest grade completed after two years</td>
</tr>
<tr>
<td>Dynarski, Gleason, Rangarajan, &amp; Wood, 1998—Georgia study (randomized controlled trial with differential attrition)</td>
<td>None</td>
<td>ns, nsi</td>
<td>Highest grade completed after two years</td>
</tr>
<tr>
<td>Dynarski, Gleason, Rangarajan, &amp; Wood, 1998—New Jersey study (randomized controlled trial)</td>
<td>Dropped out of school</td>
<td>Statistically significant, Substantively important</td>
<td>Highest grade completed after two years</td>
</tr>
<tr>
<td>Dynarski, Gleason, Rangarajan, &amp; Wood, 1998—Michigan study (randomized controlled trial with differential attrition)</td>
<td>None</td>
<td>ns, nsi</td>
<td>Highest grade completed after two years</td>
</tr>
<tr>
<td><strong>ALAS (Achievement for Latinos through Academic Success)</strong></td>
<td>Enrollment: end of grade 9</td>
<td>Statistically significant, Substantively important</td>
<td>On track to graduate on time: end of 9th grade</td>
</tr>
<tr>
<td>Larson &amp; Rumberger, 2005 (randomized controlled trial)</td>
<td>Dropped out of school</td>
<td>Statistically significant, Substantively important</td>
<td>Total credits earned</td>
</tr>
<tr>
<td><strong>Career Academies</strong></td>
<td>Kemple, 2004 (randomized controlled trial)</td>
<td>Dropped out of school</td>
<td>Statistically significant, Substantively important</td>
</tr>
<tr>
<td><strong>Check &amp; Connect</strong></td>
<td>Sinclair, Christenson, Evelo, &amp; Hurley, 1998 (randomized controlled trial)</td>
<td>Dropped out of school</td>
<td>Statistically significant, Substantively important</td>
</tr>
<tr>
<td>Sinclair, Christenson, &amp; Thurlow, 2005 (randomized controlled trial with attrition problems)</td>
<td>Dropped out of school</td>
<td>Statistically significant, Substantively important</td>
<td>na</td>
</tr>
<tr>
<td><strong>Financial Incentives for Teen Parents to Stay in School</strong></td>
<td>Long, Gueron, Wood, Fisher, &amp; Fellerath, 1996 (randomized controlled trial)</td>
<td>None</td>
<td>ns, nsi</td>
</tr>
<tr>
<td>Mauldon, Malvin, Stiles, Nicosia, &amp; Seto, 2000 (randomized controlled trial with attrition problems)</td>
<td>Dropped out of school</td>
<td>Statistically significant, nsi</td>
<td>na</td>
</tr>
<tr>
<td><strong>First Things First</strong></td>
<td>Quint, Bloom, Black, &amp; Stephens, 2005—Houston study (quasi-experimental design)</td>
<td>None</td>
<td>ns, nsi</td>
</tr>
<tr>
<td><strong>High School Redirection</strong></td>
<td>Dynarski &amp; Wood, 1997—Stockton study (randomized controlled trial with control group crossover)</td>
<td>Number of days enrolled: year 1</td>
<td>Statistically significant, Substantively important</td>
</tr>
<tr>
<td>Dynarski &amp; Wood, 1997—Wichita study (randomized controlled trial)</td>
<td>None</td>
<td>ns, nsi</td>
<td>None</td>
</tr>
<tr>
<td>Dynarski &amp; Wood, 1997—Cincinnati study (randomized controlled trial)</td>
<td>None</td>
<td>ns, nsi</td>
<td>na</td>
</tr>
</tbody>
</table>

(continued)
### Appendix A4  Summary of statistically significant\(^1\) or substantively important\(^2\) positive findings (continued)

<table>
<thead>
<tr>
<th>Intervention name</th>
<th>Staying in school</th>
<th>Progressing in school</th>
<th>Completing school</th>
<th>Findings across outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive findings</td>
<td>Findings across outcomes</td>
<td>Positive findings</td>
<td>Findings across outcomes</td>
</tr>
<tr>
<td><strong>Job Corps</strong></td>
<td>na</td>
<td>na</td>
<td>None</td>
<td>ns, nsi</td>
</tr>
<tr>
<td>Schochet, Burghardt, &amp; Glazerman, 2001 (randomized controlled trial)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>JOBSTART</strong></td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Cave, Bos, Doolittle, &amp; Toussaint, 1993 (randomized controlled trial)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Middle College High School</strong></td>
<td>None</td>
<td>ns, nsi</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Dynarski, Gleason, Rangarajan, &amp; Wood, 1998 (randomized controlled trial)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New Chance</strong></td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Quint, Bos, &amp; Polit, 1997 (randomized controlled trial)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Project GRAD</strong></td>
<td>na</td>
<td>na</td>
<td>None</td>
<td>ns, nsi</td>
</tr>
<tr>
<td>Snipes, Holton, Doolittle, &amp; Sztejnberg, 2006 (quasi-experimental design)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Quantum Opportunity Program</strong></td>
<td>na</td>
<td>na</td>
<td>None</td>
<td>ns, nsi</td>
</tr>
<tr>
<td>Schirm, Stuart &amp; McKie, 2006 (randomized controlled trial with differential attrition)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Talent Development High Schools</strong></td>
<td>na</td>
<td>na</td>
<td>Total credits earned: end of year 2</td>
<td>Statistically significant, nsi</td>
</tr>
<tr>
<td>Kemple, Herlihy, &amp; Smith, 2005 (quasi-experimental design)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Talent Search</strong></td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Constantine, Seftor, Martin, Silva, &amp; Myers, 2006—Texas study (quasi-experimental design)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constantine, Seftor, Martin, Silva, &amp; Myers, 2006—Florida study (quasi-experimental design)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Twelve Together</strong></td>
<td>Dropped out of school</td>
<td>ns, nsi</td>
<td>None</td>
<td>ns, nsi</td>
</tr>
<tr>
<td>Dynarski, Gleason, Rangarajan, &amp; Wood, 1998 (randomized controlled trial with differential attrition)</td>
<td></td>
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</tr>
</tbody>
</table>

\(^{1}\) According to WWC criteria, if an intervention 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.
Eighty-four studies on 22 dropout prevention interventions 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.

**Eligibility Screens and Evidence Standards**
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. The WWC is 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 short-term outcomes in the WWC’s analysis of intervention effects.

The research evidence for interventions 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://ies.ed.gov/ncee/wwc/. So far, 23 studies of 16 dropout prevention interventions meet evidence standards with or without reservations. The lack of evidence for the remaining interventions does not mean that those interventions are ineffective; some interventions 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 the WWC 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 the WWC 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 intervention effects. A “medium to 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 and 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**

**Meets WWC standards**

**Accelerated Middle Schools**

**ALAS (Achievement for Latinos through Academic Success)**

**Additional sources:**

**Career Academies**

**Additional sources:**

**Check & Connect**

**Additional sources:**

**Financial Incentives for Teen Parents to Stay in School**

**Additional sources:**
**High School Redirection**

**Additional sources:**


**Additional sources:**

**Job Corps**

**Additional sources:**

**JOBSTART**

**Additional sources:**

**Middle College High School**

**Additional sources:**

**New Chance**

**Additional sources:**
Appendix A6
References (continued)


**Meets WWC standards with reservations**

**Accelerated Middle Schools**


**Additional sources:**


**Check & Connect**


**Additional source:**


**Financial Incentives for Teen Parents to Stay in School**


**First Things First**


**Additional Sources:**


**High School Redirection**


**Additional sources:**


**Project GRAD**

Quantum Opportunity Program

Additional sources:

Talent Development High Schools

Additional source:

Talent Search

(Texas study)

(Florida study)

Additional sources:

Talent Search
Twelve Together

Additional sources:

Does not meet WWC eligibility screens or evidence standards
Belief Academy
with learning disabilities and emotional/behavioral disorders at risk for dropping out of school. Project Evaluation 1990–1995. Washington, DC: US Department of Education, Office of Special Education Programs. The study does not meet evidence standards because the intervention and comparison groups are not shown to be equivalent at baseline.

**Career Academies**


**Additional source:**


**Additional sources:**


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. The study does not meet evidence standards because the intervention and comparison groups are not shown to be equivalent at baseline.

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**Additional sources:**


Appendix A6
References
(continued)

because the intervention and comparison groups are not shown to be equivalent at baseline.

Additional sources:

Check & Connect
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 & Connect model. Journal of Education for Students Placed At-Risk, 9(3), 279–301. This study is ineligible for review because it does not use a sample within the age or grade range specified in the protocol.

Additional sources:
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. This study is ineligible for review because it does not use a comparison group.

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. The study does not meet evidence standards because the intervention and comparison groups are not shown to be equivalent at baseline.

First Things First
Quint, J., Bloom, H. S., Black, A. R., & Stephens, L. (2005). Scaling up First Things First: The challenge of scaling up educational reform. New York, NY: MDRC. (Riverview Gardens study) The study does not meet evidence standards because the measures of effect cannot be attributed solely to the intervention – there was only one unit of analysis in one or both conditions. Quint, J., Bloom, H. S., Black, A. R., & Stephens, L. (2005). Scaling up First Things First: The challenge of scaling up educational reform. New York, NY: MDRC. (Kansas City study) The study does not meet evidence standards because
the intervention and comparison groups are not shown to be equivalent at baseline.

Quint, J., Bloom, H. S., Black, A. R., & Stephens, L. (2005). Scaling up First Things First: The challenge of scaling up educational reform. New York, NY: MDRC. (Shaw and Greenville study) This study is ineligible for review because it does not include an outcome within a domain specified in the protocol.


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) This study is ineligible for review because it does not use a comparison group.


Job Corps

Lin, C. W. (1999). Affective work competencies: Evaluation of work-related attitude change in a Job Corps residential center. (Doctoral dissertation, Kansas State University, 1999). Dissertation Abstracts International, 60 (5-A), 1463. This study is ineligible for review because it does not include an outcome within a domain specified in the protocol.

Middle College High School

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Lieberman, J. E. (1986). Middle College: A ten year study. (ERIC Document Reproduction Service No. ED271153) The study does not meet evidence standards because the intervention and comparison groups are not shown to be equivalent at baseline.

Lieberman, J. E. (1992). A final report to the Ford Foundation on Middle College replication. Long Island City, NY: LaGuardia Community College. This study is ineligible for review because it does not include an outcome within a domain specified in the protocol.

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Wenger, J. W., & Hodari, A. K. (2004). Final analysis of evaluation of homeschool and ChalleNGe program recruits. Alexandria, VA: CNA Corporation. This study is ineligible for review because it does not include an outcome within a domain specified in the protocol.

Appendix A6

References (continued)

New Century High Schools Initiative
Brand, B. (2005). Enhancing high school reform: Lessons from site visits to four cities. Washington, DC: American Youth Policy Forum. This study is ineligible for review because it does not examine the effectiveness of an intervention.


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Huebner, T. A. (2005). Rethinking high school: An introduction to New York City’s experience. San Francisco, CA: WestEd. The study does not meet evidence standards because the intervention and comparison groups are not shown to be equivalent at baseline.

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Project COFFEE

Appendix A6 References (continued)

American Institutes for Research, Research Triangle Institute, and RMC Research Corporation, Arlington, VA. (Fort Totten study) The study does not meet evidence standards because the intervention and comparison groups are not shown to be equivalent at baseline.


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(continued)

development (Report No. 2). Baltimore, MD: Johns Hopkins University, CRESPAR. This study is ineligible for review because it does not use a comparison group.

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