



# Preventing Dropout in Secondary Schools *Practice Guide Summary*



## Educators' Practice Guide Summary • WHAT WORKS CLEARINGHOUSE™

The four evidence-based recommendations in this WWC practice guide can support educators and administrators in preventing dropout in secondary schools.

### Recommendations in this practice guide:

1. Monitor the progress of all students, and proactively intervene when students show early signs of attendance, behavior, or academic problems.
2. Provide intensive, individualized support to students who have fallen off track and face significant challenges to success.
3. Engage students by offering curricula and programs that connect schoolwork with college and career success and that improve students' capacity to manage challenges in and out of school.
4. For schools with many at-risk students, create small, personalized communities to facilitate monitoring and support.

### Introduction

Students who do not complete high school face economic and social challenges throughout their lifetimes. They are more likely to be unemployed,<sup>1</sup> earn lower wages,<sup>2</sup> have poor health, engage in criminal activity, and require public assistance.<sup>3</sup> The *Preventing Dropout in Secondary Schools* practice guide from the What Works Clearinghouse (WWC) aims to address these challenges. Developed by a panel of practitioners and researchers, the guide offers school and district administrators four evidence-based recommendations for helping students stay in school, progress through school, and graduate high school.

This summary introduces the recommendations and supporting evidence described in the full practice guide. Recommendations 1, 2, and 3 complement one another and are most effective when implemented simultaneously in all types of schools, while Recommendation 4 should be implemented primarily in schools with high dropout rates to facilitate implementation of the other three recommendations. For a full description of the recommendations and more practical tips, **download your free copy of the guide.**

**Recommendation 1.**  
**Monitor the progress of all students, and proactively intervene when students show early signs of attendance, behavior, or academic problems.**

Students typically decide to drop out of high school after an accumulation of setbacks and struggles over several years.<sup>4</sup> Three key indicators—attendance, behavior, and course performance—are reliable predictors of which students are at risk for dropping out.<sup>5</sup> Pay special attention to these indicators during transition years, such as 6th grade and 9th grade, when students often slip off track. By continually monitoring all students’ attendance, behavior, and grades, schools can intervene at the first signs of trouble, before students need intensive support to graduate on time.<sup>6</sup>

**How to carry out the recommendation**

**1. Organize and analyze data to identify students who miss school, have behavior**

**problems, or are struggling in their courses.** Use data routinely collected in school as a starting point for monitoring the three key “ABC” early warning indicators:<sup>7</sup>

- **A**ttendance (total, unexcused, and excused)
- **B**ehavior (suspensions, office referrals)
- **C**ourse grades (including intermediate outcomes such as failing tests or missing assignments)

Use ABC data from previous years to establish thresholds<sup>8</sup> that indicate when students are at risk for falling off track for graduation and need intervention. Schools can access ABC indicators from their school data systems and regularly update them as part of everyday operations.

Organize the data at both the student level and school level (see templates below) so that it is easy for staff to flag which students are showing early warning signs of falling off track, work with other educators to plan interventions for students needing support, and identify patterns and trends in the data that might be related to dropping out.

**Sample template for organizing data at the student level**

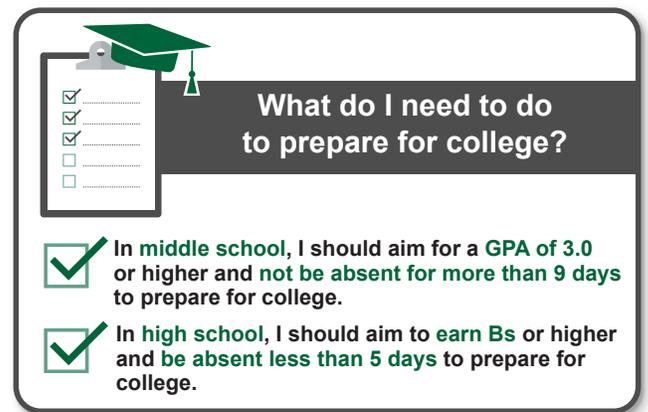
Student ID	Last name	First name	Grading period	Current absences	Prior period absences	Current behavior incidents	Prior behavior incidents	Current GPA	Prior Ds or Fs
102201	Robert	Sarah	2	0	0	0	0	3.1	—
104451	Smith	Kyla	2	0	0	0	0	2.5	—
245230	Hassan	Bob	2	8	0	0	0	1.6	2
216222	D'Shay	Matt	2	2	2	2	0	2.4	1

**Sample template for organizing data at the school level**

Month	Absence counts					Office referral counts					Grade counts				
	0	1	2	3	>3	0	1	2	3	>3	A	B	C	D	F
August	295	4	1	0	0	0	2	0	0	0	—	—	—	—	—
September	229	12	48	5	6	0	1	2	0	0	35	100	140	25	10
October	202	31	32	15	20	0	0	3	0	1	40	95	135	30	10
Total to date	726	47	81	20	26	0	3	5	0	1	75	195	275	55	20

- 2. Intervene with students who show early signs of falling off track.** Use the data collected in Step 1 to identify students who are in need of early intervention to ensure they remain on track for graduation. Early interventions can occur for individual students, groups of students, or the entire school, and they may be academic, social, or emotional in nature. Before planning any intervention, informally check in with students about changes in attendance, behavior, or grades to discover the cause of the problem.
- 3. If data show high rates of absenteeism, take steps to help students, parents, and school staff understand the importance of attending school daily.** The panel believes that it is important to set clear expectations for attendance and embed it in the school culture. If schoolwide data show low attendance rates for many students, initiate programs that reach all students, staff, and parents to emphasize the importance of attendance for graduation. See **pp. 14–16 of the practice guide** for examples of strategies to stress the importance of attendance, such as distributing “fridge stickers” like the one to the right<sup>9</sup> to highlight the attendance rates and grades needed to graduate from high school and attend college. Throughout the school year, post visuals highlighting expectations for attendance in highly visible places to help reinforce the school culture and message that attending school daily is important.

### Sample “fridge sticker” highlighting the grades and attendance needed to prepare for college



- 4. Monitor progress and adjust interventions as needed.** Regularly monitor the effectiveness of interventions by reviewing the data on target students’ attendance, behaviors, and academic progress during team meetings. Pay particular attention to students’ performance on indicators that the intervention is expected to influence. For example, daily wake-up calls would influence attendance during the first period.<sup>10</sup> If no improvement is evident based on the data, determine whether an alternate course of action is necessary. Consider whether the intervention is being implemented as intended and, if not, what can be done to facilitate better implementation.

## **Recommendation 2.** **Provide intensive, individualized support to students who have fallen off track and face significant challenges to success.**

Students who are already off track, who have not responded to interventions from Recommendation 1, or who must overcome large personal obstacles are unlikely to graduate without more intense intervention. Regularly monitoring ABC data (described in

**Chronic absenteeism** is generally defined as 10% of the school year, which is 18 days out of a typical 180-day school year.

Recommendation 1) will help staff identify which students are chronically absent or have failed multiple courses, which students are not responding to interventions, and which are facing significant personal challenges. A trained adult advocate can help these students by providing individualized support to meet their academic, personal, and emotional needs.

## **How to carry out the recommendation**

- 1. For each student identified as needing individualized support, assign a single person to be the student’s primary advocate.** Provide each high-risk, high-needs student with an adult advocate whose primary task is to help students get back on track for graduation. Advocates provide students and their families with a trusted connection within the school

and can act as a liaison among students, their families, and school staff. When students have multiple or acute needs, the advocate may also take on the additional role of a case manager. As a case manager, the advocate coordinates support from multiple sources to address needs he or she cannot handle singlehandedly. When assigning advocates to students, consider the key qualifications outlined on this page<sup>11</sup> and try to assign advocates who are from the same community, have similar interests, or share similar cultural or language backgrounds.<sup>12</sup>

**2. Develop a menu of support options that advocates can use to help students.** Create a menu of available services in and around the school community, including academic-assistance services, behavioral interventions, mentoring, sources to address basic needs (e.g., provision of food and school supplies), college planning and preparation, rewards for improved behavior, and support for families. See below for one sample support menu.<sup>13</sup> Have advocates monitor students' attendance, behavior, and course performance regularly—as often as daily, if necessary—to determine whether students need additional support and which supports to provide.<sup>14</sup> Advocates can use the support menu to create an individualized plan based on each student's needs.

## Key qualifications of an advocate

- Advocacy and communication skills, such as the ability to negotiate, compromise, and confront conflict constructively
- Familiarity with the schools and community resources
- A belief that all students have abilities
- Willingness to work cooperatively with families and school staff

**3. Support advocates with ongoing professional learning opportunities and tools for tracking their work.** The panel believes that an important step in offering intensive, individualized support for students is to provide ongoing professional support for the advocates who serve them. Advocates need proper training, ongoing feedback and mentoring, opportunities to share experiences with colleagues, and a system for tracking their work. **Pages 25–26 of the practice guide** discuss strategies for supporting advocates in their work.

### Sample support menu to address student and family needs

STUDENT SUPPORT			FAMILY SUPPORT
Student attendance	Student behavior	Student academic performance	
Provide attendance cards for each teacher to sign when students attend class	Provide social and emotional skills training	Implement individual performance contract with student and parent	Provide training on how parents can actively engage with their child's school
Escort students from class to class	Provide individual counseling sessions	Provide one-on-one support with a reading or math specialist	Provide tips for monitoring adolescents' behavior and academic performance
Provide wake-up calls to students	Implement daily behavior contract	Provide after-school homework help	Provide training in accessing community resources and contacting school personnel
Organize transportation to school	Provide peer mentoring	Follow-up daily on missed assignments	Provide help with getting welfare benefits or food stamps

**Recommendation 3.**  
**Engage students by offering curricula and programs that connect schoolwork with college and career success and that improve students’ capacity to manage challenges in and out of school.**

Students are engaged in school when they are interested in their classes and see them as important to their future, and when they feel they belong in school. Engaged students have good attendance, come to class prepared, and are able to navigate daily challenges in and out of school.<sup>15</sup> These behaviors, in turn, improve course pass rates and help students establish positive relationships with teachers and peers, reinforcing students’ sense of belonging in school.<sup>16</sup> Programs and curricula targeted at increasing the relevance of school, building supportive relationships, and helping students manage challenges can help prevent disengagement. This recommendation can be implemented both as a proactive, schoolwide approach and as an intervention for students already showing signs of low engagement in school.

**How to carry out the recommendation**

**1. Directly connect schoolwork to students’ options after high school.** Make classes relevant by offering curricula and academic programs that are clearly connected to a career pathway or postsecondary education. Schools with a college or career theme also provide a common focus for teachers and students,

making it easier for teachers to collaborate, share information about student progress, and create a coherent schoolwide curriculum.<sup>17</sup>

Reinforce the relevancy of coursework by creating a continuum of experiential learning outside the classroom that builds awareness of the connections between high school and students’ college or career goals (like in the example below<sup>18</sup>). Community resources, such as area employers, nonprofit organizations, and colleges, can support these efforts by providing guest speakers, hosting students for tours or job shadowing, and coordinating internships or dual-enrollment courses. See **pp. 30–33 of the practice guide** for examples of how to integrate a college- and career-focus in your school.

**2. Provide curricula and programs that help students build supportive relationships and teach students how to manage challenges.**

The panel recommends implementing explicit social and emotional training through either classroom curricula or separate programs that are offered outside of the classroom, depending on student risk level for low engagement. Districts and states can help by developing social and emotional learning standards with benchmarks for skills students should develop at each grade level. Skills taught through curricula and programs might include how to make better decisions in high-stakes situations, strategies for stress and anger management, setting and tracking progress toward goals, and relationship-building skills. To reinforce the skills, give students regular opportunities to practice and

**Continuum of experiential learning**

	9th grade	10th grade	11th grade	12th grade
	 <b>Build awareness</b>	 <b>Explore options</b>	 <b>Develop relevant knowledge and skills</b>	 <b>Gain hands-on experience</b>
<b>How it looks in practice...</b>				
Health careers academy	Employees from the local hospital discuss their professions at career day.	Students complete a spring break job shadow at the local hospital, learning about different medical careers.	Students take a medical clinical class that combines instruction in clinical skills with a twice weekly internship at the local hospital.	The summer after junior year, students complete an internship in the medical field.

apply them through everyday classroom interactions, role-playing exercises, or service-learning projects and internships.

- 3. Regularly assess student engagement to identify areas for improvement, and target interventions to students who are not meaningfully engaged.** Administer school climate and student engagement surveys annually. Analyze survey results along with regularly monitored ABC early warning indicators, such as attendance and grades

(as described in Recommendation 1) to assess schoolwide strengths and weaknesses. The panel believes that school climate and student engagement surveys can supplement early warning indicators, helping staff identify the root cause behind low attendance rates or slipping grades. The example below<sup>19</sup> provides sample survey questions on academic engagement, student-teacher trust, and the importance of school for the future, concepts which are related to higher student engagement.<sup>20</sup>

**Sample student engagement survey questions**

How much do you agree with the following statement...	What is being measured
<ul style="list-style-type: none"> <li>▪ I usually look forward to this class.</li> <li>▪ I work hard to do my best in this class.</li> <li>▪ Sometimes I get so interested in my work I don't want to stop.</li> <li>▪ The topics we are studying are interesting and challenging.</li> </ul>	 <p><b>Academic engagement</b></p>
<ul style="list-style-type: none"> <li>▪ When my teachers tell me not to do something, I know they have a good reason.</li> <li>▪ I feel safe and comfortable with teachers at this school.</li> <li>▪ My teachers always keep their promises.</li> <li>▪ My teachers will always listen to students' ideas.</li> <li>▪ My teachers treat me with respect.</li> </ul>	<p><b>Student-teacher trust</b></p>
<ul style="list-style-type: none"> <li>▪ My classes give me useful preparation for what I plan to do in life.</li> <li>▪ High school teaches me valuable skills.</li> <li>▪ Working hard in high school matters for success in the workforce.</li> <li>▪ What we learn in class is necessary for success in the future.</li> <li>▪ I have someone who is helping me with my college and career goals.</li> </ul>	<p><b>Importance of school for the future</b></p>

**Recommendation 4.**  
**For schools with many at-risk students, create small, personalized communities to facilitate monitoring and support.**

Schools with large numbers of at-risk students may struggle to provide students with the personalized attention and support described in Recommendations 1, 2, and 3. By grouping students into small communities of no more than a few hundred students,<sup>21</sup> teachers and other school staff will have fewer students to monitor and manage, and

will be better able to implement the other recommendations in this guide. In a small, personalized community, staff can check in with students more frequently, pay closer attention to their needs, form stronger and more meaningful relationships with them, and keep track of what troubles and motivates them.<sup>22</sup> As students, teachers, and other school staff get to know one another throughout the year, students will feel more connected to the people in their school and develop a greater sense of belonging in the school community, which will help them persevere to graduation.<sup>23</sup> See **pp. 42-46 of the practice guide** for a case study illustrating the implementation of this recommendation.

## How to carry out the recommendation

### 1. Decide whether the small communities will serve a single grade or multiple grades.

Examine school data to determine which type of community would best serve at-risk students:

- Transition-year academies serve all students in a specific grade and focus on the particular needs experienced by students as they start middle school or high school and must adjust to new demands and expectations and to having more freedom in school.
- College- or career-focused communities include all students at multiple grade levels and help students see how their education is useful for preparing for future careers.
- Smaller communities that span all grades allow students to develop strong peer relationships that begin when they enter school and last through graduation.<sup>24</sup>

### 2. Create teams of teachers that share common groups of students.

Create teacher teams that work with the same students for the entire time students are part of the small community (either the entire year or multiple years).<sup>25</sup> By teaming and remaining with students longer, teachers can form stronger, longer lasting relationships with their students and provide consistency, even when there is some staff turnover. This allows the teachers to monitor and proactively intervene when students show signs of being at risk for dropping out. (see Recommendation 1).<sup>26</sup>

### 3. Identify a theme to help build a strong sense of identity and community and to improve student engagement.

Select a small-community theme, such as one of the example topics below, around which the small communities can be organized.<sup>27</sup> See the example below for sample themes. The panel believes that themes strengthen small communities and

### If my school is already small, do I need to do anything?

The panel believes that being small by itself is not sufficient to address dropout issues. The key is to create a more personalized, supportive learning environment for the students who are struggling. To reap the benefits of smallness, the panel recommends implementing the action steps articulated in this recommendation.



facilitate implementing the steps described in Recommendation 3. Themes provide a sense of shared identity for the students in the community; this feeling of belonging helps students feel connected to their schooling.<sup>28</sup>

### 4. Develop a schedule that provides common planning time and ample opportunities for staff to monitor and support students.

To help students and teachers get to know one another, develop a master schedule that permits teachers and students to remain in their community most of the day. More than half the classes taught by the teacher team should be within the smaller community, and students should take most, if not all, courses from teachers in their communities.<sup>29</sup> Master schedules should also include common planning times for teacher teams, which teacher teams should use to:<sup>30</sup>

- develop activities that relate to the theme of the community, link course content to the theme, and further engage students in getting to know their community;
- collaboratively identify concerns and develop solutions; and
- discuss academic and behavioral progress with students and their parents.

## Sample small-community themes

Broad academic topics	Specific topics	Career-related topics
<ul style="list-style-type: none"> <li>▪ Humanities</li> <li>▪ Science and technology</li> <li>▪ Society and culture</li> </ul>	<ul style="list-style-type: none"> <li>▪ Performing arts</li> <li>▪ Environmental studies</li> <li>▪ Social justice in America</li> </ul>	<ul style="list-style-type: none"> <li>▪ Communications and media</li> <li>▪ Health</li> <li>▪ Public safety</li> </ul>

## Summary of Supporting Evidence

Each practice guide recommendation is assigned a **level of evidence** that summarizes the rigorous research supporting it. To decide whether the level of evidence is **minimal**, **moderate**, or **strong**, the WWC assesses all of the eligible research that meets WWC design standards related to the core practices in each recommendation. For this guide, studies examining outcomes in the graduating school domain were weighted more heavily than other outcome domains in determining the level of evidence.

The level of evidence conveys the WWC’s assessment about whether rigorous research studies that relate to a recommendation:

- Consistently demonstrate that the recommended practices improved outcomes;
- Reflect the contexts and students that the guide is meant to apply to.

Regardless of the level of evidence, **each core practice in the guide is recommended by the expert panel.**

### Recommendations and corresponding levels of evidence

Recommendation	Levels of Evidence		
	Minimal Evidence	Moderate Evidence	Strong Evidence
1. Monitor the progress of all students, and proactively intervene when students show early signs of attendance, behavior, or academic problems.	◆		
2. Provide intensive, individualized support to students who have fallen off track and face significant challenges to success.		◆	
3. Engage students by offering curricula and programs that connect schoolwork with college and career success and that improve students’ capacity to manage challenges in and out of school.			◆
4. For schools with many at-risk students, create small, personalized communities to facilitate monitoring and support.		◆	

### Summary of evidence for Recommendation 1

The first recommendation in the guide was assigned a **minimal** level of evidence. A minimal level of evidence does not mean that there is no research evidence supporting the recommendation. While several studies that included practices from Recommendation 1 met WWC standards and showed positive effects, none of the studies evaluated an intervention that included all four steps of the recommendation without any other components, so there is no direct test of the full recommendation.

**Outcomes:** The WWC identified six studies that examined interventions that monitor student progress and intervene with at-risk students and met WWC group design standards. Two studies found positive effects on at least one of the three outcome domains related to dropout prevention.

**Contexts and students:** The two studies demonstrating positive effects were implemented in middle and high schools in the United States.

**Summary:** While two of the six studies supporting this recommendation led to improved student outcomes, neither study directly tested all four steps of the recommendation without any other components. Additionally, the studies may have limited generalizability because they were conducted in only two areas of the United States: Chicago and North Carolina. Therefore, the WWC assigned a minimal level of evidence to support this recommendation. For more details, see the description of evidence for Recommendation 1 on **p. 62 of the practice guide**.

### Summary of evidence for Recommendation 2

The second recommendation in the guide was assigned a **moderate** level of evidence. Although many studies relevant to this recommendation met WWC group design standards and showed positive effects, there was not a consistent pattern of effects across all relevant outcomes.

**Outcomes:** The WWC identified eight studies that examined interventions that provide intensive, personalized support to students who have fallen off-track and met WWC group design standards. Four of the eight studies showed positive effects in at least one outcome domain.

**Contexts and students:** The studies include at-risk students in both middle and high schools across the United States.

**Summary:** The evidence supporting this recommendation is inconsistent. While four studies demonstrated that the practices outlined in Recommendation 2 had positive effects on student outcomes, another four studies had indeterminate effects. Two of the four studies provided direct tests of the recommendation, evaluating interventions that are closely aligned with all of the recommendation's steps and do not include components of other recommendations. Therefore, the WWC assigned a moderate level of evidence to support this recommendation. For more details, see the description of evidence for Recommendation 2 on **p. 66 of the practice guide**.

### Summary of evidence for Recommendation 3

The third recommendation in the guide was assigned a **strong** level of evidence. This means that there is consistent evidence that the recommended practices have positive effects on outcomes for the contexts and students to which the guide is meant to apply.

**Outcomes:** The WWC identified 14 studies that examined interventions that engage students by offering curricula and programs that connect schoolwork with college and career success and met WWC group design standards. Nine studies found positive effects in at least one outcomes domain related to dropout prevention.

**Contexts and students:** The studies include diverse students in both middle and high schools across the United States.

**Summary:** Overall, the evidence consistently indicated that the practices outlined in Recommendation 3 had positive effects on relevant outcomes. Four studies provide direct tests of the recommendation, evaluating interventions that are closely aligned with all of the recommendation's steps and do not include components of other recommendations. The study findings are collectively generalizable across different students and settings. Therefore, the WWC assigned a strong level of evidence to support this recommendation. For more information, see the description of evidence for Recommendation 3 on **p. 71 of the practice guide**.

### Summary of evidence for Recommendation 4

The fourth recommendation in the guide was assigned a **moderate** level of evidence. While almost all of the studies supporting this recommendation demonstrate positive effects, only one study offered a direct test of the recommended practices.

**Outcomes:** The WWC identified eight studies that examined the use of small, personalized communities to facilitate monitoring and support and met WWC group design standards. All but one study reported positive effects on at least one outcome domain.

**Contexts and students:** The studies include diverse students in high schools across the United States.

**Summary:** The studies supporting this recommendation examined diverse samples in school settings and many tested interventions that led to improved student outcomes. However, only one study supporting this recommendation examines an intervention that provides a direct test of this recommendation, and most of the supporting studies examine a variation of the recommendation—creating small schools rather than small communities within existing schools. Therefore, the WWC assigned a moderate level of evidence to support this recommendation. For more information, see the description of evidence for Recommendation 4 on **p. 77 of the practice guide**.

If you would like more information about the specific study features that the WWC examines to determine the level of evidence, you can find a detailed list in **Appendix Table A1 in the practice guide**.

## Endnotes

- <sup>1</sup> U.S. Department of Labor (2015a).
- <sup>2</sup> U.S. Department of Labor (2015b).
- <sup>3</sup> Rumberger (2011).
- <sup>4</sup> Bridgeland, Dilulio, and Burke Morison (2006); Mac Iver (2010).
- <sup>5</sup> Allensworth et al. (2014); Balfanz, Herzog, and Mac Iver (2007); Bowers et al. (2013).
- <sup>6</sup> Bruce et al. (2011); Edmunds et al. (2013).
- <sup>7</sup> Corrin et al. (2016).
- <sup>8</sup> Regional Education Laboratory Southeast (2011); Gewertz (2009).
- <sup>9</sup> Based on data from Allensworth et al. (2014).
- <sup>10</sup> Endnote 52
- <sup>11</sup> Sinclair et al. (1998).
- <sup>12</sup> Maxfield et al. (2003).
- <sup>13</sup> Larson and Rumberger (1995).
- <sup>14</sup> Larson and Rumberger (1995); Rodríguez-Planas (2012); Sinclair et al. (1998).
- <sup>15</sup> National Center on Safe Supportive Learning Environments (2016).
- <sup>16</sup> Dary et al. (2016).
- <sup>17</sup> Allensworth and Easton (2007).
- <sup>18</sup> Linked Learning Alliance (n.d.); ConnectEd: The California Center for College and Career (n.d.); Laing and Villavicencio (2016); Edmunds et al. (2012).
- <sup>19</sup> The University of Chicago Consortium on School Research (2015).
- <sup>20</sup> Allensworth and Easton (2007).
- <sup>21</sup> Ancess (1995); Cook (2000); Fine (1994); Oxley (2008).
- <sup>22</sup> National Association of Secondary School Principals (2004).
- <sup>23</sup> Lee and Burkam (2003); National Research Council and the Institute of Medicine (2004); Wehlage (1989).
- <sup>24</sup> Edmunds et al. (2013).
- <sup>25</sup> Oxley (2008).
- <sup>26</sup> Bloom et al. (2013); Edmunds et al. (2013).
- <sup>27</sup> Dayton et al. (2007).
- <sup>28</sup> Edmunds et al. (2013).
- <sup>29</sup> Oxley (2008).
- <sup>30</sup> Guha et al. (2014); Oxley (2008).

**For more practical tips and useful classroom examples, download a copy of the *Preventing Dropout in Secondary Schools* practice guide at <https://ies.ed.gov/ncee/wwc/PracticeGuide/24>**

The Institute for Education Sciences publishes practice guides in education to provide educators with the best available evidence and expertise on current challenges in education. The WWC develops practice guides in conjunction with an expert panel, combining the panel's expertise with the findings of existing rigorous research to produce specific recommendations for addressing these challenges. The expert panel for this guide included Russell Rumberger, Howard Addis, Alaine Allensworth, Robert Balfanz, Debra Duardo, and Mark Dynarski. See **Appendix A on p. 51** for a full description of practice guides.

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