

# Systematic Review Protocol for Social, Emotional, and Behavioral Interventions

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WHAT WORKS CLEARINGHOUSE™

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This protocol guides the What Works Clearinghouse's (WWC) systematic reviews of evidence on interventions designed to improve the social, emotional, and behavioral outcomes of students in preschool to grade 12. To conduct the systematic review, this protocol is used in conjunction with version 4.1 of the <a href="https://www.emotocol.com/www.emotocol">www.emotocol.com/www.emoto

#### PURPOSE STATEMENT

This review focuses on educational interventions designed to improve the social, emotional, and behavioral outcomes of students in early childhood settings and K–12 schools. It examines the effects of these interventions on students, teachers, school leaders, and school environments. The WWC can review a wide range of interventions under this protocol, including those that aim to improve students' social skills, emotional status, and behavior. These interventions might also influence student academic performance, school attendance and progress, teacher and school leader practices and retention, school climate, and equity concerns, such as disproportionate uses of discipline practices. Social, emotional, and behavioral interventions can be used in general education settings as well as in settings that support students with disabilities, such as autism spectrum disorder, intellectual disability, emotional behavioral disorders, and attention deficit hyperactivity disorder.

The following research questions guide the systematic review:

- Which social, emotional, and behavioral interventions improve students' social, emotional, behavioral, and achievement outcomes?
- Which social, emotional, and behavioral interventions improve practices or retention for teachers or school leaders?
- Which social, emotional, and behavioral interventions improve the school environment?
- Are some interventions more effective than others for certain subpopulations of students, or more effective when delivered in certain types of settings?
- Are certain components of interventions more effective than others at improving outcomes?

The following three processes are key to the WWC's systematic review process:

- 1. Identify research on social, emotional, and behavioral interventions
- 2. Screen research for relevance to social, emotional, and behavioral interventions and eligibility for WWC review
- 3. Synthesize and disseminate evidence on social, emotional, and behavioral interventions

The following sections describe each process in more detail.

# LITERATURE SEARCH

As described in <u>Section III: Identifying Relevant Literature</u> and <u>Appendix B: Principles for Searching for Studies to Review</u> of the <u>WWC Procedures Handbook</u>, the WWC conducts literature searches in consultation with research librarians. In conducting literature searches under this protocol, the WWC identifies studies that have not yet been reviewed on social, emotional, and behavioral interventions. These searches are intended to identify studies that are relevant and useful to educators or other decision makers. To do this, the WWC identifies studies from the following sources:

- Federally funded research available in Education Resources Information Center (ERIC) or from other sources
- Other research identified in ERIC using key terms
- Research on specific interventions available in ERIC or other databases

See Appendix A for additional details on identifying interventions for systematic review and on the search, screening, and prioritization processes.

#### SCREENING OF RESEARCH USING ELIGIBILITY CRITERIA

The WWC Procedures Handbook discusses the types of research reviewed by the WWC in Section II: Developing the Review Protocol, Section III: Identifying Relevant Literature, and Section IV: Screening Studies. The WWC reviews studies using the Study Review Protocol, which guides the review in conjunction with the WWC Standards Handbook and the WWC Procedures Handbook. To be included in a systematic review under this protocol, a study must meet the eligibility criteria in the Study Review Protocol AND the criteria listed below.

# **Eligible Interventions**

The WWC will conduct a systematic review and synthesize evidence for social, emotional, and behavioral interventions that meet the following criteria:

- Intervention type. Interventions must be an educational product, practice, policy, or program designed primarily to improve students' social, emotional, or behavioral outcomes, which might lead to improved student academic achievement, school climate, teacher and school leader practices, or teacher and school leader retention. See the <a href="Study Review Protocol">Study Review Protocol</a> for definitions of each type of intervention.
  - Interventions with a primary or exclusive focus on academic improvement are ineligible. For example, a study of a literacy intervention solely intended to improve students' reading outcomes is not eligible, even if it could indirectly improve social, emotional, or behavioral outcomes. The review team may consult research experts when deciding whether an intervention seeks to change students' social, emotional, or behavioral outcomes.
- **Setting.** Interventions must be provided in PK-12 educational programs (including remote instruction; center and home-based daycare and childcare settings; and after school, summer school, or home-schooling programs). Interventions must have a connection to learning in a preschool, elementary, or secondary education program.
- *Delivery.* Interventions may be implemented schoolwide, at the classroom level, with small groups of students, or with individual students. See the <u>Study Review Protocol</u> for definitions of each delivery method.
- *Replicability*. An intervention must be also replicable (that is, it must be possible to reproduce the delivery of the intervention in another setting). To ensure that the intervention is reproduceable, the following characteristics of an intervention must be documented:
  - Intervention goals, including the targeted skills or behaviors
  - The target population of the intervention
  - The method of delivery, which is the unit of delivery of the intervention (for example, whole group versus individual)
  - The frequency and duration of the intervention
  - Key intervention components, including activities and characteristics of activities, as well as the strategies used to improve the targeted skills or behaviors
  - Resources (including technology, facilities, personnel, and other materials) needed to implement the intervention
  - Qualifications of individuals delivering or administering the intervention

The review will also document the resources and costs of implementing the interventions. An intervention may be excluded from a systematic review if little is known about the resources needed to implement the intervention with fidelity.

# **Eligible Populations**

To be included in a systematic review under this protocol, studies must examine the effectiveness of an intervention administered to:

- **Students.** Students and other learners (ages 3–21) in PK–12 educational programs (including remote instruction; center and home-based daycare and childcare settings; and after school, summer school, or home-schooling programs)
- Staff. Teachers, school leaders, other educators, or home-, school-, or center-based service providers

Social, emotional, and behavioral interventions might be designed to improve student outcomes for all students, or designed specifically to meet the needs of students with disabilities or disorders. When a study is reviewed as part of a systematic review of a social, emotional, or behavioral intervention under this protocol, the WWC will review findings for all students, and for students in one or more of the following subpopulations of interest:

- Students with autism spectrum disorder (ASD). This review adopts the definition used in the Individuals with Disabilities Education Act (IDEA), 20 U.S.C. § 1401 (2004) and accompanying federal regulations 34 C.F.R. § 300.8 (2004), which defines ASD as "a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three, that adversely affects a child's educational performance." Other characteristics often associated with ASD are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences. ASD refers to the full range of specific diagnoses and descriptors—including terms no longer used—associated with the key characteristics of autism, such as autistic disorder, Asperger's syndrome, Rett's disorder, pervasive developmental disorder, and pervasive developmental disorder not otherwise specified. To be described as having ASD in this review, students must have been classified with an ASD through evaluation by (1) the special education system; (2) a medical evaluation; (3) a direct assessment by researchers; or (4) the administration of a standardized, diagnostic protocol by a parent or teacher. Study participants cannot be classified with an ASD based solely on a parent or teacher report that is not based on a diagnostic protocol. The review team will contact study authors to establish whether these criteria apply when necessary.
- Students with intellectual disability (ID). This review adopts the definition used in IDEA, 20 U.S.C. § 1401 (2004) and accompanying federal regulations 34 C.F.R. § 300.8 (2004), which define ID as "significantly subaverage general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period, that adversely affects a child's educational performance." ID was previously labeled mental retardation, which is a term no longer used. According to Rosa's Law, ID "covers the same population of individuals who were diagnosed previously with mental retardation in number, kind, level, type, and duration of the disability and the need of people with this disability for individualized services and supports," and "every individual who is or was eligible for a diagnosis of mental retardation is eligible for a diagnosis of intellectual disability" (Schalock et al., 2007; p. 116). This definition also includes students described as having a developmental delay. To be described as intellectually disabled in this review, students must have been classified as having an ID or mental retardation under IDEA. Because of the stigma associated with ID classification, this review will also synthesize findings for students who have not been classified as having ID or mental retardation but who have IQ scores of 75 or below, or have a developmental delay that study authors describe as a precursor to ID classification. The review team will contact study authors to establish whether these criteria apply when necessary.
- Students with emotional disturbance (also known as emotional behavioral disorder, or EBD). This review adopts the definition used in IDEA, 20 U.S.C. § 1400 (2004) and accompanying federal regulations, 34 C.F.R. § 300.8 (2004). IDEA defines emotional disturbance as a "condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a student's educational performance:

- An inability to learn that cannot be explained by intellectual, sensory, or health factors.
- An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
- Inappropriate types of behavior or feelings under normal circumstances.
- A general pervasive mood of unhappiness or depression.
- A tendency to develop physical symptoms or fears associated with personal or school problems.

States vary in how they define emotional disturbance. This review uses the followings terms to indicate emotional disturbance: emotional or behavioral disorder, serious emotional disturbance, emotional handicap, behavioral disorder, or serious behavior disorder. Students sometimes are described as being at risk for being classified with emotional disturbance (or similar term) or may have an Individualized Education Program that specifies a need for an intervention to address a behavior concern, even though they are not formally classified with emotional disturbance. This review considers these terms and conditions as synonymous with emotional disturbance. The review team will contact study authors to establish whether these criteria apply when necessary.

- **Students with attention deficit hyperactivity disorder (ADHD).** This review adopts the definition used by the National Institute of Mental Health, which defines ADHD as a disorder marked by an ongoing pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development and characterized by:
  - Inattention, when a person wanders off task, lacks persistence, has difficulty sustaining focus, and is disorganized; and these problems are not due to defiance or lack of comprehension.
  - Hyperactivity, when a person seems to move about constantly, including in situations in which it is not appropriate; or excessively fidgets, taps, or talks.
  - Impulsivity, when a person makes hasty actions that occur in the moment without first thinking about them
    and that could have a high potential for harm, or a desire for immediate rewards or inability to delay
    gratification. An impulsive person could be socially intrusive and excessively interrupt others or make
    important decisions without considering the long-term consequences.

# **Eligible Research**

Studies included in a systematic review under this protocol must meet the eligibility criteria in the *WWC Procedures Handbook* and the *Study Review Protocol*, as well as the following additional criteria:

- *Time frame.* The study must have been released within the 15 years preceding the year of the review (for example, in 2006 or later for reviews occurring in 2021) as a way to ensure that the intervention and its research base are relevant. Research experts may advise a longer time frame for an intervention if necessary.
- *Implementation of intervention components.* Studies must describe the key components of the intervention and how each were implemented with adequate detail so reviewers can accurately document the intervention.
- *Intervention version.* Studies must implement a version of the intervention that is similar to the version available from the developer or publisher at the time of the review. To be considered the same version as the available intervention, the intervention implemented in the study must share key intervention components, goals, and methods of delivery, and be delivered with similar frequency and duration, with only minor differences.

# **Eligible Outcomes**

Social, emotional, and behavioral interventions can affect outcomes in multiple domains. Table 1 lists the outcome domains from the *Study Review Protocol* that will be included in systematic reviews under this protocol.

Table 1. Eligible outcome domains for systematic reviews of social, emotional, and behavioral interventions

# Social-Emotional Outcomes, Behaviors, and Skills

- Functional Skills
- Intrapersonal Competencies
- · Student Behavior
- · Student Discipline

#### **School Attendance and Progress**

- · College Readiness
- School Attendance
- · Staying in Secondary School

#### **Educational Attainment**

High School Completion

#### **English Language Arts Outcomes**

- Alphabetics
- Expressive Communication
- Proficiency in the English Language
- · Proficiency in a Language Other than English
- · Reading Comprehension
- Reading Fluency
- · Receptive Communication
- Vocabulary
- Writing Conventions
- Writing Productivity
- Writing Quality
- · General Literacy Achievement

#### STEM Outcomes

- · Algebra
- · Calculus and Precalculus
- Data Analysis, Statistics, and Probability
- Earth/Space Sciences
- Geometry and Measurement
- Life Sciences
- · Numbers and Operations
- · Physical Sciences
- · Technology and Engineering Literacy
- General Mathematics Achievement
- General Science Achievement

#### Other Measures of Academic Readiness, Knowledge, or Skills

- · General Academic Achievement
- · General Social Studies Achievement
- · Visual and Performing Arts
- Cognition

#### **School Environment**

- · School Climate
- School Equity

#### **Teacher Outcomes**

- Teacher Attendance
- · Teacher Practice
- Teacher Retention in the Profession
- · Teacher Retention in the School
- Teacher Retention in the School District
- · Teacher Retention in the State

#### **School Leader Outcomes**

- School Leadership Practice
- School Leader Retention in the Profession
- School Leader Retention in the School
- School Leader Retention in the School District
- School Leader Retention in the State

Note: The domains from the <u>Study Review Protocol</u> that are not included are College Enrollment; College Degree Attainment; Progressing in College Courses; Progressing in Developmental College Courses; Postsecondary Academic Achievement; Technical Skills Proficiency; Industry-Recognized Credential, Certificate, or License; Earnings; Employment; and General Employability Skills. For each study, findings from all outcome domains will be reviewed and reported, but only findings from the outcome domains listed in Table 1 will be synthesized in reports under this protocol.

# SYNTHESIS AND DISSEMINATION OF FINDINGS

**Determining the number of reports.** The WWC will present findings from its systematic review of social, emotional, and behavioral interventions in one or more reports, referred to as "intervention reports." The WWC will determine the number and scope of the intervention reports once a set of eligible studies that meet WWC standards are identified.

Reporting on findings for different subpopulations of interest. If findings for more than one subpopulation of interest are available, the WWC may produce multiple intervention reports (one for each subpopulation), or findings from multiple subpopulations may be combined in one intervention report. The WWC will determine whether to summarize findings in one or more reports based on the number of studies that meet WWC standards for each subpopulation of interest, and whether the implementation of the intervention differs across these subpopulations. When possible, findings will be summarized separately for students with specific disabilities and disorders, including ASD, ID, EBD, or ADHD, when at least 50 percent of the students are classified as having the disability using the definitions presented earlier in this protocol. For some interventions, however, it will not be possible to disaggregate intervention effects for multiple subpopulations of interest.

# REFERENCE

Schalock, R., Luckasson, R., Shogren, K., Bradley, V., Borthwick-Duffy, S., Buntix, W., Coulter, D. L., Craig, E. M., Gomez, S. C., Lachapelle, Y., Reeve, A., Snell, M. E., Spreat, S., Tassé, M. J., Thompson, J. R., Verdugo, M. A., Wehmeyer, M. L., & Yeager, M. H. (2007). The renaming of mental retardation: Understanding the change to the term intellectual disability. *Intellectual and Developmental Disabilities*, 45, 116–124. Retrieved from <a href="https://eric.ed.gov/?id=E|758956">https://eric.ed.gov/?id=E|758956</a>

# APPENDIX A. SEARCH, SCREENING, AND PRIORITIZATION OF RESEARCH

This appendix describes the processes for prioritizing studies for WWC review, and for selecting interventions for systematic reviews to inform "what works" in improving social, emotional, and behavioral outcomes. The WWC prioritizes systematic reviews of evidence that are most likely to be relevant and useful to educators and other decision makers. The WWC also prioritizes for review studies that have not already been reviewed by the WWC.

To select studies and interventions for WWC review, the WWC uses the five-step process outlined below. Studies are identified in Steps 1 and 2, scored in Step 3, and reviewed in Step 4 on a rolling basis. The WWC then identifies interventions for systematic reviews and disseminates the findings in Step 5.

**Step 1: Identify studies for possible WWC review.** The WWC identifies studies on social, emotional, and behavioral interventions. This step is intended to identify studies that are relevant and useful to educators or other decision makers through four literature search processes:

- Search ERIC for IES-funded research not yet reviewed by the WWC.
  - This search will be restricted to research funded by the U.S. Department of Education (ED), Institute of Education Sciences (IES) using the *funded:y* search flag.
  - This search will be conducted so that all IES-funded research can be screened for possible review.
     Therefore, this search will not be limited by key terms relating to social, emotional, and behavioral interventions specifically.
  - The review team will expand this search to include all ED-funded research when such an option becomes available in ERIC. ERIC does not currently encode whether research was conducted with funding from other ED grants. For this reason, the review team will supplement this search with the lists of ED-funded studies described below.
- Search ERIC using key terms for social, emotional, and behavioral intervention research not yet reviewed by the WWC.
  - The review team will search ERIC using specific key terms to identify recent research on social, emotional, and behavioral interventions.
  - The WWC will use ERIC thesaurus terms and additional key search terms related to impact, study design, outcomes, and population and disability terms (if needed) to search key ERIC fields, including the title, abstract, and descriptors. Appendix B provides examples of the search terms that this review may use to focus the literature search. The ERIC database searches abstracts but does not search the full text of studies. Because abstracts are less likely to include the search terms than the full text, the WWC will identify studies that have terms from one or more of the categories in Appendix B, Table B.1 (such as impact and study design terms) to ensure that the search captures all relevant studies. To ensure the search focuses on social, emotional, and behavioral intervention research, the WWC will require the study abstract to contain at least one of the terms from the outcomes, population, or disability categories listed in Table B.1. To address a high volume of identified research, the review may prioritize screening of studies that include terms from more than one of the categories listed in Table B.1.
- Search ERIC and other key databases for research on specific interventions, such as those identified by research experts in social, emotional, and behavioral interventions, particularly from those who work closely with practitioners.
  - After identifying interventions for improving social, emotional, and behavioral outcomes, the review team will conduct an intervention name search in ERIC and other databases listed in Appendix C.
     The team may also search additional websites that might be relevant to a particular intervention.
  - For some interventions, the literature search may result in many studies unrelated to the intervention. For example, this often occurs when the intervention name includes commonly used terms. These searches may be limited by specific keywords listed in Appendix B.
- Search for lists of studies funded by a range of ED grants or other federal agencies.

- ED grants include those from the National Center for Education Research and the National Center for Special Education Research, including Priority to Effectiveness, Efficacy, Replication, and Scale-Up grants.
- Additionally, the team will screen studies from other ED grants that have provided technical
  assistance for grantees to design evaluations to meet WWC standards, such as the Investing in
  Innovation program, the Education Innovation and Research program, the Supporting Effective
  Educator Development program, and First in the World.
- Finally, the review team will aim to identify federally funded education research from outside of ED,
   such as from the National Institutes of Health and the National Science Foundation.

Step 2: Narrow the list of studies for possible WWC review. The review team determines whether studies have been previously reviewed by the WWC and screens studies on the basis of eligibility criteria under the Study Review Protocol, such as whether the study examines the effects of an eligible intervention on an eligible outcome measure. The review team then screens the study for eligibility under this social, emotional, and behavioral interventions protocol, such as whether the intervention in the study is intended to improve social, emotional, or behavioral outcomes. To address a high volume of identified research, the WWC may prioritize screening recent studies or those for certain education levels, topic descriptors, or other characteristics.

Step 3: Score and select studies for WWC review. As eligible studies are identified in Step 2, the WWC will assign a prioritization score to each study on a rolling basis. The score is designed to help prioritize studies for WWC review and identify eligible research that is of high quality and interest to a wide range of WWC stakeholders. The WWC gives each eligible study a score based on a number of factors (see Table A.1). The WWC then ranks the studies from highest to lowest according to their scores. The WWC will begin reviewing studies with the highest prioritization scores on a rolling basis, while screening and scoring additional studies. For any studies that receive the same score, the study that was conducted more recently will receive priority. The score of each study is calculated on a scale of 0 to 8 points, as follows:

Table A.1. Study characteristics used to determine prioritization score for each study

| Points | Study characteristic  | Justification  |
|--------|---|--|
| +2     | The study is a randomized controlled trial, regression discontinuity design, or single-case design and is therefore eligible to receive the highest study rating.   | Stronger research designs provide more credible evidence and are more likely to meet standards. Quasi-experimental design studies are eligible for review but will not receive these points.         |
| +1     | The study relies on data from multiple sites and the analytic sample for the study includes at least 350 individuals for group design and regression discontinuity design studies or 20 individuals for single-case design studies. | These studies provide evidence that is more likely to apply to different settings or populations of teachers or students.  |
| +1     | The study was funded by ED.   | Research produced with support from ED is likely to be of great interest to a wide range of stakeholders.  |
| +1     | The study is already in ERIC with full text or with a direct link to the text in a journal or another publicly available source.  | Research in ERIC is more accessible to educators and other decision makers.  |
| +1     | The intervention is widely used according to content experts or practitioner surveys.   | Evidence on interventions in wide use is likely to be of interest to educators and other decision makers. For example, the RAND American Educator Panels are one source for this information.        |
| +1     | The WWC has not released an intervention report on the same intervention in the study.  | The WWC prioritizes research that could contribute to new systematic reviews over research that might be included in an update to an existing systematic review.                                     |
| +1     | The WWC has previously reviewed at most one study of the same intervention that met WWC standards.  | The WWC prioritizes reviewing studies of many different interventions. If an intervention is selected for systematic review in <b>Step 5</b> , the WWC will review all research on the intervention. |

**Step 4: Conduct WWC study reviews.** The WWC will review the studies with the highest prioritization scores from Step 3 on an ongoing basis using the <u>Study Review Protocol</u>.

*Step 5: Disseminate findings and identify topics for intervention reports and other systematic review products.* The WWC will disseminate its findings and conduct systematic reviews of evidence through one or more of the following:

- **Single-study reviews.** The WWC will monitor recently reviewed studies and will disseminate relevant findings from single-study reviews through IES NewsFlashes and social media posts.
- Intervention reports. The WWC will monitor potential interventions for which to conduct systematic reviews:
  - In general, if only one study of an intervention meets WWC standards, or if the pooled sample size across all studies that meet WWC standards is fewer than 350 individuals for group design and regression discontinuity design studies or 20 individuals for single-case design studies, then the WWC will review those studies but will not prepare an intervention report.
  - When at least two studies of the same intervention meet WWC standards (version 2.1 or higher) and both are not already included in an existing WWC intervention report, the WWC will identify the intervention as a candidate for an intervention report. Once it has identified an intervention, the WWC may conduct a literature search to identify all research in ERIC and other databases specified in this protocol on the intervention (if one was not already conducted in Step 1). The WWC will then calculate a prioritization score for the intervention, which is a sum of the study-level prioritization scores calculated in Step 3, excluding any studies that do not meet WWC standards or that are already included in an intervention report.
  - IES reviews the prioritization scores and approves the production of intervention reports on a rolling basis.
  - When IES approves an intervention report, the WWC will review all eligible studies of the intervention not already reviewed by the WWC. The WWC will also use the <u>Study Review Protocol</u> to update reviews of any studies of the intervention previously reviewed under a different protocol. The WWC may also review additional supplementary findings, such as findings for the specific disability groups outlined in this protocol.

• Other products. The WWC may also develop evidence summaries across social, emotional, and behavioral interventions to provide educators and other decision makers with information about which components of interventions were most effective. These summaries may include meta-analytic syntheses of findings across branded and non-branded interventions. The WWC may highlight the strength of evidence by intervention component or across different student populations and outcome domains, as well as areas where the WWC has limited evidence, which may inform future literature searches.

# APPENDIX B. SEARCH TERMS USED IN LITERATURE SEARCH

As described in Appendix A, the social, emotional, and behavioral interventions review will use four literature search processes to identify research that may be of interest to practitioners and decision makers. This appendix describes example search terms for the literature searches.

Table B.1. Example search terms for the social, emotional, and behavioral interventions review

| Category          | ERIC thesaurus terms and other key search terms   |
|-------------------|---|
| Impact            | achiev*, affect*, benefit*, decreas*, effect*, efficac*, evaluat*, gain, growth, impact*, improv*, increas*, progress, reduc*, success*   |
| Study design      | ABAB, alternating treatment*, assess*, assign*, causal, changing criteri*, comparison group*, control*, counterfactual, crossover design*, difference in differences, experiment*, matched, meta analy*, metaanaly*, multi element, multielement, multiple baseline, multiple probe*, post test*, posttest*, pre test*, pretest*, quasi experimental, quasiexperimental, random*, regression discontinuity, reversal design*, simultaneous treatment*, single case, single subject, treatment, withdrawal design*   |
| Outcomes          | adapt*, adjust*, aggressi*, anxiety, attendance, attention, atypical, behavior*, behaviour*, bullying, communicat*, conduct problems, delinqu*, depress*, discipline*, disrupt*, dropout, emotion*, esteem, engag*, expulsion, externalizing, feelings, functional skills, functioning, global impairment, graduation, hyperactivity, impuls*, interaction, internalizing, interpersonal, isolation, noncomplian*, off-task, on-task, out-of-seat, peer-nomination, problem behavior*, prosocial, psychosis, rejection, school climate, self-awareness, self-injur*, social*, somatic, suspension, vocalization, well-being, withdrawal |
| Population        | adolescen*, child*, early childhood, early intervention, elementary grade*, elementary school*, grade school*, high school*, junior high*, K-12*, middle school*, pre-K*, PreK*, pre-school, preschool, student*, teen*, young adult*, youth*   |
| Disability (ASD)  | ASD, Asperger*, autis*, CDD, childhood disintegrative disorder, PDD, pervasive developmental disorder, Rett syndrome, spectrum disorder*  |
| Disability (ID)   | Angelman syndrome, cognitive* disab*, developmental* delay*, developmental* disab*, developmental* disorder*, Down* syndrome, fetal alcohol syndrome, fragile X syndrome, intellectual* disab*, intellectual* handicap*, mental* handicap*, mental* retard*, neurodevelopment* disab*, Prader-Willi syndrome, severe* disab*, Williams syndrome   |
| Disability (EBD)  | anorexia nervosa, antisocial personality disorder*, anxiety disorder*, Asperger syndrome*, behavior* disorder*, bipolar disorder*, bulemi*, conduct disorder*, depress*, disruptive behavior disorder*, dysthymia, eating disorder*, EBD, emotion* disorder*, emotion* disturb*, emotion* handicap*, externaliz* behavior* problem*, internaliz* behavior* problem*, obsessive compulsive disorder*, oppositional defiant disorder*, personality disorder*, post-traumatic stress disorder*, PTSD, schizophrenia, selective mutism, self-injurious behavior, somatic disorder, Tourette's syndrome                                      |
| Disability (ADHD) | attention deficit*, ADHD, ADD, hyperactivity, inattention, impulsiv*  |

The asterisk (\*) is a Boolean operator and allows the truncation of the term so that the search returns any word that begins with the specified letters.

# APPENDIX C. DATABASES USED IN LITERATURE SEARCH

As described in Appendix A, the WWC will search ERIC and the following electronic databases and websites for research on social, emotional, and behavioral interventions. The WWC may also search additional websites that might be relevant to particular interventions.

Table C.1. Databases and websites for the social, emotional, and behavioral interventions review

| Category   | Websites Websites for the social, emotional, and behavioral interventions review   |
|--|--|
| Electronic<br>databases  | Academic Search Premier, E-Journals, EconLit, Education Research Complete (EBSCO), ERIC, ProQuest Dissertations & Theses, PsycInfo, PubMed, SAGE Journals Online, Scopus, SocINDEX, WorldCat   |
| Websites of federal agencies                                       | National Center for Education Research (NCER), National Center for Special Education Research (NCSER), National Institute of Child Health and Human Development (NICHD), National Institute for Early Education Research (NIEER), National Institutes of Health (NIH), National Science Foundation (NSF)   |
| Websites of professional associations                              | American Educational Research Association (AERA), American Evaluation Association (AEA), American Federation of Teachers (AFT), Association for Public Policy Analysis and Management (APPAM), National Education Association (NEA), Society for Research on Educational Effectiveness (SREE)  |
| Websites of<br>universities and<br>other research<br>organizations | Abt Associates, Academy for Social-Emotional Learning in Schools, American Academy of Pediatrics, American Association on Intellectual and Developmental Disabilities, American Institute for Research (AIR), American Psychological Association, The School Superintendent Association, ASCD: Professional Learning & Community for Educators, Association for Positive Behavior Support, Autism Research Institute, Autism Research Network, Autism Speaks, Cambridge Center for Behavioral Studies, Center for Data-Driven Reform in Education (CDDRE) at Johns Hopkins University, Center for Parent Resources and Information, Center for Research in Educational Policy (CREP), Center for Research on Education, Diversity and Excellence (CREDE), Center on Education Policy, Centers for Disease Control and Prevention, Children's Hospital of Philadelphia, Channing Bete, Collaborative for the Advancement of Social and Emotional Learning (CASEL), Committee for Children, Consortium for Policy Research in Education (CPRE), Council for Exceptional Children, Edutopia, Harvard Graduate School of Education, Hazeldon, Kennedy Krieger Institute, Koegel Autism Center, Maternal and Child Health Library Knowledge Path: Autism Spectrum Disorders, Mathematica (formerly known as Mathematica Policy Research), MDRC, National Association of Secondary School Principals, National Association of School Psychologists, National Association of Secondary School Principals, National Association of Special Education Teachers, National Association of State Directors of Developmental Disabilities Services, National Association of State Directors of Developmental Disabilities Services, National Association of State Directors of Special Education, National Autism Center, National Center on Response to Intervention (Rt1), National Center on Safe and Supportive Learning Environments, National Clearinghouse on Supportive School Discipline, National School Climate Center, Positive Behavior Intervention Supports, Pacific Resources for Education and Learning (PREL), Public Pol |