Reviews of Collections of Programs, Curricula, Practices, Policies, and Tools: Evaluated According to Evidence

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For more information, see: http://nirn.fpg.unc.edu/resources/reviews

This collection originated as part of the Results for Kids: Resources library of The IDEA Partnership, which transferred early contents to NIRN in 2009.

Academic Enhancements and Differentiated Instruction: Reviews

A Summary of the Research on Effects of Test Accommodations: 2007-2008

National Center on Educational Outcomes, University of Minnesota. (2010).
D. C. Cormier, J. Altman, V. Shyyan, & M. L. Thurlow.

"The purpose of this report is to provide an update on the state of the research on testing accommodations, as well as to identify promising areas of research likely to contribute to understanding of current and emerging issues. . . . Many of the 40 research studies reviewed sought to study the effects of accommodations on scores or to compare accommodated scores to non-accommodated versions of a similar testing instrument. The most researched content areas were mathematics and reading. . . . Research samples most often included students with learning disabilities, compared to other disability classifications. Presentation accommodations were studied by more than half of all the research studies published in 2007 and 2008. Findings from these studies were mixed for most specific accommodations, such as read-aloud and extended time, as well as for studies in which accommodations were aggregated. There was some consensus on the equivalence of computer-based tests and paper-and-pencil test formats."

[Full text – A Summary of Research on Effects of Test Accommodations (Technical Report 56)](#)
[Scroll down. Also see the NCEO Accommodations Bibliography at the top of the page]

AA-AAS Bibliography Database (on alternate assessments based on alternate achievement standards)

National Center on Educational Outcomes, University of Minnesota. (Continuing Collection).

"This bibliography represents a comprehensive collection of research-based publications on alternate assessments based on alternate achievement standards (AA-AAS), as well as work on standards-based instruction for students with significant cognitive disabilities. . . . There are over 150 items listed in the database, including research performed during the current year."

[To access the AA-AAS Bibliography Database](#)

Academic Intervention Tools Chart (for intensive intervention)

National Center on Intensive Intervention, American Institutes for Research,
Washington DC. (Annual Updates).

"This chart represents the results of an annual review of academic intervention studies by the Technical Review Committee (TRC) of the National Center on Intensive Intervention. The chart provides ratings on the efficacy of studies on commercially available academic intervention programs that can be used as part of a data-based individualization program for educating students with disabilities who require intensive intervention due to persistent learning problems. Additional information on how to implement the tools can be found on the chart as well."

Access the Academic Intervention Tools Chart

Also see the Progress Monitoring Chart (intensive interventions)

Accessible Instructional Materials: An Annotated List of Research Articles

National Center on Accessible Instructional Materials (AIM) at CAST, Inc,
Wakefield, Massachusetts. (Continuing Collection).

"Articles listed in this resource focus on the following categories: (a) audio, (b) digital, (c) large print, (d) Braille, (e) assistive technology, (f) multimedia formats, (g) supported reading (such as text-to-speech), and (h) Universal Design for Learning (UDL). The articles include a mix of quantitative evidence, qualitative evidence, scholarly reviews, and expert opinion."

Full text – Annotated List of Research Articles

Also see – AIM cross the Curriculum

Autism Spectrum Disorders: Diagnosis, Prevalence, and Services for Children and Families

Social Policy Report. (2010). Society for Research in Child Development.
C. Lord & S. L. Bishop.

"Because ASD remains a diagnosis that is defined completely on the basis of behavior, diagnostic assessment is both complex and expensive. Appropriate interventions and services are also multi-faceted and costly, and because of the pervasive nature of the disorder, are often required in some form across the lifespan. . . . This Social Policy Report summarizes selected recent studies on diagnosis, prevalence, and intervention, and discusses strategies for designing social policies to help improve the outcomes and independence of children and adults with ASDs."

Full text – Autism Spectrum Disorders: Diagnosis, Prevalence, and Services
[Scroll to 2010 and click on #2]

Autism Spectrum Disorders: Evidence-Based Practice Briefs

National Professional Development Center on Autism Spectrum Disorders (ASD), FPG Child Development Institute, UNC at Chapel Hill, with the M.I.N.D. Institute, Medical School at the University of California-Davis, and the Waisman Center at the University of Wisconsin-Madison.
(Continuing collection initiated in 2010).

"The National Professional Development Center on ASD uses rigorous criteria to determine whether a practice is evidence-based." Currently, the Center has identified 24 evidence-based practices that are effective with autism spectrum disorders. Descriptions include evidence of effectiveness; the ages at which the practice is effective; skills or intervention goals that the practice addresses; and settings in which the practice can be effectively used. "To be considered an evidence-based practice for individuals with ASD, efficacy must be established through peer-reviewed research in scientific journals using: (a) randomized or quasi-experimental design studies (two high quality experimental or quasi-experimental group design studies); (b)single-subject design studies (three different investigators or research groups must have conducted five high quality single subject design studies); or (c) combination of evidence (one high quality randomized or quasi-experimental group design study and three high quality single subject design studies conducted by at least three different investigators or research groups -- across the group and single subject design studies).

Full texts -- Evidence-Based Practices Briefs
[Click at the bottom of the page for each brief]

Also see Autism Internet Modules. The National Professional Development Center on ASD is a participant.

Cooperative Learning Methods: A Meta-Analysis

The Cooperative Learning Center, University of Minnesota, Minneapolis. (2000).
D. W. Johnson, R. T. Johnson, & M. B. Stanne.

The authors' "extensive search found 164 studies investigating eight cooperative learning methods. The studies yielded 194 independent effect sizes representing academic achievement. All eight cooperative learning methods had a significant positive impact on student achievement. . . . The meta-analysis examined results for eight cooperative learning methods in terms of cooperative learning versus competitive learning and in terms of cooperative learning versus individualistic learning. . . . (The authors conclude that) the results of this meta-analysis provide evidence that considerable research has been conducted on cooperative learning methods, that eight diverse methods have been researched, all methods have produced higher achievement than competitive and individualistic learning, and the more conceptual approaches to cooperative learning may produce higher achievement than the direct methods. These conclusions are all the stronger due to the diversity of the research on which they are based, ranging from controlled field experimental studies to evaluational case studies."

Full text -- Cooperative Learning Methods

Creating Equal Opportunities for Children and Youth with Disabilities to Participate in Physical Education and Extracurricular Activities

Office of Special Education and Rehabilitative Services, U.S. Department of Education. (2011).

"A report by the United States Government Accountability Office revealed that, despite legislation obligating states and schools to provide equal access, opportunities for physical activity are limited for

children and youth with disabilities. This document is the initial response to the GAO recommendation that the Secretary of Education facilitate information sharing among states and schools on ways to provide opportunities in PE and extracurricular athletics to students with disabilities. . . . The purposes of this document are to disseminate information on improving opportunities for children and youth to access PE and athletics and to refer the reader to sources of additional information regarding the inclusion of children and youth with disabilities in PE and athletic extracurricular activities. . . . Even with the limited research on effective practices, there is growing consensus in the research literature regarding several common barriers to physical activity for children and youth with disabilities. The research base and professional opinion support this document's suggestions for improving opportunities for children and youth with disabilities to participate in PE and athletic activity."

Full text – Creating Equal Opportunities

Also see -- "Association Between School-Based Physical Activity and Academic Performance," Centers for Disease Control and Prevention (CDC)

And see the summary of the CDC report

Current Practice Alerts
Division for Learning Disabilities and Division for Research,
Council for Exceptional Children, Arlington, Virginia. (Continuing Collection)

"The Alerts series is a joint initiative sponsored by two divisions of the Council for Exceptional Children -- the Division for Learning Disabilities (DLD) and the Division for Research (DR). Alerts provide timely and informed judgments regarding professional practices in the field. Based on the adequacy of the current knowledge base and practice experience, each Alert makes a recommendation of Go For It (practices for which there is solid research evidence of effectiveness), or Use Caution (practices for which the research evidence is incomplete, mixed, or negative)." Prepared with students with special needs in mind, the Alerts include instructional methods, schoolwide programs, and other types of practice. The research studies that form the basis of each recommendation are summarized.

To access Current Practice Alerts

Curriculum Access for Students with Low-Incidence Disabilities: The Promise of Universal Design for Learning (UDL) – 2011 Revision
National Center on Accessing the General Curriculum at CAST Inc, Wakefield, Massachusetts. (2011).

"Equal access to the general education curriculum implies that all students have the right to strive for the same educational goals. Equal opportunity implies that accommodations are in place to remove or minimize the impact of disability on authentic performance, thus leveling the playing field. In this updated, in-depth treatment of the topic, accessible instructional materials (AIM) and other key issues are discussed within the context of Universal Design for Learning (UDL). . . . This document is based on careful and extensive library research and literature summaries."

Full text – Curriculum Access
[Scroll down and click under Relevant Scholarly Articles]

Direct Instruction Research Database

National Institute for Direct Instruction (NFDI), Eugene, Oregon. (Continuing Collection).

"Research on the effectiveness of Direct Instruction has spanned over 40 years, consistently providing support for the assertion that all children can learn. Studies involving Direct Instruction curricula have been conducted with a wide variety of populations, in different settings, within numerous subject areas. The NIFDI Research Database makes this extensive research base more accessible to educators and researchers. Studies are catalogued on several different dimensions, allowing users to search for articles that are most relevant to their areas of interest. On this page, you will find information about how the database is organized and tips on searching for the content you are looking for easily and quickly."

Search the Direct Instruction Research Database

Also see the Direct Instruction Bibliography

Effective Specialized Instructional Support Services: Research Brief (an annotated bibliography]

National Alliance of Pupil Services Organizations (NAPSO). (2011).

"NAPSO is a coalition of national professional organizations whose members provide and support a variety of school-based prevention and intervention services to assist students in becoming effective learners and productive citizens. NAPSO organizations represent over a million members, including school counselors, school nurses, psychologists, school psychologists, social workers and school social workers; occupational therapists, physical therapists, art therapists, dance/movement therapists, and music therapists; speech-language pathologists; audiologists; teachers, students, parents, and administrators. NAPSO promotes interdisciplinary practice and cooperation, and advocates for ensuring access to quality specialized instructional support services (i.e., pupil services and related services under ESEA and IDEA, respectively) for all students." This resource is an annotated bibliography of a range of publications on the effectiveness of these services.

Full text – Effective Specialized Instructional Support Services

Encouraging Meaningful Parent/Educator Collaboration: A Review of Recent Literature

Center for Appropriate Dispute Resolution in Special Education (CADRE), Eugene, Oregon. (2011).
T. Hedeen, P. Moses, & M. Peter.

"All parents can and should participate meaningfully in their children's education, including those whose children receive special education services. The value of parent participation has been recognized under law since 1975, most recently as the Individuals with Disabilities Education Improvement Act. Many scholars and professionals in the field of special education have explored various approaches to collaboration since then, and research has demonstrated the benefits for all parties involved: from children and their families, to teachers and principals, to district administrators and the communities they serve. . . . This document synthesizes findings from a number of recent academic studies and policy

publications. Among the highlights is the idea that involvement may be too narrow a term to encapsulate the range and depth of partnerships that support students' success."

Full text – Encouraging Meaningful Parent/Educator Collaboration

Also see – Literature on Dispute Resolution in Special Education: Annotated Bibliography

Enhancing the Participation of Students with Disabilities in Comprehensive School Reform Models

Comprehensive School Reform Quality Center (CSRQ),
American Institutes for Research, Washington DC. (2006).

"Many of the models reviewed in the CSRQ Center Elementary Report have features that address the needs of students with disabilities. Therefore, it is hoped that this report will heighten awareness of these features as a way for educators to continue to include a diverse range of students in school improvement and reform initiatives. Second, the descriptive information provided in this report can help educators review individual models to determine the model's inclusiveness of a broad range of students, including those with disabilities. Finally, model developers may find the recommendations useful as they continuously improve their models and seek to accommodate the needs of a diverse range of students." The report sets forth 22 model descriptions, with findings on evidence of positive effects for diverse student populations. The methodology used for rating this evidence is explained in Appendix A.

Full text -- Enhancing the Participation of Students with Disabilities
[Scroll down]

Evidence-Based Reform: Advancing the Education of Students at Risk

Center for American Progress and the Institute for America's Future, Washington DC. (2005).
R. E. Slavin.

"This paper argues that genuine reform in American education depends on a movement toward evidence-based practice, using the findings of rigorous research to guide educational practices and policies. . . . (It) reviews research on programs that already have strong evidence of effectiveness (and) establishes criteria for study quality like those of the What Works Clearinghouse. Programs with strong evidence of effectiveness fall into the following categories: (a) comprehensive school reform models; (b) instructional technology; (c) cooperative learning programs; (d) innovative mathematics programs; (e) innovative elementary reading programs; (f) tutoring programs in reading; and (g) dropout prevention programs." A list of reviewed Comprehensive School Reform programs with ratings is shown in Table 1 (page 9), followed by a summary of each . Other programs are discussed in the text. The focus is on closing achievement gaps and providing research-based instruction for at-risk learners.

Full text – Evidence-Based Reform

Extended Time Testing Accommodations: What Does the Research Say?

Communique Online. (2011). National Association of School Psychologists, Bethesda, Maryland.
B. J. Lovett.

"Extended time is among the most common testing accommodations given to students with a wide range of disabilities. . . . Used properly, testing accommodations let students demonstrate their skills, increasing the accuracy of their test scores. But accommodations are a double-edged sword -- they

break the standardization of testing, and so they can compromise score quality as well. Extended time is no exception to this rule. In this article, (the author has) selected the most important and consistent findings from the research literature, focusing on their relevance for practitioners. Four basic facts about this accommodation are of particular importance: (a) extended time often helps students regardless of their disability status, (b) it can change the proper interpretation of students' test scores, (c) decisions about it are not made consistently, and (d) interventions may help to decrease students' reliance on it."

Full text – Extended Time Testing Accommodations

Influences of Sign and Oral Language Interventions on the Speech and Oral Language Production of Young Children with Disabilities

CELLreviews. (2011). Center for Early Literacy Learning, Orelena Hawks Puckett Institute, Asheville and Morganton, North Carolina.

"The influences of sign and oral language interventions on the speech and oral language production of preschool-aged children with different types of disabilities were examined in 33 studies including 216 children. The children's disabilities included autism, Down syndrome, intellectual and developmental disabilities, social-emotional disorders, and physical disabilities. All of the studies used some type of simultaneous communication (oral language together with some type of sign language) to promote the children's increased use of vocal or verbal behavior. Results showed, regardless of type of sign language, that simultaneous communication facilitated the children's production of speech and oral language. The interventions also had positive effects on child speech and oral language production regardless of other variables, including type of child disability and the different conditions of the interventions. Implications for practice are described."

Full text – Click on the title under Volume 4 (2011).
[This is the second item in Volume 4]

Instructional Intervention Tools Chart (for RTI)

National Center on Response to Intervention, American Institutes for Research, Washington DC. (Annual Reviews).

"The National Center on Response to Intervention defines instruction as additional or alternative intervention programs to the core curriculum conducted in small groups or individually with evidence of efficacy for improving academic outcomes for students whose performance is unsatisfactory in the core program. The tools chart reflects the results of the current annual review of research studies of instructional programs by the Center's Technical Review Committee (TRC). . . . The Committee independently established a set of criteria for evaluating the scientific rigor of studies demonstrating the efficacy of instructional programs. The TRC rated each submitted study against these criteria but did not compare it to other studies on the chart. . . . Across the top of the chart are the standards by which the TRC reviews each program study. Click on each standard for a detailed description of how the rating was defined." Components of study quality and effect size are represented. The rating symbols are defined at the bottom of the chart: (a) convincing evidence; (b) partially convincing evidence; (c) unconvincing evidence; and (d) data unavailable or inadequate.

Access the Instructional Intervention Tools Chart

Multiple Constructs and Effects of Accommodations on Accommodated Test Scores for Students with Disabilities

Practical Assessment, Research & Evaluation. (2009).
S. W. Cawthon, E. Ho, P. G. Patel, D. C. Potvin, & K. M. Trundt.

"Students with disabilities frequently use accommodations to participate in large-scale, standardized assessments. Accommodations can include changes to the administration of the test, such as extended time, changes to the test items, such as read aloud, or changes to the student's response, such as the use of a scribe. Some accommodations or modifications risk changing the difficulty of the test items or decreasing the validity of how test scores are interpreted. Questions regarding the validity of accommodated tests are heightened when scores are used in high-stakes decisions such as grade promotion, graduation, teacher merit pay, or other accountability initiatives. The purpose of this article is to review existing literature on multiple constructs that affect validity of interpretations of accommodated assessment scores. Research on assessment accommodations continues to grow but offers few conclusive findings on whether they facilitate fair and accurate measurement of student knowledge and skill. The validity of an accommodated score appears to vary depending on several factors such as student characteristics, test characteristics, and the accommodations themselves. A multiple construct approach may facilitate more accurate evaluations of the effects of accommodated test scores."

Full text – Multiple Constructs and Effects of Accommodations
[Click on #18]

National Assessment of IDEA: Overview

National Center for Education Evaluation and Regional Assistance,
Institute of Education Sciences, U.S. Department of Education. (2011).

"Section 664(b) of the Individuals with Disabilities Education Improvement Act of 2004 requires that the Secretary of Education delegate to the Institute of Education Sciences (IES) responsibility for conducting an assessment of national activities under the law, known as the 'National Assessment of IDEA.' The Individuals with Disabilities Education Act National Assessment Implementation Study (IDEA-NAIS) is one study of the implementation of IDEA programs that contributes to the overall National Assessment. The IDEA-NAIS focuses on four areas: (a) services to young children with disabilities; (b) identification of children and youth with disabilities; (c) efforts to promote positive developmental and educational outcomes for children and youth with disabilities; and (d) dispute resolution. Within each area, the IDEA-NAIS focuses on the implementation of select provisions of IDEA that were introduced or revised in the 2004 reauthorization of the law and complement the work of the other National Assessment studies. The IDEA-NAIS also examines key IDEA provisions that were introduced prior to the 2004 authorization but were not included in earlier national studies."

Full text -- National Assessment of IDEA: Overview

National Standards Report -- Addressing the Need for Evidence-Based Practice Guidelines for Autism Spectrum Disorders

National Standards Project, National Autism Center, Randolph, Massachusetts. (2009).

"The National Autism Center launched the National Standards Project in 2005 with the support and guidance of an expert panel composed of nationally recognized scholars, researchers, and other leaders representing diverse fields of study. . . .This groundbreaking report covers a broad range of applied treatments and identifies the level of scientific evidence available for each. It includes 775 research studies. . . . For the first time, families can find specific information about the age groups, treatment targets, and diagnostic populations to which these treatments have been applied. . . . The findings include the identification of (a) 11 Established Treatments -- Treatments that produce beneficial outcomes and are known to be effective with individuals on the autism spectrum; the overwhelming majority of these interventions were developed in the behavioral literature (e.g., applied behavior analysis, behavioral psychology, and positive behavior support); (b) 22 Emerging Treatments -- Treatments that have some evidence of effectiveness but not enough for the panel to be confident that they are truly effective; and (c) Unestablished Treatments -- Treatments for which there is no sound evidence of effectiveness."

Full text – National Standards Report (free sign-in)

Neuroscience and Special Education

Project Forum, National Association of State Directors of Special Education, Alexandria, Virginia. (2011). E. Müller.

"The purpose of this document is to provide a brief overview of how links are being developed between the rapidly expanding field of neuroscience and the practice of special education. The first part of the document introduces definitions and terminology, provides an overview of how findings from neuroscience are being applied to the field of special education, describes outcomes from the limited research bridging the two disciplines and discusses how institutions of higher education (IHEs) and other organizations are creating interdisciplinary links between neuroscience and education/special education. The second part of the document profiles three programs currently serving students with disabilities that base their curriculum in part on findings from the field of neuroscience."

Full text -- Neuroscience and Special Education

Occupational Therapy: Effective School-Based Practices Within a Policy Context

Center on Personnel Studies in Special Education (COPSSE). University of Florida, Gainesville. (2007). Y. Swinth, K. C. Spencer, & L. L. Jackson.

"The authors of this report were charged with the task of reviewing the research to identify evidence-based and effective practices for school-based occupational therapy (OT). The purpose of this report, therefore, is to provide an overview of current research and evidence that supports OT practices in schools, specifically children served under Part B of IDEA. . . . School-based occupational therapists are the primary audience for this report, as are institutions of higher education that prepare occupational therapists for school-based practice, school administrators who hire and supervise occupational therapists, and the students and families who receive special education and related services." Descriptions of the types of studies considered within each level of evidence are shown in Table 1. The review began with a search of literature from databases that are listed in Table 2. Table 4 shows

evidence for occupational therapy in schools. The paper concludes with a recommended research agenda for the future.

Full text -- Occupational Therapy: Effective School-Based Practices

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Peer Mediated Instruction and Intervention (PMII)

National Center on Accessible Instructional Materials at CAST Inc, Wakefield, Massachusetts. (Updated in 2009).   T. Hall & A. Steglia.

"There is an extensive research literature in the areas of peer mediation and tutoring. . . . The research in PMII is not only extensive but broad-ranged. The characteristics of these studies are large. In relation to age, studies have been conducted at all formal education levels and beyond, including elementary to post secondary (higher education and adult settings). Research has also been conducted across groups, minority, gender and countries. . . . Finally, PMII research includes studies focusing on a range of ability-students with mild disabilities, participants with physical and cognitive disabilities, English language learners, and non-disabled learners. . . . Several variations of empirically validated PMII implementations are summarized on this page. . . . Four characteristics are common across all forms of PMII; these include: (a) assignment and training of students to roles in the PMII configuration, (b) students instruct one another, (c) teachers monitor and facilitate all PMII groups in the classroom, and (d) structures are designed to increase academic as well as social goals for all students." This review includes evidence of effectiveness from the literature on effects on tutors and tutees; achievement outcomes; and ranking of cooperative learning methods.

Full text -- Peer Mediated Instruction and Intervention

Professional Development to Improve Accommodations Decisions – A Review of the Literature

National Center on Educational Outcomes (NCEO), University of Minnesota. (2011).
J. R. Hodgson, S. S. Lazarus, & M. L. Thurlow.

"Teachers play an important role in making decisions about students' accommodations for instruction and assessment. Although teachers are a significant part of the decision-making process, 'gaps' in teachers' accommodations knowledge are well documented. Some of these gaps may be due to challenges in providing teacher professional development, including teachers' limited time. . . . NCEO conducted a review of the literature to learn more about the characteristics of high-quality online accommodations training. This report summarizes the research literature for both professional development on accommodations decision making, and traditional and high-quality online teacher professional development."

Full text – Professional Development

Also see – Accommodations Bibliography

REHABDATA

National Rehabilitation Information Center (NARIC), Landover, Maryland. (Continuing Collection)

The core mission of NARIC "is to collect and disseminate the results of research funded by the National Institute on Disability and Rehabilitation Research (NIDRR). . . . "REHABDATA is the leading literature database on disability and rehabilitation. The database describes over 70,000 documents covering

physical, mental, and psychiatric disabilities, independent living, vocational rehabilitation, special education, assistive technology, law, employment, and other issues as they relate to people with disabilities. The collection spans 1956 to the present. Three main categories of documents are included: (a) reports, studies, and papers submitted by projects funded by the National Institute on Disability and Rehabilitation Research; (b) articles published in rehabilitation-related periodicals; and (c) commercially published books. Some non-print materials are also included. Some full-text versions of original research documents are now available online."

Home page – The REHABDATA collection

Research Summaries: What the Research Evidence Has to Say About Working with Children Who Have Disabilities

National Dissemination Center for Children with Disabilities (NICHCY), FHI 360, Washington DC. (Continuing Collection).

"These days parents, educators, and policy makers are asking what the research evidence has to say about working with children who have disabilities. What classroom strategies, behavioral supports, and other educational interventions have strong foundations in scientific research to inform and guide practice? This section of NICHCY's website is devoted to summarizing research in special education and with students who have disabilities." You can search by disability or by subject.

Home page – Research Summaries

Research-Based Practices for Creating Access to the General Curriculum in Mathematics for Students with Significant Intellectual Disabilities

Council of Chief State School Officers, Washington DC. (2009).
L. Ahlgrim-Delzell, V. F. Knight, & B. A. Jimenez.

"The objective of this monograph is to increase teacher understanding of creating access to the general curriculum in mathematics for students with significant intellectual disabilities, through an exhaustive literature review pertaining to the teaching practices for mathematics instruction for students with significant intellectual disabilities. . . . The literature review attempted to locate the most recent research (quantitative, qualitative, correlational) from peer-reviewed journals in special education, psychology, and research in which a mathematics skill was taught to at least one individual with significant cognitive disabilities. . . . Both an electronic and hand search were conducted to determine articles for review. . . . All of the 14 identified studies were conducted using single subject design. . . . All of the 14 studies provided evidence of increased student outcomes. . . . The monograph reviews each of the five components of mathematics recognized by the Council of Teachers of Mathematics. It discusses how each component of mathematics is addressed and supported by current research on students with significant intellectual disabilities, including students who may have additional physical and sensory impairments. . . . A description of the findings consisting of the mathematical practices and the supporting evidence provides specific instructional strategies."

Full text -- Access to the General Curriculum in Mathematics

Also see – Research-Based Practices for Creating Access to the General Curriculum in Reading and Literacy for Students with Significant Intellectual Disabilities

Review of Evidence-Based Practices for Language Intervention of School-Age Children: Implications for Treatment, Research, and Personnel Preparation in Speech-Language Pathology

Center on Personnel Studies in Special Education (COPSSE), University of Florida, Gainesville. (2006). F. M. Cirrin & R. Gillam.

"This systematic review focused on peer-reviewed articles published in the past 20 years that assessed the outcomes of language therapy for school-age students with language disorders. The purposes are (a) to identify effective language intervention practices used by Speech-Language Pathologists (SLPs) that lead to positive outcomes for school-age children with language disorders; (b) to identify gaps in the evidence base and areas in need of further research; and (c) to discuss implications for personnel preparation based on what is known about effective practices for language intervention in schools. A computer search of electronic databases and hand searches of other sources revealed 19 studies that used experimental designs of the type that are generally considered to be reliable and valid -- randomized clinical trials, systematic reviews, non-randomized comparison studies, and single-subject design studies. The studies that met criteria for inclusion were grouped into the general areas of (a) syntax/morphology; (b) semantics/vocabulary/concepts; (c) phonological awareness/ metalinguistics; (d) computer-based language intervention; and (e) pragmatics/conversation/discourse/narratives.

Full text -- Review of Evidence-Based Practices for Language Intervention
[Click on the third title]

Review of Selected Physical Therapy Interventions for School Age Children with Disabilities

Center on Personnel Studies in Special Education (COPSSE), University of Florida, Gainesville. (2007). S. K. Effgen & I. R. McEwen.

"The purposes of this paper are to identify (a) effective physical therapy procedural interventions that lead to positive outcomes for children (3-12 years) with disabilities in schools, and (b) gaps in the evidence and areas requiring further research. . . . The paper focuses on peer-reviewed research on procedural interventions that physical therapists commonly use when working with children with disabilities in schools. (The authors) report on interventions with enough research to have published systematic reviews, research using explicit methods to systematically search, critically appraise, and synthesize the world of literature on a specific issue. . . . The interventions covered include: (a) adapted seating for children with cerebral palsy; (b) conductive education; (c) constraint-induced movement therapy; (d) lower extremity casting, orthosis, and splints for children with neurological disorders; (e) neurodevelopmental treatment; (f) partial body weight supported treadmill training; (g) passive stretching to improve range of motion; (h) strengthening for children with cerebral palsy; and (i) weight-bearing interventions for children with cerebral palsy. The paper also provides recommendations for application to physical therapy school-based practice and future research."

Full text -- Review of Selected Physical Therapy Interventions

Secondary School Programs and Performance of Students with Disabilities: A Special Topic Report of Findings from the National Longitudinal Transition Study-2 (NLTS2)

National Center for Special Education Research, Institute of Education Sciences,
U.S. Department of Education. (2011).
L. Newman, M. Wagner, T. Huang, D. Shaver, A. Knokey, J. Yu, E. Contreras, K. Ferguson,
S. Greene, K. Nagle, & R. Cameto.

The NLTS2 "addresses questions about youth with disabilities by providing information over a 10-year period about a nationally representative sample of secondary school students with disabilities, including information that details for policymakers, educators, parents, and students a national picture of what courses students with disabilities took in high school, in what settings, and with what success in terms of credits and grades earned. This report describes course taking primarily through the lens of course credits earned. To progress toward graduation, students need not only to take a particular distribution of courses but also to meet the performance standards for those courses, resulting in earned credits. Specifically, this report addresses the following questions for students with disabilities who attended typical high schools: (a) How many credits did students with disabilities earn during high school and in what types of courses? (b) What proportion of credits did students with disabilities earn in general and special education settings? (c) What grades did they receive in their classes? (d) How did the high school credit-earning and grade-performance experiences of students with disabilities compare with those of their peers in the general population? and (e) How did the high school credit-earning and grade-performance experiences differ for students who differed in disability category, demographic characteristics, grade levels, and school completion status?"

Summary – Secondary School Programs and Performance
[Click for the full text]

Special Education in High School Redesign (annotated bibliography)

National High School Center, American Institutes for Research, Washington DC,
and the National Secondary Transition Technical Assistance Center (NSTTAC), University of North Carolina at Charlotte. (2011).

"The robust list of special education and general education articles that compose this new publication is organized around the National High School Center's 'Eight Elements of High School Improvement: A Mapping Framework.' . . . All the articles included here have been vetted by the explicit and rigorous review processes of the National High School Center and NSTTAC. . . . Articles in this annotated bibliography are annotated according to their source (i.e., research, intervention study, and product or tool). . . . The table contains the bibliographic information for each publication and identifies the type of source and the key elements it relates to. After the table, each publication is annotated with bulleted points about what it provides. The table and annotated list are in alphabetical order."

Full text – Special Education in High School Redesign

Special Education: Music Therapy Research and Evidence-Based Practice Support (annotated bibliography)

American Music Therapy Association, Silver Spring, Maryland. (Circa 2010).

"Music therapy is a well-established professional health discipline that uses music as the therapeutic stimulus to achieve non-musical treatment goals. In special education and settings serving persons with special needs, music therapists utilize music as an educational related service to promote learning and skill acquisition. . . . The Individuals with Disabilities Education Act (IDEA) 20 U.S.C. §1400, provides that eligible children and youth with disabilities shall receive special education and related services. The law includes a definition of related services that the U.S. Department of Education notes is not exhaustive. In addition, in June 2010, the U.S. Department of Education issued a Questions and Answers document on Individualized Education Programs, Evaluations, and Reevaluations. This document provides guidance representing the interpretation of the Department and clarifies the recognition of music therapy as a related service under IDEA." Overviews of various research findings are shown, with references.

Full text – Special Education: Music Therapy Research and Evidence-Based Practice
[Click under Annotated Bibliographies – and see related resources on this page]

Special Needs: Publications and Resources
What Works Clearinghouse (Continuing Collection),
Institute of Education Sciences, U.S. Department of Education.

These reviews focus "on interventions for students with special needs or who have been classified using the categories identified in the Individuals with Disabilities Education and Improvement Act of 2004. Items reviewed are intended to improve outcomes in (a) cognition, (b) external behavior, (c) general academic achievement, (d) social-emotional development, (e) emotional/internal behavior, (f) functional abilities, (g) language competencies, (h) social outcomes, and (i) staying in school. Grade-age range: PreK-12. Population: Students with learning disabilities, children with disabilities, children classified with an emotional disturbance." The contents cover Intervention Reports, Practice Guides, Reference Resources, and Multimedia.

Full texts -- Special Needs Reviews

Summary of Self-Management Research
National Center for Students with Intensive Social, Emotional, and Behavioral Needs,
Lehigh University, Bethlehem, Pennsylvania. (2006).

"The purpose of this literature review was to determine the effectiveness of self-management as an intervention for students with emotional and behavioral disorders (EBD). Areas of effectiveness that were evaluated include: (a) age/grade, (b) diagnosis, in addition to EBD, (c) racial/cultural background, (d) setting, (e) targeted behavior, (f) duration of evaluation, (g) procedural integrity, (h) consumer satisfaction, (i) link to assessment information, and (j) generalization. Thirty-four self-management studies were identified, with a total of 83 students. Students ranged in age from 5 to 17. . . . To date, in-depth analyses of twenty articles have been conducted. Effectiveness was assessed in three ways: effect sizes, percentage of non-overlapping data points, and percentage change in level. The indicators for all studies demonstrated improvement in the target behaviors (task engagement, appropriate/inappropriate behaviors and, secondarily, academic accuracy and productivity).. . . The study provides mean effect sizes for changes in different behaviors and academic variables. Treatment fidelity, social validity, and other factors are also discussed." Academic subjects that were targeted included math, English/language arts, reading, handwriting, social studies, and science.

Summary of Self-Management Research

Synthesis Reports on Intensive Academic and Behavioral Intervention: Annotated Bibliography

National Center on Intensive Intervention, American Institutes for Research, Washington DC. (2012). J. Casasanto-Ferro. A. Gandhi, M. Shami, & L. Danielson.

"The purpose of this annotated bibliography is to identify and describe major synthesis studies that have been conducted to date regarding the effectiveness of intervention strategies targeting students with disabilities who have intensive academic or behavioral needs. NCII senior advisors identified the synthesis studies, which are considered comprehensive and informative for the purpose of NCII. However, the studies identified do not necessarily reflect all of the synthesis work that has been conducted in the area of intensive academic and behavioral intervention. NCII will continue to identify and review synthesis studies as appropriate and add to this annotated bibliography during the course of NCII's operation. The following annotations are organized into four topic areas: (a) Reading, (b) Mathematics, (c) Behavior, and (d) Data-Based Individualization. The annotations include the following information about each synthesis report: citation, abstract, studies included (number of studies, years included, grades included, search procedures, and study selection criteria), synthesis methods, and synthesis results." NOTE: NCII is a new center funded by the Office of Special Education Programs in 2012.

The Effect of Instructional Grouping Format on the Reading Outcomes of Students with Disabilities: A Meta-Analytic Review. Executive Summary

National Center for Learning Disabilities, New York City. (2009). Summarized by B. Elbaum.

Traditionally, students in regular classrooms were divided into several groups according to reading ability and were provided reading instruction within these groups. In the last twenty years, there has been considerable criticism of same-ability grouping on the grounds that this practice lowers self-esteem and motivation among students with reading problems and often widens the gap between high and low achievers. At the same time, there has been an increase in the popularity of alternative grouping practices such as cooperative learning and cross-age tutoring that are designed to accommodate individual differences while avoiding social stigmas. . . . "This study, a meta-analysis of 20 studies conducted from 1975 to 1995, examined the relationship between reading outcomes of students with disabilities and the grouping formats (i.e., pairing, small groups, multiple grouping formats) used for reading instruction. Most studies compared students who received instruction through one of these grouping formats with similar students who received 'traditional' instruction delivered to the whole class. The researchers found that students who were taught in one of the alternative grouping formats had greater reading outcomes, on average, than students in a comparison group (nearly half a standard deviation higher). Thus, this research supports the use of alternative instructional groupings for teaching reading to students with disabilities."

The Effects of Self-Management Interventions on Academic Outcomes for Youth with Disabilities

National Post-School Outcomes Center, University of Oregon. (2006)
J. R. Wolgemuth, R. B. Cobb, & J. J. Dugan.

"The relationship between self-management (the intervention) and academic performance and classroom behavior (the outcomes) for secondary aged youth with disabilities was explored in this systematic review of 17 studies. . . . This review adds to the literature base of reviews in three important ways. First, the focus includes only studies that combine the use of a self-management treatment and the measurement of one or more academic outcomes exclusively (or in large part) for secondary aged youth with identified disabilities. . . . Second, the review explores the efficacy of self-management interventions across several disability categories whereas most reviews focus on one disability at the exclusion of others. . . . Third (the authors) required every study in this review to meet minimum standards of internal and external validity. . . . The findings strongly support the efficacy of self-management interventions across educational environments, disability types, ages, and genders in the improvement of academic performance and correlates of academic achievement. A series of more detailed implications for practice are also suggested, as well as directions to the reader to locate more detailed descriptions of how these interventions might be implemented in secondary education environments."

Full text -- The Effects of Self-Management Interventions
[Scroll down]

On the same page also see "The Effects of Technology-Based Interventions on Academic Outcomes for Youth with Disabilities" -- the next title after "The Effects of Self Management Interventions"

And see "The Effects of Visual Display Interventions on Outcomes for Youth with Disabilities: A Systematic Review" -- the second title after "The Effects of Self-Management Interventions"

The Importance of Relative Standards in ADHD Diagnoses: Evidence Based on Exact Birth Dates

Journal of Health Economics. (2010).   T. Elder.

Based on analysis of data from the Early Childhood Longitudinal Study-Kindergarten Cohort, this study "presents evidence that diagnoses of Attention Deficit/Hyperactivity Disorder (ADHD) are driven largely by subjective comparisons across children in the same grade in school. Roughly 8.4 percent of children born in the month prior to their state's cutoff date for kindergarten eligibility -- who typically become the youngest and most developmentally immature children within a grade -- are diagnosed with ADHD, compared to 5.1 percent of children born in the month immediately afterward. A child's birth date relative to the eligibility cutoff also strongly influences teachers' assessments of whether a child exhibits ADHD symptoms but is only weakly associated with similarly measured parental assessments, suggesting that many diagnoses may be driven by teachers' perceptions of poor behavior among the youngest children in a classroom. These perceptions have long-lasting consequences; the youngest children in fifth and eighth grade are nearly twice as likely as their older classmates to regularly use stimulants prescribed to treat ADHD."

[Click under Published Articles. This is the author's website.]

The Inclusion of Students with Disabilities in School Accountability Systems: Interim Report

National Center for Educational Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. (2012).
J. Harr-Robins, M. Song, S. Hurlburt, C. Pruce, L. Danielson, M. Garet, & J. Taylor.

"As part of the national assessment of IDEA, this study is intended to provide policy-relevant information about the education of students with disabilities (SWDs) by examining their inclusion in school accountability systems, the use of school practices that may relate to their educational outcomes, and SWD's achievement in relation to school accountability status. . . . This interim study report presents an overview of the relevant policy context and presents findings for the following research questions: (a) What percentage of schools were accountable for the performance of the SWD subgroup between the 2005–06 and 2008–09 school years? (b) What percentage of different types of schools were accountable for the performance of the SWD subgroup? (c) What percentage of schools moved in and out of accountability for the performance of the SWD subgroup? (d) What percentage of schools missed AYP because of the performance of the SWD subgroup? and (e) What percentage of schools accountable for SWD subgroup performance were identified for school improvement? . . . The analyses that appear in this interim report are limited to the 2005–06 to 2008–09 school years because 2005–06 is the first year in which EDFacts collected information on the number of tested SWDs and 2008–09 was the latest year for which EDFacts data were available at the time the analyses were conducted." An upcoming report will report on 2009-2010 findings.

30th Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, 2008.

Office of Special Education and Rehabilitative Services, U.S. Department of Education. (2011).

This report "describes our nation's progress (a) in providing a free appropriate public education (FAPE) for all children with disabilities, (b) in assuring that the rights of children with disabilities and their parents are protected, (c) in assisting states and localities in providing for the education of all children with disabilities, and (d) in assessing the effectiveness of efforts to educate children with disabilities." The report includes six sections and three appendices. Section I is a summary and analysis of IDEA Section 618 data and longitudinal study data at the national level. Section II is a summary and analysis of IDEA Section 618 data at the state level. Section III reports findings and determinations resulting from reviews of state implementation of IDEA. Section IV is a summary of research conducted under Part E of the Education Sciences Reform Act of 2002. Section V is a summary of studies and evaluations under Section 664 of IDEA. Section VI describes the extent and progress of the assessment of national activities."

Treatment of Attention/Deficit Hyperactivity Disorder: Overview of the Evidence

Pediatrics. (2005). The Official Journal of the American Academy of Pediatrics.
R. T. Brown. R. W. Amler, W. S. Freeman, J. M. Perrin, M.T. Stein. H. M. Feldman, K. Pierce,
M. L. Wolraich, and the Committee on Quality Improvement on Attention Deficit/Hyperactivity Disorder.

The American Academy of Pediatrics' Committee on Quality Improvement, Subcommittee on Attention-Deficit/Hyperactivity Disorder, reviewed and analyzed the current literature for the purpose of developing an evidence-based clinical practice guideline for the treatment of the school-aged child with attention-deficit/hyperactivity disorder (ADHD). . . . These reviews provided substantial information about different treatments for ADHD and their efficacy in improving certain characteristics or outcomes for children with ADHD as well as adverse effects and benefits of multiple modes of treatment compared with single modes (e.g. medication or behavior therapies alone). The reviews also compared the effects of different medications. Other evidence documents the long-term nature of ADHD in children and its classification as a chronic condition, meriting the application of general concepts of chronic-condition management, including an individual treatment plan with a focus on ongoing parent and child education, management, and monitoring. The evidence strongly supports the use of stimulant medications for treating the core symptoms of children with ADHD and, to a lesser degree, for improving functioning. Behavior therapy alone has only limited effect on symptoms or functioning of children with ADHD, although combining behavior therapy with medication seems to improve functioning and may decrease the amount of (stimulant) medication needed."

Full text -- Treatment of AD/HD: Overview of the Evidence

Universal Design for Learning Guidelines Version 2.0: Research Evidence (Across 26 Checkpoints)

National Center on Universal Design for Learning at CAST Inc, Wakefield, Massachusetts. (2011).

Universal Design for Learning is "a flexible approach to curriculum design that offers all learners full and equal opportunities to learn. . . . The UDL Guidelines (v1.0) are based on research from several very different fields and from diverse researchers at many different universities and research organizations. That research has been reviewed, compiled, and organized by educators and researchers at CAST. The process spanned a 10-year period and involved several different stages. . . . Nearly 1,000 articles were eventually reviewed and selected for inclusion in the evidence base that is now organized around each of the checkpoints in the UDL guidelines. Within each checkpoint, the supporting research is organized into two categories: (a) experimental and quantitative evidence, and (b) scholarly reviews and expert opinions."

Full text -- UDL for Learning Guidelines: Research Evidence

Using Strategy Instruction to Help Struggling High Schoolers Understand What They Read

Institute of Education Sciences, U.S. Department of Education. (2007).
H. Apthorp & T. Clark.
Prepared by the Mid-continent Research for Education and Learning (McREL), Denver, Colorado.

"This review sought to locate and summarize findings from rigorous, scientifically based studies of the effectiveness of strategy instruction -- teaching students to use and articulate strategies that foster

active, competent, self-regulated, and intentional learning-for helping struggling high school students improve their reading comprehension. The goal was to address information needs in the Central Region by identifying evidence-based practices intended to help high school teachers teach to struggling readers. . . . Extensive searches were conducted for relevant studies, which were then screened against rigorous evidence standards. To identify the least biased estimates of the effect of strategy instruction, the evidence screens required that only exposure to strategy instruction distinguish the intervention and comparison groups. . . . The evidence indicates that peer-assisted learning can have a substantively important positive effect on struggling high school students' reading comprehension. But reservations remain about attributing improved comprehension to peer-assisted learning because the students were not randomly assigned to the intervention in the one study that met evidence standards."

Full text -- Using Strategy Instruction to Help Struggling High Schoolers

What Works for Asthma Education Programs: Lessons from Experimental Evaluations of Social Programs and Interventions

Child Trends, Washington DC. (2012).   A. Chrisler.

"This Fact Sheet reviews seventeen random assignment intent-to-treat asthma education programs that are geared toward educating children and youth on ways to effectively manage their chronic condition. Overall, 13 of the 17 programs had a positive impact on at least one child/adolescent outcome area, three programs had mixed results, and one program was not found to work. . . . Findings for the programs in this study are reported in the following five outcome areas: (a) Education (e.g., academic achievement and school attendance); (b) Psycho-emotional health (e.g., quality of life ratings and locus of control); (c) Medical (e.g., hospitalization, emergency department visits, urgent calls to the health services/acute visits, and seeing a primary care physician); (d) Physical (e.g., experiencing asthma symptoms, restricted activity, lung function, and less use of corticosteroids/inhalers/oral steroids/nasal sprays); and (e) Self-management (e.g., asthma knowledge, appropriate behaviors/taking steps to manage asthma/managing asthma symptoms, adolescent autonomy of taking and remember asthma medications, adherence to inhaler use/using daily controller medication, and availability of rescue inhaler)."

Full text – What Works for Asthma Education Programs
[Click under 2012. Publications are in chronological order]