

Research-Based Interventions

**A Review of Research Support for Interventions
Included in Intervention Manuals Published
by Hawthorne Educational Services, Inc.**



H A W T H O R N E

Phone: (800) 542-1673 Fax: (800) 442-9509

Cognitive Strategies Instruction

Cognitive Strategies Instruction involves direct instruction in the use of a strategy or procedure for completing a specific academic task or social behavior (Beckman, 2002). This category of interventions includes the activation of metacognition or self-understanding of one's strategy use, self-regulation of learning strategies, use of mnemonic devices (e.g., acronyms or keywords to aide memory), and structured techniques for completing learning tasks (e.g., story maps and graphic organizers). The following set of references is an incomplete collection of research support for the use of Cognitive Strategies Instruction.

References

- Arthaud, T.J., & Goracke, T. (2006). Implementing a structured story web and outline strategy to assist struggling readers. *The Reading Teacher*, 59(6), 581-586. (EBSCOhost database)
- Beckman, P.(2002). *Strategy instruction*. ERIC Digest. (ERIC Document Reproduction Service No. ED474302)
- Bowen, J.M. (2005). Classroom interventions for students with traumatic brain injuries. *Preventing School Failure*, 49(4), 34-41. (EBSCOhost database)
- Bulgren, J., Deshler, D.D., & Lenz, B.K. (2007). Engaging adolescents with LD in higher order thinking about history concepts using integrated content enhancement routines. *Journal of Learning Disabilities*, 40(2), 121-133. (EBSCOhost database)
- Butler, D.L. (2003). Structuring instruction to promote self-regulated learning by adolescents and adults with learning disabilities. *Exceptionality*, 11(1), 39-60. (EBSCOhost database)
- Chung, K.K.H., & Tam, Y.H. (2005). Effects of cognitive-based instruction on mathematical problem-solving by learners with mild intellectual disabilities. *Journal of Intellectual & Developmental Disability*, 30(4), 207-216. (EBSCOhost database)
- Conroy, M.A., Dunlap, G., Clarke, S., & Alter, P.J. (2005). A descriptive analysis of positive behavioral intervention research with young children with challenging behavior. *Topics in Early Childhood Special Education*, 25(3), 157-166. (EBSCOhost database)
- Deshler, D.D., Schumaker, J.B., Woodruff, S.K. (2006). Reading strategy interventions: Can literacy outcomes be enhanced for at-risk adolescents? *Teaching Exceptional Children*, 38(3), 64-68.
- Dimino, J.A. (2007). Bridging the gap between research and practice. *Journal of Learning Disabilities*, 40(2), 183-189. (EBSCOhost database)
- Graham, S., Harris, K.R., & Reid, R. (1992). Developing self-regulated learners. *Focus on Exceptional Children*, 24(6), 1-16.

- Idol, L., & Croll, V.J. (1987). Story-mapping training as a means of improving reading comprehension. *Learning Disability Quarterly*, 10, 214-229.
- Mann, R.L. (2006). Effective teaching strategies for gifted/learning-disabled students with spatial students. *The Journal of Secondary Gifted Education*, 17(2), 112-121. (EBSCOhost database)
- Gersten, R., Williams, J.P., Fuchs, L., Baker, S., Koppenhaver, D., Spadorcia, S., & Harrison, M. (1998). *Improving reading comprehension for children with disabilities: A review of research. Final report*. Report prepared for Office of Special Education Programs, U.S. Department of Education, Contract No. HS 92017001/Task Order No. 18. (ERIC Document Reproduction Service No. ED451650)
- Graham, S., & Harris, K.R. (2005). *Writing better: Effective strategies for teaching students with learning difficulties*. Baltimore: Paul H. Brookes Publishing Co.
- Harris, K.R., & Graham, S. (1996). *Making the writing process work: Strategies for composition and self-regulation*. Cambridge, MA: Brookline Books.
- Harris, K.R., Graham, S., & Deshler, D. (1998). *Teaching every child every day: Learning in diverse schools and classrooms*. Cambridge, MA: Brookline Books.
- Santangelo, T., Harris, K.R., & Graham, S. (2007). Self-regulated strategy development: A validated model to support students who struggle with writing. *Learning Disabilities: A Contemporary Journal*, 5(1), 1-20. (EBSCOhost database)
- Schiff, R., & Calif, S. (2004). An academic intervention program for EFL university students with reading disabilities. *Journal of Adolescent & Adult Literacy*, 48(2), 102-113. (EBSCOhost database)
- Schumaker, J.B., & Deshler, D.D. (2003). Can students with LD become competent writers? *Learning Disability Quarterly*, 26(2), 129-141.
- Trainin, G., & Swanson, H.L. (2005). Cognition, metacognition, and achievement of college students with learning disabilities. *Learning Disability Quarterly*, 28, 261-272. (EBSCOhost database)
- Tralli, R., Colombo, B., Deshler, D.D., & Schumaker, J.B. (1996). The Strategies Intervention Model: A model for supported inclusion at the secondary level. *Remedial and Special Education*, 17, 204-216.

Environmental Structure/Adaptations

Interventions for students who are at-risk or who have specific disabilities may involve revisions to the structure of the learning environment. Environmental accommodations may include the seating arrangement within a classroom, the classroom management techniques employed by a teacher or school district, the use of preventive techniques employed by a teacher or school district, setting up structured routines and/or schedules, and other approaches which alter the learning atmosphere in a classroom or school building. The following set of references is an incomplete collection of research support for the use of environmental adaptations to address the needs of students who are at-risk or who have been identified with a specific disability.

References

- Blazer, B. (1995). Theory into practice. *Intervention in School or Clinic*, 30(4), 248. (EBSCOhost database)

- Bovey, T., & Strain, P. (2003a). *Using classroom activities & routines as opportunities to support peer interaction. What Works Briefs*. (Report No-5). Champaign, IL: Center on Social and Emotional Foundations for Early Learning, University of Illinois at Urbana Champaign. (ERIC Document Reproduction Service No. ED481993)
- Bovey, T., & Strain, P. (2003b). *Using environmental strategies to promote positive social interactions. What Works Briefs*. (Report No-6). Champaign, IL: Center on Social and Emotional Foundations for Early Learning, University of Illinois at Urbana Champaign. (ERIC Document Reproduction Service No. ED481994)
- Hester, P. (2002). What teachers can do to prevent behavior problems in school. *Preventing School Failure*, 47(1), 33-39. (EBSCOhost database)
- Kamps, D., Kravits, T., Rauch, J., Kamps, J.L., & Chung, N. (2000). A prevention program for students with or at risk for ED: Moderating effects of variation in treatment and classroom structure. *Journal of Emotional & Behavioral Disorders*, 8(3), 141-155. (EBSCOhost database)
- Kemp, K., & Fister, S. (1995). Academic strategies for children with ADD. *Intervention in School & Clinic*, 30(4), 203-211. (EBSCOhost database)
- Klein, J. (2004). Planning middle school schedules for improved attention and achievement. *Scandinavian Journal of Educational Research*, 48(4), 441- 449. (EBSCOhost database)
- MacDonald, C., Jones, K., & Istone, M. (2006). Positive behavioral support. *Teaching Elementary Physical Education*, 17(6), 20-24.
- Nelson, J.R., Martella, R.M., & Marchand-Martella, N. (2002), Maximizing student learning: The effects of a comprehensive school-based program for preventing problem behaviors. *Journal of Emotional & Behavioral Disorders*, 10(3), 136-149. (EBSCOhost database)
- Ostrosky, M.M., Jung, E.Y., & Hemmeter, M.L. (2002). *Helping children make transitions between activities. What Works Briefs*. (Report No-4). Champaign, IL: Center on Social and Emotional Foundations for Early Learning, University of Illinois at Urbana Champaign. (ERIC Document Reproduction Service No. ED481992)
- Ostrosky, M.M., Jung, E.Y., Hemmeter, M.L., & Thomas, D. (2003). *Helping children understand routines and classroom schedules. What Works Briefs*. (Report No-3). Champaign, IL: Center on Social and Emotional Foundations for Early Learning, University of Illinois at Urbana Champaign. (ERIC Document Reproduction Service No. ED481991)
- Oswald, K., Safran, S., & Johanson, G. (2005). Preventing trouble: Making schools safer places using positive behavior supports. *Education & Treatment of Children*, 28(3), 265-278. (EBSCOhost database)
- Rubin, R. (2005). A blueprint for a strengths-based level system in schools. *Reclaiming Children and Youth*, 14(3), 143-145. (EBSCOhost database)
- Ratcliff, N. (2001). Use the environment to prevent discipline problems and support learning. *Young Children*, 56 (5), 84-88.
- Sugai, G., & Horner, R.H. (2002). Introduction to the special series on positive behavior support in schools. *Journal of Emotional & Behavioral Disorders*, 10(3), 130-136. (EBSCOhost database)
- Warren, J.S., Bohanon-Edmonson, H.M., Turnbull, A.P., Sailor, W., Wickham, D., Griggs, P., & Beech, S.E. (2006). School-wide positive behavior support: Addressing behavior problems that impede student learning. *Educational Psychology Review*, 18(2), 187-198.

Reinforcement Strategies

Techniques that involve strategic application of reinforcement to positively or negatively impact the occurrence of behavior(s) may be used to increase or decrease targeted behaviors. Positive reinforcement involves the systematic application of desired consequences to increase the likelihood of the occurrence/reoccurrence of behavior(s) (Polloway, Patton, & Serna, 2005, p. 69). Differential reinforcement of specific behaviors can increase the likelihood of one behavior, while reducing the likelihood of nonpreferred behaviors (Polloway, Patton, & Serna, 2005, p. 76-77). Research indicates the systematic application of reinforcement principles can improve student behavior. The following set of references is an incomplete collection of research support for the use of reinforcement strategies to address the needs of students who are at-risk or who have been identified with a specific disability.

References

- Downing, J., Keating, T., & Bennett, C. (2005). Effective reinforcement techniques in elementary physical education: The key to behavior management. *Physical Educator*, 62(3), 114-122. (EBSCOhost database)
- Everett, G.E., Olmi, D.J., Edwards, R.P., & Tingstrom, D.H. (2005). The contributions of eye contact and contingent praise to effective instruction delivery in compliance training. *Education and Treatment of Children*, 28(1), 48-62. (EBSCOhost database)
- Fisher, W.W., Adelinis, J.D., Volkert, V.M., Keeney, K.M., Neidert, P.L., & Hovanetz, A. (2005). Assessing preferences for positive and negative reinforcement during treatment of destructive behavior with functional communication training. *Research in Developmental Disabilities: A Multidisciplinary Journal*, 26(2), 153-168.
- Hanley, G.P., Piazza, C.C., Fisher, W.W., & Maglieri, K.A. (2005). On the effectiveness of and preference for punishment and extinction components of function-based interventions. *Journal of Applied Behavior Analysis*, 38(1), 51-66.
- Luiselli, J.K., Putnam, R.F., Handler, M.W., & Feinberg, A.B. (2005). Whole-school positive behaviour support: Effects on student problems and academic performance. *Educational Psychology*, 25(2-3), 183-198. (EBSCOhost database)
- Neidert, P.L., Iwata, B.A., & Dozier, C.L. (2005). Treatment of multiply controlled problem behavior with procedural variations of differential reinforcement. *Exceptionality*, 13(1), 45-53. (EBSCOhost database)
- Polloway, E.A., Patton, J.R., & Serna, L. (2005). *Strategies for teaching learners with special needs* (8th ed.). Upper Saddle River, NJ: Pearson/Merrill/Prentice-Hall.
- Thompson, R.H., & Iwata, B.A. (2005). A review of reinforcement control procedures. *Journal of Applied Behavior Analysis*, 38(2), 257-279.
- Worsdell, A.S., Iwata, B.A., Dozier, C.L., Johnson, A.D., Neidert, P.L., & Thomason, J.L. (2005). Analysis of response repetition as an error-correction strategy during sight-word reading. *Journal of Applied Behavior Analysis*, 38(4), 511-528.

Self-Management and/or Self-Regulation of Behavior or Academic Skills

Self-management and/or self-regulation of behavior and/or academic skills is a tool for positive change in student performance that puts the student in charge of his/her learning. Self-management involves the student in goal-setting, implementation of the task or behavior, self-assessment, and self-reinforcement (Polloway, Patton, & Serna, 2005, p. 82-83). Self-regulation of cognitive strategies incorporates the elements of self-management into the acquisition of strategies designed to improve academic or behavioral performance (Polloway, Patton, & Serna, 2005, p. 97-99). Techniques within these intervention models would include self-charting and self-graphing of academic or behavior progress, self-cuing strategies to guide the student in the employment of a strategy, and self-reinforcement systems in which the student engages in verbal or tangible self-administration of rewards or positive praise. The following set of references is an incomplete collection of research support for the use of self-management and self-regulation strategies to address the needs of students who are at-risk or who have been identified with a specific disability

References

- Butler, D.L. (2003). Structuring instruction to promote self-regulated learning by adolescents and adults with learning disabilities. *Exceptionality, 11*(1), 39-60. (EBSCOhost database)
- Fox, L, & Garrison, S. (2003). *Helping children learn to manage their own behavior: What Works Briefs*. (Report No-7). Champaign, IL: Center on Social and Emotional Foundations for Early Learning, University of Illinois at Urbana Champaign. (ERIC Document Reproduction Service No. ED481995)
- Graham, S., Harris, K.R., & Reid, R. (1992). Developing self-regulated learners. *Focus on Exceptional Children, 24*(6), 1-16.
- Graham, S., & Harris., K.R. (2005). *Writing better: Effective strategies for teaching students with learning difficulties*. Baltimore: Paul H. Brookes Publishing Co.
- Harris, K.R., & Graham, S. (1996). *Making the writing process work: Strategies for composition and self-regulation*. Cambridge, MA: Brookline Books.
- Harris, K.R., Graham, S., & Deshler, D. (1998). *Teaching every child every day: Learning in diverse schools and classrooms*. Cambridge, MA: Brookline Books.
- McCabe, P.P. (2006). Convincing students they can learn to read: Crafting self-efficacy prompts. *Clearing House: A Journal of Educational Strategies, Issues, and Ideas, 79*(6), 252-257. (EBSCOhost database)
- Olive, E.C. (2004). Practical tools for positive behavior facilitation. *Reclaiming Children and Youth, 13*(1), 43-47. (EBSCOhost database)
- Polloway, E.A., Patton, J.R., & Serna, L. (2005). *Strategies for teaching learners with special needs* (8th ed.). Upper Saddle River, NJ: Pearson/Merrill/Prentice-Hall.
- Santangelo, T., Harris, K.R., & Graham, S. (2007). Self-regulated strategy development: A validated model to support students who struggle with writing. *Learning Disabilities: A Contemporary Journal, 5*(1), 1-20. (EBSCOhost database)

Schiff, R., & Calif, S. (2004). An academic intervention program for EFL university students with reading disabilities. *Journal of Adolescent & Adult Literacy*, 48(2), 102-113. (EBSCOhost database)

Trainin, G., & Swanson, H.L. (2005). Cognition, metacognition, and achievement of college students with learning disabilities. *Learning Disability Quarterly*, 28, 261-272. (EBSCOhost database)

Social Skills Instruction

Social skills instruction involves the direct teaching of specific skills considered to be necessary to form positive social relationships (e.g., initiate conversation with others, to advocate in a positive manner for oneself, and to verbally or physically respond to others' attempts to interact) (Polloway, Patton, & Serna, 2005, p. 472-475). Social skills curriculum models may include systematic instruction in such behaviors as goal-setting, self-monitoring of one's behavior, and self-determination, thus going beyond simple exhibition of an appropriate behavior by developing problem-solving and decision-making skills. The following set of references is an incomplete collection of research support for the use of social skills instruction to address the needs of students who are at-risk or who have been identified with a specific disability.

References

Bovey, T., & Strain, P. (2003c). *Promoting positive peer social interactions. What Works Briefs*. (Report No-8). Champaign, IL: Center on Social and Emotional Foundations for Early Learning, University of Illinois at Urbana Champaign. (ERIC Document Reproduction Service No. ED481996)

Denham, A., Hatfield, S., Smethurst, N., Tan, E., & Tribe, C. (2006). The effect of social skills interventions in the primary school. *Educational Psychology in Practice*, 22(1), 33-51. (EBSCOhost database)

Frydendall, P., LeWald, K., Walls, J., & Zarring, E. (2001). *Decreasing disruptive behaviors through social skills instruction*. Chicago, IL: Saint Xavier University & IRI/Skylight Professional Development Field-Based Masters Program. (ERIC Document Reproduction Service No. ED454482)

Polloway, E.A., Patton, J.R., & Serna, L. (2005). *Strategies for teaching learners with special needs* (8th ed.). Upper Saddle River, NJ: Pearson/Merrill/Prentice-Hall.

Schlender, A., & Wolf, L. (1998). *Improving cooperative behavior through the use of social skills instruction*. Chicago, IL: Saint Xavier University and IRI/Skylight Professional Development Field-Based Masters Program. (ERIC Document Reproduction Service No. ED422088)

Schlitz, M.E., & Schlitz, S.C. (2001). *Using direct teaching and cooperative learning to improve the social skills of students labeled as having moderate cognitive delays*. Chicago, IL: Saint Xavier University and IRI/Sklight Professional Development Field-Based Masters Program. (ERIC Document Reproduction Service No. ED456613)

Seferian, R. (1999). *Design and implementation of a social-skills program for middle school students with learning and behavioral disabilities*. (1999). Nova Southeastern University Doctoral Program. (ERIC Document Reproduction Service No. ED436863)

**Additional copies of this
material or other Hawthorne Educational Services, Inc.,
products may be ordered directly from**

Hawthorne

Educational Services, Inc.

**800 Gray Oak Drive
Columbia, MO 65201**

Phone: (573) 874-1710

Fax: (800) 442-9509

www.hawthorne-ed.com