What Works Clearinghouse

INSTITUTE OF EDUCATION SCIENCES

Students with Learning Disabilities July 2010

Orton-Gillingham–based Strategies (Unbranded)

Effectiveness[1]

No studies of unbranded *Orton-Gillingham*–based strategies that fall within the scope of the Students with Learning Disabilities review protocol meet What Works Clearinghouse (WWC) evidence standards. The lack of studies meeting WWC evidence standards means that, at this time, the WWC is unable to draw any conclusions based on research about the effectiveness or ineffectiveness of unbranded *Orton-Gillingham*–based strategies for students with learning disabilities.

Program Description[2]

Orton-Gillingham is a broad, multisensory approach to teaching reading and spelling that can be modified for individual or group instruction at all reading levels. Teaching sessions are action oriented with auditory, visual, and kinesthetic elements reinforcing one another. The approach targets persons with the kinds of language processing problems (reading, spelling, and writing) associated with dyslexia. This report focuses on unbranded interventions that are based on general *Orton-Gillingham* principles and interventions that combine multiple branded products based on *Orton-Gillingham* principles. For individual branded products based on *Orton-Gillingham* principles, please refer to the Students with Learning Disabilities topic area page.[3]

1. The studies in this report were reviewed using WWC Evidence Standards, Version 2.0 (see the WWC Procedures and Standards Handbook, Chapter III), as described in protocol Version 2.0.
2. The descriptive information for this approach was obtained from a publicly available source: the approach's website (www.ortonacademy.org, downloaded March 2010). The WWC requests developers to review the program description sections for accuracy from their perspective. Although there is no developer for this approach, the WWC requested that the Orton Academy, which certifies Orton-Gillingham teachers and maintains professional and ethical standards for the practice of this approach, review the description for this report. Further verification of the accuracy of the descriptive information for this approach is beyond the scope of this review. The literature search reflects documents publicly available by October 2009.
3. Other WWC intervention reports related to the multisensory Orton-Gillingham approach include *Alphabetic Phonics*, *Barton Reading & Spelling System*®, *Fundations*®, *Herman Method*™, *Wilson Reading System*®, *Project Read*®, and *Dyslexia Training Program*.

Program Description *(continued)*

The WWC identified 31 studies of unbranded *Orton-Gillingham*–based strategies for students with learning disabilities that were published or released between 1989 and 2009.

None of the 31 studies meet WWC evidence standards with or without reservations.

Six studies are within the scope of the Students with Learning Disabilities review protocol but do not meet WWC evidence standards.

- Four studies use a quasi-experimental design in which the analytic intervention and comparison groups are not shown to be equivalent.
- For two studies, the measures of effectiveness cannot be attributed solely to the intervention since there was only one unit assigned to one or both conditions.

Twenty-five studies are out of the scope of the Students with Learning Disabilities review protocol and are ineligible for review.

- Eleven studies were not primary analyses of the effectiveness of an intervention.
- Eleven studies do not use a comparison group.
- Three studies have samples that are not aligned with the protocol—the sample includes less than 50% students with learning disabilities.

References

Studies that fall outside the Students with Learning Disabilities review protocol or do not meet evidence standards

Alexander, A. W., & Slinger-Constant, A. (2004). Current status of treatments for dyslexia: Critical review. *Journal of Child Neurology, 19*(10), 744–758. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Arndt, E. J. (2006). Orton-Gillingham *approach*. Tallahassee, FL: Florida Center for Reading Research. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Baker, J. M. (1995). Inclusion in Minnesota: Educational experiences of students with learning disabilities in two elementary schools. *Journal of Special Education, 29*(2), 133. The study is ineligible for review because it does not use a comparison group.

Bas, O. (2008). Teaching literacy with multisensory approach to a dyslexic child who has hearing difficulty and attention deficit disorder (ADD): A case study. *Cagdas Egitim Dergisi*, (351), 21–27. The study is ineligible for review because it does not use a comparison group.

Beale, I. L. (1995). Learning disabilities: Current status and future prospects. *Journal of Child & Family Studies, 4*(3), 237–277. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Bentum, K. E., & Aaron, P. G. (2003). Does reading instruction in learning disability resource rooms really work?: A longitudinal study. *Reading Psychology, 24*(3), 361. The study does not meet WWC evidence standards because it uses a quasi-experimental design in which the analytic intervention and comparison groups are not shown to be equivalent.

Blockinger, K. L. (2004). *The impact of daily* Orton-Gillingham *drill on reading skills*. Unpublished master's thesis, Gratz College, Melrose Park, PA. The study is ineligible for review because it does not use a comparison group.

References *(continued)*

Castro, V. C. (2006). The effects of modified *Orton-Gillingham* instructional strategies on phonological processing deficits in a first-year college Spanish student. (Doctoral dissertation, Purdue University, 2006). *Dissertation Abstracts International, 67*(10A), 193–3692. The study is ineligible for review because it does not use a comparison group.

Corchin-Dorn, L., & Ellena, A. (2005). *Using multisensory methods of synthetic phonics instruction to improve the decoding and encoding skills of students with reading disabilities*. Unpublished master's thesis, Benedictine University, Lisle, IL. The study is ineligible for review because it does not use a comparison group.

Crochet, F. G. (1999). Dyslexic college students: Quest for literacy. (Doctoral dissertation, Louisiana State University and Agricultural and Mechanical College, 1999). *Dissertation Abstracts International, 59*(8-A), 2879. The study is ineligible for review because it does not use a comparison group.

Dev, P. C., Doyle, B. A., & Valente, B. (2002). Labels needn't stick: "At-risk" first graders rescued with appropriate intervention. *Journal of Education for Students Placed at Risk, 7*(3), 327–332. The study is ineligible for review because it does not use a comparison group.

Gray, E. S. (2008). Understanding dyslexia and its instructional implications: A case to support intense intervention. *Literacy Research & Instruction, 47*(2), 116–123. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Gunn, V. B. (1998). Using curriculum-based measurement to determine the efficacy of multisensory structured language instruction. (Master's thesis, Miami University, 1998). *Masters Abstracts International, 36*(05), 58–1223. The study is ineligible for review because it does not use a comparison group.

Hammill, D. D., & Swanson, H. L. (2006). The National Reading Panel's meta-analysis of phonics instruction: Another point of view. *Elementary School Journal, 107*(1), 17–26. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Hishinuma, E. S. (2000). Parent attitudes on the importance and success of integrated self-contained services for students who are gifted, learning disabled, and gifted/learning disabled. *Roeper Review, 22*(4), 241. The study is ineligible for review because it does not use a sample aligned with the protocol—the sample includes less than 50% students with learning disabilities.

Hook, P. E., Macaruso, P., & Jones, S. (2001). Efficacy of Fast ForWord training on facilitating acquisition of reading skills by children with reading difficulties—A longitudinal study. *Annals of Dyslexia, 51*, 75–96. The study does not meet WWC evidence standards because the measures of effectiveness cannot be attributed solely to the intervention—there was only one unit assigned to one or both conditions.

John, E. L. (1989). Unlocking the mystery of the nonreading child. *Momentum, 20*(1), 46–47, 50. The study is ineligible for review because it does not use a comparison group.

Kutrumbos, B. M. (1993). The effect of phonemic training on unskilled readers: A school-based study. (Doctoral dissertation, University of Denver, 1993). *Dissertation Abstracts International, 54*(07A), 309–2520. The study does not meet WWC evidence standards because the measures of effectiveness cannot be attributed solely to the intervention—there was only one unit assigned to one or both conditions.

Miller, J. S. (2005). A year in the life: A case study of a co-taught Spanish class. (Doctoral dissertation, University of Missouri–Saint Louis, 2005). *Dissertation Abstracts International, 66*(08A), 204–2870. The study is ineligible for review because it does not use a comparison group.

Rains, J. R., Kelly, C. A., & Durham, R. L. (2008). The evolution of the importance of multi-sensory teaching techniques in

References *(continued)*

elementary mathematics: Theory and practice. *Journal of Theory & Practice in Education, 4*(2), 239–252. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Ritchey, K. D., & Goeke, J. L. (2006). *Orton-Gillingham* and *Orton-Gillingham*–based reading instruction: A review of the literature. *The Journal of Special Education, 40*(3), 171–183. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Scheffel, D. L., Shaw, J. C., & Shaw, R. (2008). The efficacy of a supplemental multisensory reading program for first-grade students. *Reading Improvement, 45*(3), 139–152. The study is ineligible for review because it does not use a sample aligned with the protocol—the sample includes less than 50% students with learning disabilities.

Simpson, S. B., Swanson, J. M., & Kunkel, K. (1992). The impact of an intensive multisensory reading program on a population of learning-disabled delinquents. *Annals of Dyslexia, 42*, 54–66. The study does not meet WWC evidence standards because it uses a quasi-experimental design in which the analytic intervention and comparison groups are not shown to be equivalent.

Stahl, S. A. (1998). Teaching children with reading problems to decode: Phonics and "not-phonics" instruction. *Reading & Writing Quarterly: Overcoming Learning Difficulties, 14*(2), 165–188. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Swanson, H. L. (1999). Reading research for students with LD: A meta-analysis of intervention outcomes. *Journal of Learning Disabilities, 32*(6), 504. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Sylvester, S. P. (1998). *Phonemic awareness: The application of computer-assisted instruction to the* Orton-Gillingham *method of phonemic identification*. Unpublished master's thesis, Bloomsburg University, PA. The study is ineligible for review because it does not use a comparison group.

Troia, G. A. (2003). Auditory perceptual impairments and learning disabilities: Theoretical and empirical considerations. *Learning Disabilities: A Contemporary Journal, 1*(1), 27. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Turner, H. M. (2008). This systematic review empirically documents that the effectiveness of *Orton-Gillingham* and *Orton-Gillingham*–based reading instruction remains to be determined. *Evidence-Based Communication Assessment and Intervention, 2*(2), 67–69. The study is ineligible for review because it is not a primary analysis of the effectiveness of an intervention, such as a meta-analysis or research literature review.

Van Hell, J. G., Bosman, A. M. T., & Bartelings, M. C. G. (2003). Visual dictation improves the spelling performance of three groups of Dutch students with spelling disabilities. *Learning Disability Quarterly, 26*(4), 239–255. The study is ineligible for review because it does not use a sample aligned with the protocol—the sample includes less than 50% students with learning disabilities.

Young, C. A. (2001). Comparing the effects of tracing to writing when combined with *Orton-Gillingham* methods on spelling achievement among high school students with reading disabilities. (Doctoral dissertation, The University of Texas at Austin, 2001). *Dissertation Abstracts International, 63*(09A), 127–3157. The study does not meet WWC evidence standards because it uses a quasi-experimental design in which the analytic intervention and comparison groups are not shown to be equivalent.

References *(continued)*

Westrich-Bond, A. (1993). The effect of direct instruction of a synthetic sequential phonics program on the decoding abilities of elementary school learning-disabled students. (Doctoral dissertation, Rutgers–New Brunswick, 1993). *Dissertation Abstracts International, 55*(01A), 118–4685. The study does not meet WWC evidence standards because it uses a quasi-experimental design in which the analytic intervention and comparison groups are not shown to be equivalent.