

## References

### Logic/Decision Process

- Daly, E. J., III, Witt, J. C., Martens, B. K., & Dool, E. J. (1997). A model for conducting a functional analysis of academic performance problems. *School Psychology Review*, 26, 554-574. <https://doi.org/10.1080/02796015.1997.12085886>
- Lentz, F. E., & Shapiro, E. S. (1986). Functional assessment of the academic environment. *School Psychology Review*, 15, 346-357.
- Shapiro, E. S., & Clemens, N. H. (2009). A conceptual model for evaluating system effects of response to intervention. *Assessment for Effective Intervention*, 35, 3-16. <https://doi.org/10.1177/1534508408330080>
- VanDerHeyden, A. M., & Coddling, R. S. (2020). Belief-Based Versus Evidence-Based Math Assessment and Instruction: What School Psychologists Need to Know to Improve Student Outcomes. *Research-Based Practice; Communique*, 48 (5), p. 1, 20-25. [https://www.researchgate.net/publication/338585344\\_Belief-Based\\_Versus\\_Evidence-Based\\_Math\\_Assessment\\_and\\_Instruction\\_What\\_School\\_Psychologists\\_Need\\_to\\_Know\\_to\\_Improve\\_Student\\_Outcomes](https://www.researchgate.net/publication/338585344_Belief-Based_Versus_Evidence-Based_Math_Assessment_and_Instruction_What_School_Psychologists_Need_to_Know_to_Improve_Student_Outcomes)
- VanDerHeyden, A. M., Coddling, R. S., Martin, R., Desai, S., Maki, E., & McKeveitt, N. (in submission). Use of a web-based mathematics intervention tool to promote implementation and student learning. Manuscript submitted for publication.
- VanDerHeyden, A. M. & Witt, J. C. (2005). Quantifying the context of assessment: Capturing the effect of base rates on teacher referral and a problem-solving model of identification. *School Psychology Review*, 34, 161-183. <https://doi.org/10.1080/02796015.2005.12086281>
- VanDerHeyden, A. M., Witt, J. C., & Gilbertson, D. A. (2007). Multi-Year Evaluation of the Effects of a Response to Intervention (RTI) Model on Identification of Children for Special Education. *Journal of School Psychology*, 45, 225-256. <https://doi.org/10.1016/j.jsp.2006.11.004>
- VanDerHeyden, A. M., Witt, J. C., & Naquin, G. (2003). Development and validation of a process for screening referrals to special education. *School Psychology Review*, 32, 204-227. <https://doi.org/10.1080/02796015.2003.12086194>

### Assessment

- Burns, M. K., VanDerHeyden, A. M., & Jiban, C. (2006). Assessing the instructional level for mathematics: A comparison of methods. *School Psychology Review*, 35, 401-418. <https://doi.org/10.1080/02796015.2006.12087975>
- Christ, T. J., & Vining, O. (2006). Curriculum-based measurement procedures to develop multiple-skill mathematics computation probes: Evaluation of random and stratified stimulus-set arrangements. *School Psychology Review*, 35, 387-400. <https://doi.org/10.1080/02796015.2006.12087974>
- Deno, S. L., & Mirkin, P. K. (1977). *Data-based program modification: A manual*. Reston, VA: Council for Exception Children.
- Fuchs, L. S., & Deno, S. L. (1991). Paradigmatic distinctions between instructionally relevant measurement models. *Exceptional Children*, 57, 488-500. <https://doi.org/10.1177/001440299105700603>
- Hintze, J. M., Christ, T. J., Keller, L. A. (2002). The generalizability of CBM survey-level mathematics assessments: Just how many samples do we need? *School Psychology Review*, 31, 514-528. <https://doi.org/10.1080/02796015.2002.12086171>
- Keller-Margulis, M. A., Mercer, S. H., & Shapiro, E. S. (2014). Differences in growth on math curriculum-based measures using triennial benchmarks. *Assessment for Effective Intervention*, 39, 146-155. <https://doi.org/10.1177/1534508412452750>
- Keller-Margulis, M. A., Shapiro, E. S., & Hintze, J. (2008). Long-term diagnostic accuracy of curriculum-based measures in reading and mathematics. *School Psychology Review*, 37, 374-390. <https://doi.org/10.1080/02796015.2008.12087884>
- Meehl, P. E. (1967). Theory-testing in psychology and physics: A methodological paradox. *Philosophy of Science*, 34, 103-115. <https://doi.org/10.1086/288135>
- Messick, S. (1995). Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *American Psychologist*, 50, 741-749. <https://doi.org/10.1037/0003-066X.50.9.741>
- Methe, S. A., Briesch, A. M., & Hulac, D. (2015). Evaluating procedures for reducing measurement error in math curriculum-based measurement probes. *Assessment for Effective Intervention*, 40, 1-15. <https://doi.org/10.1177/1534508414553295>
- Powell, S. R., Fuchs, L. S., & Fuchs, D. (2013). Reaching the mountaintop: Addressing the Common Core standards in mathematics for students with mathematics difficulties. *Learning Disabilities Research & Practice*, 28, 38-48. <https://doi.org/10.1111/ldrp.12001>
- Shinn, M. R. (Ed.). (1989). *Curriculum-based measurement: Assessing special children*. New York: The Guilford Press.
- Solomon, B., G., VanDerHeyden, A. M., Solomon, E. C., Korzeniewski, E. R., Payne, L. L., Campaña, K. V., & Dillon, C. R. (in submission). Mastery Measurement in Mathematics and the Goldilocks Effect. Manuscript submitted for publication.

- Solomon, B. G., Payne, L. L., Campana, K. V., Marr, E. A., Battista, C., Silva, A., & Dawes, J. M. (2020). Precision of single-skill math CBM time-series data: The effect of probe stratification and set size. *Journal of Psychoeducational Assessment, 38*, 724-739. <https://doi.org/10.1177/0734282919894096>
- VanDerHeyden, A. M. (2011). Technical adequacy of RTI decisions. *Exceptional Children, 77*, 335-350. <https://doi.org/10.1177/001440291107700305>
- VanDerHeyden, A. M. (2010). Determining early mathematical risk: Ideas for extending the research. *School Psychology Review, 39*, 196-202. <https://doi.org/10.1080/02796015.2010.12087773>
- VanDerHeyden, A. M. (2013). Universal screening may not be for everyone: Using a threshold model as a smarter way to determine risk. *School Psychology Review, 42*, 402-414. <https://doi.org/10.1080/02796015.2013.12087462>
- VanDerHeyden, A. M., & Broussard, C. (2019). Construction and Examination of Math Subskill Mastery Measures. Advance Online Publication. *Assessment for Effective Intervention*. <https://doi.org/10.1177/1534508419883947>
- VanDerHeyden, A. M., Broussard, C., & Burns, M. K. (2019). Classification agreement for gated screening in mathematics: Subskill mastery measurement and classwide intervention. *Assessment for Effective Intervention*. Advance Online Publication. <https://doi.org/10.1177/1534508419882484>
- VanDerHeyden, A. M., Broussard, C., Snyder, P., George, J., LaFleur, S. M., Williams, C. (2011). Measurement of kindergartners' understanding of early mathematical concepts. *School Psychology Review, 40*, 296-305. <https://doi.org/10.1080/02796015.2011.12087719>
- VanDerHeyden, A. M., & Burns, M. K. (2008). Examination of the utility of various measures of mathematics proficiency. *Assessment for Effective Intervention, 33*, 215-224. <https://doi.org/10.1177/1534508407313482>
- VanDerHeyden, A. M., & Burns, M. K. (2009). Performance indicators in math: Implications for brief experimental analysis of academic performance. *Journal of Behavioral Education, 18*, 71-91. <https://doi.org/10.1007/s10864-009-9081-x>
- VanDerHeyden, A. M., Coddling, R., Martin, R. (2017). Relative value of common screening measures in mathematics. *School Psychology Review, 46*, 65-87. <https://doi.org/10.17105/SPR46-1.65-87>
- VanDerHeyden, A. M., Coddling, R., Solomon, B., & Chehayeb, R. (in submission). The reliability of virtual CBMs for simple and complex operations in mathematics. Manuscript submitted for publication.
- VanDerHeyden, A. M. & Witt, J. C. (2005). Quantifying the context of assessment: Capturing the effect of base rates on teacher referral and a problem-solving model of identification. *School Psychology Review, 34*, 161-183. <https://doi.org/10.1080/02796015.2005.12086281>
- VanDerHeyden, A. M., Witt, J. C., Naquin, G., Noell, G. (2001). The reliability and validity of curriculum-based measurement readiness probes for kindergarten students. *School Psychology Review, 30*, 363-382. <https://doi.org/10.1080/02796015.2001.12086121>

## Intervention

- Bryant, D. P., Bryant, B. R., Gersten, R. M., Scammacca, N. N., Funk, C., Winter, A. J., Shih, M., & Pool, C. (2008). The effects of tier 2 intervention on the mathematics performance on first-grade students who are at risk for mathematics difficulties. *Learning Disability Quarterly, 31*, 47 - 63. <https://doi.org/10.2307/20528817>
- Burns, M. K., Coddling, R. S., Boice, C. H., & Lukito, G. (2010). Meta-analysis of acquisition and fluency math interventions with instructional and frustration level skills: Evidence for a skill-by-treatment interaction. *School Psychology Review, 39*, 69-83. <https://doi.org/10.1080/02796015.2010.12087791>
- Burns, M. K., Riley-Tilman, T. C., & VanDerHeyden, A. M. (2012). *RTI Applications, Volume 1. Academic and Behavioral Interventions*. New York: Guilford. (226 pp.) [https://www.researchgate.net/publication/313561750\\_RTI\\_Applications\\_Volume\\_1\\_Academic\\_and\\_Behavioral\\_Interventions](https://www.researchgate.net/publication/313561750_RTI_Applications_Volume_1_Academic_and_Behavioral_Interventions)
- Burns, M. K., VanDerHeyden, A. M., & Jiban, C. (2006). Assessing the instructional level for mathematics: A comparison of methods. *School Psychology Review, 35*, 401-418. <https://doi.org/10.1080/02796015.2006.12087975>
- Fuchs, L. S., Fuchs, D., Hamlett, C. L., & Stecker, P. M. (1991). Effects of curriculum-based measurement and consultation on teacher planning and student achievement in mathematics operations. *American Educational Research Journal, 28*, 617-641. <https://doi.org/10.3102/00028312028003617>
- Fuchs, L. S., Schumacher, R. F., Long, J., Namkung, J., Hamlett, C. L., Cirino, P. T., Jordan, N. C., Siegler, R., Gersten, R., Changas, P. (2013). Improving at-risk learners' understanding of fractions. *Journal of Educational Psychology, 105*, 683-700. <https://doi.org/10.1037/a0032446>

- Gersten, R., Chard, D. J., Jayanthi, M., Baker, S. K., Morphy, P., & Flojo, J. (2009). Mathematics instruction for students with learning disabilities: A meta-analysis of instructional components. *Review of Educational Research, 79*, 1202-1242. <https://doi.org/10.3102/0034654309334431>
- Greenwood, C. R. (1991). Longitudinal analysis of time, engagement, and achievement in at-risk versus non-risk students. *Exceptional Children, 57*, 521-535. <https://doi.org/10.1177/001440299105700606>
- Haring, N. G., & Eaton, M. D. (1978). Systematic instructional procedures: An instructional hierarchy. In N. G. Haring, T. C. Lovitt, M. D. Eaton, & C. L. Hansen (Eds.), *The fourth R: Research in the classroom* (pp. 23-40). Columbus, OH: Merrill.
- Harniss, M. K., Stein, M., & Carnine, D. (2002). Promoting Mathematics Achievement. In M. R. Shinn, H. M. Walker & G. Stoner (Eds.), *Interventions for academic and behavior problems II: Preventive and remedial approaches* (pp. 571-587). Washington, DC: National Association of School Psychologists.
- Jordan, N. C., Kaplan, D., Ramineni, C., & Locuniak, M. N. (2009). Early math matters: Kindergarten number competence and later mathematics outcomes. *Developmental Psychology, 45*, 850-867. <https://doi.org/10.1037/a0014939>
- Joseph, L. M., Konrad, M., Cates, G., Vajcner, T., Eveleigh, E., & Fishley, K. M. (2012). A meta-analytic review of the cover-copy-compare and variations of this self-management procedure. *Psychology in the Schools, 49*, 122-136. <https://doi.org/10.1002/pits.20622>
- Koon, S., & Davis, M. (2019). *Math course sequences in grades 6-11 and math achievement in Mississippi* (REL 2019-007). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast. Retrieved from <http://ies.ed.gov/ncee/edlabs>
- Mayfield, K. H., & Chase, P. N. (2002). The effects of cumulative practice on mathematics problem solving. *Journal of Applied Behavior Analysis, 35*, 105-123. <https://doi.org/10.1901/jaba.2002.35-105>
- National Mathematics Advisory Panel (2008). *Foundations for Success: The Final Report of the National Mathematics Advisory Panel*, U.S. Department of Education: Washington, DC.
- National Research Council. (2001). *Adding it up: Helping children learn mathematics*. J. Kilpatrick, J. Swafford, & B. Findell (Eds.). Mathematics Learning Study Committee, Center for Education, Division of Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.
- Rittle-Johnson, B. (2017). Developing mathematics knowledge. *Child Development Perspectives, 11*, 184-190. <https://doi.org/10.1111/cdep.12229>
- Rittle-Johnson, B., Schneider, M., & Star, J. (2015). Not a one-way street: Bidirectional relations between procedural and conceptual knowledge of mathematics. *Educational Psychology Review, 27*, 587-597. <https://doi.org/10.1007/s10648-015-9302-x>
- Schneider, M., Star, J. R., & Rittle-Johnson, B. (2011). Relations among conceptual knowledge, procedural knowledge, and procedural flexibility in two samples differing in prior knowledge. *Developmental Psychology, 47*, 1525-1538. <https://doi.org/10.1037/a0024997>
- Siegler, R. S., Fazio, L. K., Bailey, D. H., & Zhou, X. (2012). Fractions: The new frontier for theories of numerical development. *Trends in Cognitive Sciences, 1-7*. <https://doi.org/10.1016/j.tics.2012.11.004>
- Skinner, C. H., Turco, T. L., Beatty, K. L., & Rasavage, C. (1989). Cover, copy, and compare: A method for increasing multiplication performance. *School Psychology Review, 18*, 412-420. <https://doi.org/10.1080/02796015.1989.12085436>
- Star, J. (2005). Reconceptualizing procedural knowledge. *Journal for Research in Mathematics Education, 36*, 404-411.
- VanDerHeyden, A. M., & Burns, M. K. (2005). Using curriculum-based assessment and curriculum-based measurement to guide elementary mathematics instruction: Effect on individual and group accountability scores. *Assessment for Effective Intervention, 30*, 15-31. <https://doi.org/10.1177/073724770503000302>
- VanDerHeyden, A. M. & Coddling, R. (2015). Practical effects of classwide mathematics intervention. *School Psychology Review, 44*, 169-190. <https://doi.org/10.17105/spr-13-0087.1>
- VanDerHeyden, A. M., McLaughlin, T., Algina, J., & Snyder, P. (2012). Randomized evaluation of a supplemental grade-wide mathematics intervention. *American Education Research Journal, 49*, 1251-1284. <https://doi.org/10.3102/0002831212462736>
- VanDerHeyden, A. M., Witt, J. C., & Gilbertson, D. A (2007). Multi-Year Evaluation of the Effects of a Response to Intervention (RTI) Model on Identification of Children for Special Education. *Journal of School Psychology, 45*, 225-256. <https://doi.org/10.1016/j.jsp.2006.11.004>
- Wu, H. (1999). Basic skills versus conceptual understanding: A bogus dichotomy in mathematics education. *American Educator, Fall 1999*, 1-7.

## Implementation Science

- Barrett, C. A., & VanDerHeyden, A. M. (2020). A cost-effectiveness analysis of classwide math intervention. *Journal of School Psychology, 80*, 54-65. <https://doi.org/10.1016/j.jsp.2020.04.002>
- Codding, R., VanDerHeyden, Martin, R. J., & Perrault, L. (2016). Manipulating Treatment Dose: Evaluating the Frequency of a Small Group Intervention Targeting Whole Number Operations. *Learning Disabilities Research & Practice, 31*, 208-220. <https://doi.org/10.1111/ldrp.12120>
- Clarke, B., Doabler, C. T., Kosty, D., Kurtz Nelson, E., Smolkowski, K., Fien, H., & Baker, S. K. (2017). Testing the efficacy of a kindergarten mathematics intervention by small group size. *AERA Open, 3*, 1-16. <https://doi.org/10.1177/2332858417706899>
- Detrich, R., Keyworth, R., & States, J. (2008). *Advances in evidence-based education: A roadmap to evidence-based education*. Oakland, CA: The Wing Institute.
- Doabler, C. T., Clarke, B., Kosty, D., Kurtz-Nelson, E., Fien, H., Smolkowski, K., Baker, S. K. (2018). Examining the impact of group size on the treatment intensity of a tier 2 mathematics intervention within a systematic framework of replication. *Journal of Learning Disabilities, 52*, 1-13. <https://doi.org/10.1177/0022219418789376>
- Duhon, G. J., Poncy, B. C., Krawiec, C. F., Davis, R. E., Ellis-Harvey, N., Skinner, C. H. (2020). Toward a more comprehensive evaluation of interventions: A dose-response curve analysis of an explicit timing intervention. Advance Online Publication. *School Psychology Review*. <https://doi.org/10.1080/2372966X.2020.1789435>
- Fixsen, D. L., & Blasé, K. A. (1993). Creating new realities: Program development and dissemination. *Journal of Applied Behavior Analysis, 26*, 597-615. <https://doi.org/10.1901/jaba.1993.26-597>
- Heifetz, R. A. (1994). *Leadership without easy answers*. Cambridge, MA: Harvard University Press.
- Joyce, B. R., & Showers, B. (1981). Transfer of Training: The Contribution of "Coaching." *Journal of Education, 163*, 163-172. <https://doi.org/10.1177/002205748116300208>
- National Implementation Research Network. <https://nirn.fpg.unc.edu/national-implementation-research-network>
- Noell, G. H., Witt, J. C., Slider, N. J., Connell, J. E., Gatti, S. L., Williams, K. L., Koenig, J. L., Resetar, J. L., & Duhon, G. J. (2005). Treatment implementation following behavioral consultation in schools: A comparison of three follow-up strategies. *School Psychology Review, 34*, 87-106. <https://doi.org/10.1080/02796015.2005.12086277>
- Powell, S., Duhon, G., Poncy, B., Mwavita, M., & Englen, A. (2020). Distributed practice in math facts fluency: A comparative analysis of varied inter-session intervals. *School Psychology Review*. Advance Online Publication. <https://doi.org/10.1080/2372966X.2020.1802207>
- Schutte, G., Duhon, G., Solomon, B., Poncy, B., Moore, K., & Story, B. (2015). A comparative analysis of massed vs. distributed practice on basic math fact fluency growth rates. *Journal of School Psychology, 53*, 149-159. <https://doi.org/10.1016/j.jsp.2014.12.003>
- VanDerHeyden, A. M., McLaughlin, T., Algina, J., & Snyder, P. (2012). Randomized evaluation of a supplemental grade-wide mathematics intervention. *American Education Research Journal, 49*, 1251-1284. <https://doi.org/10.3102/0002831212462736>
- Witt, J. C., Noell, G. H., LaFleur, L. H., & Mortenson, B. P. (1997). Teacher use of interventions in general education settings: Measurement and analysis of the independent variable. *Journal of Applied Behavior Analysis, 30*, 693-696. <https://doi.org/10.1901/jaba.1997.30-693>
- Wolf, M. M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis, 11*, 203-214. <https://doi.org/10.1901/jaba.1978.11-203>