Sabbatical Project: LD in Post-Secondary Setting (math emphasis)
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BOOK TITLE	AUTHOR etc	NOTES
Cornucopia of Strategies for Working with LD and ADD Students	Burke, Carlton, Kunze. 1999. Ohio State U and AHEAD.	Few if any online sites referenced are still there. Good section on **listening/attention skills**.
►*Learning to Think, Learning to Learn*	Cromley, Jennifer. 2000. Nat'l Inst for Literacy.	**Fantastic**. ► Chapter 18: Adult Learning. http://www.nifl.gov/nifl/fellowship/cromley_report.pdf
Content Enhancement Series	Deshler, Don et al.	**KU** product. Supplements their earlier strategies approach. Routines for instructors to follow/implement: unit organizer, course organizer, question exploration, framing, concept comparison, concept anchoring, concept mastery, etc etc.
Speaking for themselves	Gerber, Paul J. and Reiff, Henry B.	Ethnographic interviews with adults with LD. Nine subjects, falling into 3 groups: high, moderate and low/marginal adjustment to adulthood. LD continues to affect the lives of all of them, but in different ways and to different extents.
Going to College Expanding Opportunitites for People with Disabilities	Getzel, Elizabeth e. and Paul Wehman 2005	Equal access vs promoting success – where to draw the line?- institutions need to develop consensus. VA Commonwealth U has a "supported education" program: direct coaching – consultation – monitoring. Good UDI chapter by Scott and McGuire. Chapter on LD/ADHD by KU's Mike Hock: subject tutoring alone insufficient; help w goal-setting; describes "strategic tutoring".
Managing Attention and Learning Disorders in Late Adolescence and Adulthood: a guide for practitioners	Goldstein, Sam; contributions by Rob Crawford, Michael Goldstein, Patricia Latham, Peter Latham, Mary McDonald Richard. 1997	Misdiagnosis? Heterogeneous category of low achievement persisting into adulthood? Post-secondary LD programs differ little from those assisting all low-functioning students? "Identify and train in areas of previous success or knowledge; take a specific weak or difficult area, start at a lower level so the individual is comfortable, then **overtrain**, advancing slowly to ensure competence and success." P 129
Complete Learning Disabilities Handbook	Harwell, J. 2001	Yes, it is complete! Table of Contents in binder. Chapters on math and on adult/adolescent issues.
Basic Topics in Mathematics for Dyslexics	Henderson, A. and Miles, E. 2001	Stress estimation – show work for estimate AND for "accurate". Respect students' unusual but successful self-developed strategies. Note possible difficulty changing between horizontal and vertical presentations. Nice number line technique for ±.
Understanding and Managing Learning Disabilities in Adults	Jordan, Dale R. 2000.	Good examples and analysis of errors on tests, disorganized papers, etc.
Teaching Adults with LD	Jordan, DR. 1996	Another comprehensive book by Jordan.

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►*Developmental Variation and Learning Disorders*	Levine, Melvin. 1998.	Attention, memory, spatial & temporal-sequential ordering, language, motor implementation, higher-order cognition. Applied to reading, writing, spelling, ;mathematics, **other academic content areas**. Predispositions, mechanisms, complications. Assessment. Management. ►math chapter
Keys to Effective LD Teaching Practice	Lindop, Margaret H. ed. 2002 Online http://cls.coe.utk.edu	Use "direct instruction" for algorithms, concrete-representational-abstract for concepts. Effective instruction for adults with LD. Reproducible graphic organizers with completed examples. Checklists for students.
Strategic Math Series	Mercer, Cecil and Miller, Susan P.	Borrowed volumes on mult 0-81 and sub 10-18 from Don Deshler **KU**. Detailed, structured system for mastery; concrete-representational-abstract. Describe/model-guided practice – independent practice – problem solving.
►*Bridges to Practice*	National Adult Literacy and Learning Disabilities Center. www.nifl.gov	Five guidebooks from the National Institute for Literacy ►Summary: characteristics of LD-appropriate instruction
►*Winning at Math.*	Nolting, Paul. 1991.	Addressed to students. Very thorough and practical.
Math Study Skills Workbook	Nolting, Paul. 2000 and 2005	2000: Harold Asner, Access Services 2005: personal copy
Mathematics and Learning Disabilities Handbook	Nolting,Paul .2000.	Good resource for instructors and for students.
Meeting the Challenge of Learning Disabilities in Adulthood	Roffman, Arlyn J. 2000	Thorough; good resource for students.
Mathematical Cognition.	Royer, J.M. (ed.) 2002	Chapter 4: "Learning disabilities in basic mathematics", Geary, David C; Mary K Hoard. Chart of developmental change in mix of strategies used to solve simple arith probs. MD and RD compared.
Facing Learning Disabilities in the Adult Years	Shapiro, J. and Rich, Rebecca. 1999	Support is not enough – strategies must be taught! Bibliography.
Overcoming Dyslexia	Shaywitz, S. 2003	Steps an individual can take to overcome/ameliorate dyslexia.
►*Teaching in the Disciplines: Classroom Instruction for Students with Learning Disabilities*	Shea, Lynne C. and Strothman, Stuart. Eds. 2002 A Landmark College Guide.	Visual arts, psychology, world languages, literature, oral expression, ►math, history and humanities.
►*Understanding Learning Disabilities at the Postsecondary Level*	Shea, Lynne C. and Strothman, Stuart. Eds. 2003 A Landmark College Guide.	Self-awareness: enhancing cognitive strategies. AD/HD students rank these strategies highest: study skills, writing techniques, note taking, time management. Social and emotional issues. Counseling: addressing the biological, psychological, cultural. Role of student development professionals. Developmental approach to advising students w. LD.

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How the Special Needs Brain Works	Sousa, David. 2001	Less is more. Combine direct instruction with learning skills. **Emotions drive attention**. Quantitative vs qualitiative learners. Design separate assessments for each Bloom level.
►*Teaching Learning Strategies and Study Skills to Students with LD, ADD or Special Needs*	Strichart, Stephen and Mangrum, Charles. 2002	See copies of TOC, "reading graphs" and "checking my study habits". Thorough!
►*Handbook of Learning Disabilities*	Swanson, H.L., Harris, K.R. and Graham, S. 2003	Working memory. Executive system. **Phonological loop**: "component of WM that specializes in the retention of speech-based information." Constraints on this limited capacity "manifest themselves as deficits in controlled attentional processing" including suppressing conflicting information. Another section on **Strategic Content Learning Instruction (**integration of content and process.)
Unlocking Potential: College and Other Choices for People with LD and AD/HD	Taymans, Juliana M; West, Lynda L. and Madeline Sullivan, eds. 2000	Chap1: good intro. Chap9: instructional strategies. Chap10:study strategies – time, organizing, notes, tests, reading, writing, memory
First-Year Academic Advising	Upcraft, M.Lee and Kramer, Gary L., eds	Chapter 12: **advising underprepared first-year students**. Address academic AND psychological needs; e.g. "We can work it out", "I can help you figure out how to make it, if that is what you want". Effective advisors insist on regular contact. Early alert systems. Refer to appropriate resources. Monitor academic progress. Develop an effective relationship leading to student independence.
Learning Disabilities, Literacy and Adult Education	Vogel, S. A. and Reeder, S. 1998	JCCC library. **Informal assessment** of LD in adults. Maybe we can develop a questionnaire/checklist/inventory? Or use (purchase) **the Payne Learning Needs Inventory?**
College Students with LD: a Handbook	Vogel, S.A. 2000. published by ldanatl.org	Short but **comprehensive**. Ways that faculty and administration can help, and ways that students can help themselves. 8th ed 2005 requested via ILL 10/14/05.

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Relationships among working memory, math anxiety, and performance	Journal of Experimental Psychology: General June 2001 vol 130 n2, 224-237	Ashcraft, Mark; Elizabeth P. Kirk *math anxiety interferes with working memory. Intrusive thoughts/worry/stress all detract from available working memory capacity.
■Self-Talk: Strategies for Success in Math	TEACHING EXCEPTIONAL CHILDREN , Volume 29(4) , Pgs. 42-45.	Corral, Nadine and Shirin D. Antia. Helping students go from "I was successful because I was lucky" to "…I tried and I am good at this". http://www.teachingld.org/pdf/teaching_how-tos/self-talk.pdf
Self-determination: a key to success in postsecondary education for students with learning disabilities	Remedial and Special Ed, nov-dec 2003 v24 i6 p339(11)	Field, Sharon; Mary D. Sarver; Stan F. Shaw
Student Access to Division: alternative process for students with LD	Dept of Ed Psych, U of Conn	Foley, T. and Cawley, J.
■ Math learning disabilities * clear, to the point	Division of LD journal of CouncilExceptionalChildren Nov 1998. (LD Online. Follow links to LD in Depth, math skills)	Garnett, Kate. Types: mastering # facts (use chart, not calc, while improving), math talent but arith weak (help develop skills and self-monitoring), getting from concrete to written (practice translating), language (chunk verbal info into discrete segments; ask students to verbalize), visual-spatial (confused by pictures/diagrams – work on getting info from them; help students construct strong verbal models to replace visual-spatial mental images developed by most people; watch for difficulty w non-verbal signals in social setting.) v-s is rare. See Sousa's quantitative vs qualitiative.
Mathematical Disabilities: what we know and don't know	LD Online. (written for LDonline)	Geary, David C. Thorough, but refers only to young children.
■ Mathematics and learning disabilities ***Good explanation of mechanisms.**	Journal of LD Jan-feb 2004 v37 n1 4-15	Geary, David C. combo of disrupted functions of central executive (incl attentional control and poor inhibition of irrelevant associations), and difficulty w info representation and manipulation in language system. Difficulty holding info in working memory while monitoring performance; poor skills detecting/correcting errors.
■Creating successful learning environment for postsecondary students with LD.	College Reading and Learning Spring 2003 v33 i2 p131(15)	Harrison, Shari. Use cognitive and metacognitive learning strategies – "how a person thinks and acts when planning, executing and evaluating performance on a task and its outcomes.". "The effective instructor sees learning as an active process of relating new meaning to existing meaning, which involves making connections between past, present and future learning."

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■Teaching students math problem-solving through graphic representations	Teaching Exceptional Children V34 n4 pp34-38. 2002	Jitendra, Asha. guidelines for mapping.
■Helping Students with ADHD Solve Math Problems	http://www2.gsu.edu/~wwwrld/Articles/helpingstudents.htm	Johns, David. Practical. Nice chart for organizing and combining class notes and homework.
Does strategy knowledge influence working memory in children with math disabilities?	J learn disabil 2001 sep-oct; 34(5): 418-34	Keeler, ML and Swanson, HL. Supports Geary's findings of link betw **working memory** and math performance, and suggests that memory strategies may influence[improve] working memory. Another article by Swanson and Sachse-Lee says both **executive and phonological processes** are impt in working memory and math problem-solving. J exp child psychol 2001 july 79(3) 294-321.
■Accommodating Math Students with Learning Disabilities	Focus on Basics Sept 2000 v4 issue B Available online at http://www.ncsall.net/?id=325	Kenyon, Rochelle. Math LD can be a combination of difficulties incl language, visual, memory, sequencing, anxiety. Make students aware of their strengths despite computational difficulties. Lists teaching strategies and modifications.
Improving performance in high school algebra: what students with LD are saying	LD Quarterly summer 2005 v28 i3 p191(13)	Kortering, Larry J.; Laurie U. deBettencourt; Patricia M. Braziel.
Algebra Instruction for students with LD: implications from a research review	LD Quarterly 22 n2 113-26 spr 99	Maccini, Paula ;David McNaughton, Kathy L Ruhl. Literature review. "The ability to think mathematically … requires integrated use of knowledge acquire in instructional contexts as well as in **solving problems at the edge of one's competence**" . Bereiter & Scardamalia, 1993.
Technology-based practices for secondary students with ld	LD Quarterly 25 no4 247-61 fall 2002	Maccini, Paula, joseph c. Gagnon, charles a. Hughes. Survey of the literature.
Effects of a graduated Instructional Sequence on the Algebraic Subtraction of Integers by Secondary Students with LD	Education and Treatment of Children v23 n4 p465-89 N 2000	Maccini, Paula; Kathy L. Ruhl Combines Concrete-Picture-Abstract with **S**earch the [word] problem; **T**ranslate to an equation (use manipulatives, then picture, then symbols), **A**nswer (solve); **R**eview the solution.
Differentiating students with mathematics difficulty in college: mathematics disabilities vs. no diagnosis	LD Quarterly summer 2005 v28 i3 p223(10)	McGlaughlin, Sean M.; Andrew J. Knoop; Gregory A. Holliday.

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Teaching Students with Learning Problems in math to acquire, understand and apply basic math facts.	Remedial and Special Ed. 1992	Mercer, C. and Miller, S. Establish goals/expectations – difficult but attainable, challenge rather than easy success. Systematic and explicit instruction – demo/prompt/practice. Teach for understanding – concrete/representational/abstract. Monitor progress – ask student to demonstrate how to complete task. Provide explicit corrective timely feedback. Teach to mastery – automaticity – once concept is understood. Teach problem solving and generalization Promote positive attitude. Synthesizes material from many sources. authors of "strategic math series".
■ Educational aspects of mathematics disabilities: Learner Characteristics	Journal of LD Jan-feb 1997 v30 no1 p47-56	Miller, Susan P; Cecil D. Mercer. 1. info-processing factors; 2. attention deficits; 3. visual-spatial-deficits; 4. auditory-processing difficulties; 5. memory problems; 6. motor disabilities; 7. cognitive & metacognitive; 8. language; 9. social & emotional. Students w ld and low achievers have differential learning characteristics.(Kavale 1994)
Postsecondary Education for Students with LD: a synthesis of the literature (26 articles analyzed)	Exceptional Children fall 2001 v68 i1 p97	Mull, Charlotte; Patricia L. Sitlington, Sandra Alper. Huge bibliography. Implications drawn from this review: transition – student AND secondary teacher awareness of demands of post-secondary ed; assistive technology; documentation issues; staff training (see AHEAD standards); program evaluation.
■Dyscalculia: a unifying concept in understanding mathematics learning disabilities	Australian Journal of LD 2003; 8 (4) http://www.edfac.unimelb.edu.au/eldi/selage/documents/ MLDR-Dyscalculiatypes.pdf	Munro, John. Types of difficulty in dyscalculia: 1. using math concepts in oral language; 2. Manipulating concrete materials, or enumerating a quantity; 3. reading math symbols despite oral comprehension; 4. writing math symbols; 5. understanding math ideas & relationships; 6. performing specified math operations. Also presents neuropsychological correlates.
Universal Design for Instruction: new paradigm for adult instr in postsec ed	Remedial and Special Ed Nov-dec 2003 v24 i6 p369(11)	Scott, Sally S; Joan M. McGuire; Stan F. Shaw. Good information from leading practitioners.
■Math Failure and LD in the Postsecondary Student Population	Topics in Language Disorders Feb 2001; 21,2;psycINFO p 68 Good tables.	Strawser, S. and Miller, S.P. I. math failure incidental to common attributes of ld (eg cognitive/metacog, info processing, specific language disabilities). II..math failure related to specific ld subtype (eg specifid math ld, dyscalculia, developmental right-hemisphere syndrome, nonverbal ld – symbolic and conceptual aspects), nonverbal organizational disorder. Possibility of language deficits underlying both M-LD and reading-LD. Critical of math reform curricula.
Are mathematics disabilities due to a domain-general or a domain-specific working	J Learning Disabilities. 2001 may-jun; 34(3):237-248.	Wilson, KM and Swanson, HL Definitely a working memory issue.

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memory deficit?		
Title	**Journal**	**Author/notes**
How can I help students with ld in algebra?	Intervention in School and Clinic V37 n2 pp 101-104 nov 2001	Witzel, Brad; Stephen w. Smith, Mary t. brownell. Overcoming the arithmetic-to-algebra gap.
Learning Disabilities in Mathematics	National Center for Learning Disabilities	Wright, C. Christina
■ Mathematics and Dyslexia	Perspectives, Fall 1998 See ldonline.org Author not identified.	International Dyslexia Assoc. Individuals w dyslexia and math probs frequently misdiagnosed as dyscalculia, literally trouble with calculating, a rare neurologically-based disability. Teachers/tutors should understand dyslexia as well as math; provide concrete manipulatives (help build memory and aid revisualization), pictorial (transitional stage), symbolic, procedural, abstract.

Miscellaneous	**Source**	**Author**
Learner Accommodations and Instructional Modifications in the Mathematics Classroom for Students with LD	http://www.k8accesscenter.org	Charts for: inattention, organization, following directions, memory and recall, problems with understanding and comprehension. Each divided into environment vs instructional delivery and further subdivided.

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