Web Only Bonus Section

Additional Resources on Differentiated Instruction

Contents of this Bonus Section:

1. Groups and Websites for General Differentiated Instruction Information and Guidance: Contains links and information about resources to help you find more information about DI, access tools to help differentiate instruction in your classroom and resources to connect with other teachers and professionals.

2. Online Applications and Programs: Information and links to online tools to help with everything from classroom management to multimedia production and blogging, to reading lists and study skill builders, many of which we have mentioned in the ***Differentiated Instruction Book of Lists***.

3. Online Resources, Topical: Information and links to resources separated out by core content areas, including additional sections for technology, social media, and online video across content areas.

4. DI Resources By Topic: Resources by specific differentiated instruction topic, such as authentic learning, academic clubs, learning style, and more.

5. Additional Online Resources of Note for Classroom Teachers: A list of online resources regarding social media and other tools that didn't fit neatly into other areas.

6. Books and Academic Articles on DI: In our research for the ***Differentiated Instruction Book of Lists***, we consulted many resources that weren't incorporated into the book itself, but provided fantastic information and background knowledge. Rather than keep all of these resources to ourselves, we share them all here in detail.

7. From the National Institutes of Health: The Teenage Brain: a Work in Progress (Fact Sheet) This fact sheet from the NIH based on recent studies discusses the continuing developmental changes a teen-age brain undergoes, and should help all teachers of students, middle school and beyond, understand them a bit better.

1. Groups and Websites for General Differentiated Instruction Information and Guidance

The Access Center: Improving Outcomes for All Students K-8
[http://www.k8accesscenter.org/training_resources/]
Website produced and funded by the US Department of Education, with great training resources, including Professional Development modules, information on differentiating instruction, core subject area guidance, and universal design.

All Kinds of Minds [http://www.allkindsofminds.org]
This website has fantastic resources for teachers and parents, including, (under Program Contents) a Neurodevelopment Framework, which is useful for helping to see the interrelationship and possible points of weakness in a child's learning profile/skill set.

Annenberg Media- Learner.org
[http://www.learner.org/resources/series61.html?pop=yes&pid=793#jump1]
A fantastic site with high-quality education videos appropriate for science, math, language arts. Literature, foreign language and the arts. The selection of videos is comprehensive, and includes many geared towards teachers and designing assessments.

ASCD (Association for Supervision and Curriculum Development) [http://www.ascd.org]
A membership association for educators that develops programs, products, publications and services to help educators keep up to date and advance education. ASCD produces Educational Leadership and Education Update newsletters as well as many professional development conferences and courses. They also lobby on educational concerns in Washington D.C.

CAST: Center for Applied Special Technology [http://www.cast.org]
For over 25 years, CAST has been transforming education through Universal Design for Learning, making classrooms and curriculum accessible for all students, mirroring the Universal Design movement in Architecture. Their website is full of information, publications and learning tools about Universal Designs for Learning, very similar to Differentiated Instruction

Center for Universal Design in Education [http://www.washington.edu/doit/CUDE/]
The Center for Universal Design in Education is a great web portal for UD resources for education from kindergarten through post-secondary education.

Classroom 2.0: One of the most popular social networks for educators online, Classroom 2.0 has a wide membership including both k12 educators and those in higher education. Classroom 2.0 has forums and chats where you can post questions, online interviews, weekly presentations and more. It's free to join and searchable, and has a friendly membership interested in helping you answer any questions and solve problems. [http://www.classroom20.com]

Education Week [http://www.edweek.org] Publisher of Education Week, Teacher, Digital Directions and other magazines for educators, runs a terrific website with free email newsletters keeping you up-to-date with the latest education news. There are several associated blogs, including "Coach G.'s Teaching Tips" that are helpful to educators at all levels.

Educon: Educon is an annual education conference, focusing on the use of technology in the classroom, which grew out of EduBloggerCon, an education bloggers conference. Held annually at the Science Leadership Academy in Philadelphia, it has featured national speakers including Gary Stager, Sylvia Martinez, Chris Lehmann, Will Richardson, Jeff Han and others. The recordings and wiki available from past educon conferences are a great resource for anyone interested in applying and integrating digital tools in the classroom.
[http://educon22.wikispaces.com/]

Edutopia [htpp://www.edutopia.org]
Part of the George Luca Foundation, Edutopia is focused on innovation and reform in education. Using many of the concepts key to differentiated instruction, including Integrated studies, project-based learning, social and emotional learning, technology integration, comprehensive assessment and teacher development, Edutopia provides videos, development, ideas and more for teachers and students at all levels, and a strong learning community to support teachers.

National Center on Universal Design for Learning [http://www.udlcenter.org] Part of CAST, UDL offers guidelines and information on Universal Design on Learning along with research links.

National Council of Teachers of English [http://www.ncte.org]
A great resource for all teachers, including Code of Best Practice in fair Use for Media Literacy Education, a definition if 21st Century Literacies, Framework for 21st century Curriculum and Assessments, Mulitimodal Literacies and more.
Along with the Consortium for Interdisciplinary Learning, NCTE has a position statement supporting interdisciplinary learning specifically in grades preK through 4 and other great resources for teachers.

National Council of Teachers of Mathematics Illuminations web page is a website devoted to providing ideas for math curriculum ideas including projects for grades k-12.
http://illuminations.nctm.org/

National Institute of Mental Health [http://www.nimh.nih.gov/health]
Great resource for information on child development, learning disabilities and more. One of the best Fact Sheets is about The Teen Brain and its changes during adolescence, something every middle school teacher should read and is reproduced at the end of this section.

National Middle School Association [http://www.nmsa.org/]
A great resource for middle school teachers, with terrific research summaries on subjects ranging from heterogeneous grouping, flexible scheduling, professional development, bullying and more.

National Science Teachers Association resources for science teachers, including several fun podcasts, Lab Out Loud, NSTA Web Seminar podcasts, and Blick on Flicks turning "bad science" in movies into teachable science for middle and high school level students.
[http://www.nsta.org; http://learning center.nsta.org/products/podcasts.aspx]

PBS Teachers [http://www.pbs.org/teachers/] Classroom resources for teachers K – 12 and across core subject areas. Lesson plans and professional development available.

TeacherVision: [http://www.teachervision.fen.com] Comprehensive teaching resource including lesson plans, printables and more.

Teach-nology [http://www.teachnology.com/]
An online k-12 resource for teachers including learning contracts, lesson plans, printable worksheets, rubrics, teaching tips, worksheet makers, and more.

Wrightslaw [http://www.wrightslaw.com] One of the best websites out there regarding special education and special education law. The site offers great resources and links to articles, case law, and even has a monthly email newsletter to help you keep up to date with changes in the law.

2. Online Applications and Programs

Class Management, Scheduling

ClassMarker: Online website allowing teachers to create and mark quizzes, tests. Free and paid account options available. [http://www.classmarker.com]

Edmodo [http://edmodo.com] Free, online course-management and social network with a Facebook-like interface.

EDU 2.0: [http://www.edu20.org/] another online class-management solution, similar to Moodle with a friendlier user-interface.

Moodle: [http://moodle.org] Free, online course management system, often compared with Blackboard (paid schoolwide system).

Quia [http://www.quia.com] Online software that allows teachers to create web pages, online schedules, upload material, share student's work, connect with other teachers and more. The most useful feature of Quia is the ability to do assessments, quizzes, and track student time spent on practice materials, including making online "games: tailored to your class and lesson plans. Free for 30 days,. Individual and group licenses are available.

Schoolnotes.com– a great website that allows teachers, students and parents to keep track of assignments, projects, due dates and more. The online component helps students double-check assignments and reduce the number of "I forgot what I had for homework" excuses. Teacher pages have an RSS feature, so parents and students can receive automatic updates whenever the page is changed or updated.

Blogging

Edublogs:[http://www.edublogs.org] An easy to use site for creating teacher and student blogs. Free and paid versions are available.

KidBlogs- [http://www.kidblog.org] A free, student/teacher site that allows you to set up private (and semi-private) blogs for educational use.

TeacherTube, Youtube, SchoolTube: These video sharing sites have many educational resources, with TeacherTube and SchoolTube being the most consistently school-safe sites. The Common Craft Show's social media educational videos are worth a look on YouTube,. Their whiteboard style tutorials are great basic educational videos available to help understand everything from Wikis to RSS feeds.

Multimedia Production

Glogster- Allows free, Simple creation of multimedia posters. Special subdomain for educators/education. [http://edu.glogster.com]

GoAnimate: Simple and freeonline cartoon and animation creation site. [http://goanimate.com/]

Slideshare: Free online site to upload and share powerpoint/keynote or other slide presentations. [www.slideshare.com]

StoryBird: Straightforward online story creation site that allows creation of online and printable picturebooks. Enables sharing and online publishing of books, and allows commenting from others. Includes video tutorial for guiding you through book creation, but process is very simple. [http://storybird.com/]

ToonDoo: Free online way to easily create cartoons/comic books. Also has a ToonDoo spaces option to create comic-based social network for classrooms. [http://www.toondoo.com/]

Voicethread: Allows free creation of collaborative multimedia slide shows, and allows people to leave comments by voice, text, audio file or video. Content can be moderated, embedded, shared or exported as needed. [http://voicethread.com]

Reading, Books and Libraries

Goodreads [http://www.goodreads.com]

An online virtual bookshelf/library, similar to Library Thing, but with a more user-friendly interface. Allows you to enter and rate the books you are reading, create virtual bookshelves, and swap books with other members. Books can be entered by name, author, ISBN number, and by scanning the barcode. Allows you also to indicate what you are currently reading, and what's on your nightstand.

Library Thing: [http://www.librarything.com] A free, wiki-based site where you can add books to your personal library, tag them with searchable terms, and even place a location note, so you know where the book is located (Home, School, Basement box, etc.) Includes social networking features, where you can see other people's review of books, recommendations and the like. Through the site (or elsewhere online) a USB "cuecat" barcode scanner (approx.$15) is available, that will let you simply scan your books bar codes to enter the information into the site, making the process of putting your personal or classroom library online a breeze.

Orton Gillingham.com; [http://www.ortongillingham.com/frmMethodology.aspx**]** Information on the Orton-Gillgham reading method, one of the well-known and well-tested programs for struggling readers.

Online Book Lists:

Association for Library Service to Children. Newberry Medal and Honor Books, 1922 – Present. [http://www.ala.org/ala/mgrps/divs/alsc/awardsgrants/bookmedia/newberymedal/newberyhonors/newberymedal.cfm] January, 2011.

Association for Library Service to Children. Caldecott Medal and Honor Books, 1938-Present. [http://www.ala.org/ala/mgrps/divs/alsc/awardsgrants/bookmedia/caldecottmedal/caldecotthonors/caldecottmedal.cfm] January, 2011.

Reading Olympics: Book lists for Reading Olympics varies frequently by school district and reading level. Please consult with your district or school librarian for current lists of books. The lists below are included courtesy of the Chester County Intermediate Unit and participating school districts:

Elementary School List:
[http://readingolympics.cciu.org/resources/2011ESBooklist_ebooks.pdf]

Middle School Book List:
[http://readingolympics.cciu.org/resources/2011MSBooklist_ebooks.pdf]

High School Book List:
[http://readingolympics.cciu.org/resources/2011HSBooklist_ebooks.pdf
[http://readingolympics.cciu.org/booklists.html]

Study Skills, Other

Queeky Paint-[http://www.queeky.com]
Free, online paint and art program

Cornell Notetaking System
[http://lsc.sas.cornell.edu/sidebars/study_skills_resources/cornellsystem.pdf]
The "Cornell System,", developed at Cornell University, is a very useful system to help students take better notes in class and create more effective study materials in the process. Several schools for children with learning disabilities, including Commonwealth Academy, in Virginia, teach this method to their middle and high school students to help them take more effective notes.

The LD Podcast [http://www.ldpodcast.com] Produced by co-author, Whitney Hoffman. Various episodes and interviews with experts in learning, including Steven Graham, Rick Lavoie, Dr. Robert Brooks, Jenifer Fox, Dr. Russell Barkley and others.

Mind42.com: Free, online, browser based mindmapping.

Skitch- Free Screen Capture and Annotating Software [http://www.skitch.com]

Teach-nology [http://www.teachnology.com/web_tools/contract/]
An online k-12 resource for teachers includes many templates for rubrics, learning contracts, Functional behavior assessments, testing modification charts, personal education plans, lesson plans, conference forms, worksheets, puzzle makers, and more.

The Rubric Bank
http://intranet.cps.k12.il.us/Assessments/Ideas_and_Rubrics/Rubric_Bank/rubric_bank.html

Rubric Resources
http://www.aea5.k12.ia.us/pd/assessment/rubrics.htm

The Math Project Journal and the Ultimate Math Lessons book for high school algebra , geometry and advanced algebra projects.
http://www.mathprojects.com/ProjectBook/Default.aspx

Sites offering free wikis:

- Wikispaces [http://www.wikispaces.com] Wikispaces also has a great site, [http://educationalwikis.wikispaces.com] which has links to wikis currently being used in classrooms around the country.

- PB Wiki: [http://my.pbworks.com]

- Wetpaint: [http://www.wetpaint.com] Wet Paint hosts many wikis, and has a great list of wikis used in education [http://wikisineducation.wet paint.com] that provides a list of education based wikis to give you ideas of what other educators are doing with wikis in the field.

Quia: Online assessment tools with a great interface to help teachers build study games for students. [http://www.quia.com]

Education Game Resources

FunBrain.com (Grades k8) Online games for kids and a section dedicated for teachers, to help find a game for the class to play, as well as where the games align with standards.
[http://www.funbrain.com]

iCivics: a civics educational website created in partnership with Justice Sandra Day O'Connor.
[http:www.civics.org/teachers]

Nobelprize.org: Games and simulations based on Nobelprize achievements, including blood typing game, Pavolv's Dog, Immune System Game and more.
[http://www.nobelprize.org/educational/]

Education Place: Houghton Mifflin has several games available through its website including GeoNet, based on the six essential elements from the national Geography standards. [http://www.eduplace.com/edugames.html]

3. Online Resources, Topical

Math, Finance

RAND Financial Literacy Center [http://www.rand.org/labor/centers/financial-literacy]

Math.com [http://www.math.com] Great teacher and student math resources, including calculators and tools, homework help, tutoring, games and more.

Purplemath [http://www.purplemath.com]
Great online algebra help for students

Reading, Language Arts

Scholastic [http://www2.scholastic.com] Contains great reading resources, and many articles geared towards parents and teachers to help support children's education. A favorite:

Tom, J. & Darwell, J. "Make 'Boring' Books Better: Your child's textbook can be a launch pad for independent learning*." Scholastic Parents.*
[http://www2.scholastic.com/browse/article.jsp?id=7180]

Web English Teacher: [http://www.webenglishteacher.com] A great site for language arts teachers, including ideas for lessons, such as "20 ways to look at a book," media literacy resources, interdisciplinary resources and more.

Online Book Lists:

Association for Library Service to Children. Newberry Medal and Honor Books, 1922 – Present. [http://www.ala.org/ala/mgrps/divs/alsc/awardsgrants/bookmedia/newberymedal/newberyhonors/newberymedal.cfm] January, 2011.

Association for Library Service to Children. Caldecott Medal and Honor Books, 1938-Present. [http://www.ala.org/ala/mgrps/divs/alsc/awardsgrants/bookmedia/caldecottmedal/caldecotthonors/caldecottmedal.cfm] January, 2011.

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Middle School Book List:
http://readingolympics.cciu.org/resources/2011MSBooklist_ebooks.pdf

High School Book List:

[http://readingolympics.cciu.org/resources/2011HSBooklist_ebooks.pdf]
[http://readingolympics.cciu.org/booklists.html]

Science

Science Fair Projects [http://www.all-science-fair=projects.com]
Great list of science fair project ideas to get your imagination started.

Science Store for the Stars.Com Fun science site has a great list of Science TV shows for kids to watch with parents [http://www.sciencestoreforthestars.com/science-tv-shows.html].

Thinking and Learning

The Critical Thinking Community [http://www.criticalthinking.org]
A great resource for educators about teaching and developing critical thinking skills

TED: Ideas Worth Spreading [http://www.ted.com] TED, which stands for technology, Entertainment and Design, is a well-known conference, featuring short presentations, no longer than 18 minutes, from some of the finest minds in the world. Jane Goodall, Al Gore, James Watson (of DNA fame), Bill Gates and more have all presented at TED. Video and audio podcasts of presentations at TED conferences and other fantastic presentations from across the world are located on the site and are accessible and embeddable on other websites.

Technology/Social Media

Mashable: [http://www.mashable.com] A leading technology and social media blog/news site that includes great articles about using technology and social media in education, such as "Seven Fantastic Free Social Media Tools for Teachers" [http://mashable.com/2010/10/16/free-social-media-tools-for-teachers/]

Online Video Resources

TED Talks of Interest to Educators

Math and Social Studies

- **David McCandless The Beauty of Data Visualization**
  [http://www.ted.com/talks/david_mccandless_the_beauty_of_data_visualization.html]
  Discusses how data visualization can help you make sense of numbers and data we come across in the news every day.

- **Arthur Benjamin does "Mathemagic"**
  [http://www.ted.com/talks/arthur_benjamin_does_mathematic.html] Not only does he do amazing calculations, he shows people how he does it as well.

Invention and Creativity:

- **Johnny Lee demos Will Remote Hacks**
  [http://www.ted.com/talks/johnny_lee_demos_wii_remote_hacks.html] Apr. 2008.
  Johnny Lee uses a Wii Remote to use it for other things, such as a digital whiteboard, and a head mounted 3D viewer.

- **Bill Gates on Mosquitos, malaria and education**
  [http://www.ted.com/talks/lang/eng/bill_gates_unplugged.html] Feb 2009.

- **Al Gore: 15 Ways to avert a climate crisis**
  [http://www.ted.com/talks/al_gore_on_averting_climate_crisis.html] Jun 2006. A presentation that follows up the information presented in The Inconvenient Truth.

- **Jane Goodall on What Separates Us from the Apes**
  [http://www.ted.com/talks/jane_good all_on_what_separates_us_from_the_apes.html] Mar 2002.

- **Sir Ken Robinson discusses the importance of creativity in education in two excellent talks:**

  - [http://www.ted.com/talks/Sir_ken_robinson_bring_on_the_learning"revolution.html] Feb 2010.
  - [http://www.ted.com/talks/ken_robinson_says_schools_kill_creativity.html] Feb. 2006.

- **Stuart Brown: Why Play is Vital no matter your age**
  [http://www.ted.com/talks/stuart_brown_says_play_is_more_than_fun_it_s_vital.html] May 2008.

- **Dave Eggers TED Wish Once Upon a School** [http://www.ted.com/talks/dave_eggers_makes_his_ted_prize_wish_once_upon_a_school.html] Feb 2008.

- **David Bolinsky XVIVO Scientific animation** David Bolinsky, a medical illustrator, works to create animations that allow students to see and appreciate things like how a viruses can hijack the nucleus of a cell and use it for its own purposes. [http://www.xvivo.net/virusantivirotics/] See also: BioVisions at Harvard University [multimedia.mob.harvard.edu]

- **James Watson discusses how he discovered DNA** fun video of James Watson, talking about he and Francis Crick discovered the structure of DNA [http://www.ted.com/talks/james_watson_on_how_he_discovered_dan.html]

Quality Video for Science Topics

Annenberg Media- Learner.org
[http://www.learner.org/resources/series61.html?pop=yes&pid=793#jump1]
Includes fantastic videos geared towards teachers and students at almost every level for a comprehensive selection of science topics.

Virtual Field Trip Resources, Online Video

http://volcano.oregonstate.edu/fieldtrips]
http://www.internet4classrooms.com/k12links.htm
http://www.field-guides.com/trips.htm

For Fun:

Diet Coke and Mentos Experiment Videos along with information on the science behind them (Demonstrates experimentation and science in every day things):
[http://www.eepybird.com/featured-video]

4. DI Resources by Topic

Authentic Learning

Lombardi, M. “Authentic Learning for the 21st Century: An Overview.” Educause Learning Initiative, May 2007. [http://net.educause.edu/ir/library/pdf/ELI3009.pdf]

Academic Clubs

The Lab School [http://www.lab school.org/content/academic clubs]

Backwards Design

Tasmanian Department of Education. “Principles of Backward Design.” [http://www.wku.edu/library/infolit/libraryfacultydocuments/Designing_lesson_plans_using_Backwar_Design.pdf]

Learning Styles

Chernin, F. “Learning Styles: Personal Qualities” George Brown College [http://www.georgebrown.ca/pal/learningstyles.pdf]

LD Online: [http://www.ldonline.com] Maintained by WETA, Washington D.C.'s public television station, LD Online is a comprehensive site useful for both educators and parents about everything LD.

The 2e Newsletter [http://www.2enewslette.com] a newsletter and website devoted to the issues involving students that are twice exceptional- gifted and learning disabled.

Reggio Emilia Education Information

Loh, A. “Reggio Emelia Approach.” [http://brainychild.com/article/reggioemilia.shtml] Dec. 2006.

Garrett, R. “What is Reggio Emelia?” [http:www.education.com/magazine/article/Reggio_Emilia/] 2008.

Universal Design in Education

The Center for Universal Design in Education
http://www.washington.edu/doit/CUDE/

5. Additional Online Resources of Note for Classroom Teachers

Videos to Explain Social Media and Technology Terms

Common Craft Show [http://www.commoncraft.com/] January, 2011. Great example of how to teach complex subjects in short, easy to understand videos . Many videos explain rather complex things like RSS feeds, wikis, and more in simple, short videos anyone can understand.

TED: Ideas Worth Spreading. Online videos featuring some of the best lectures and presentations available on the web from notable scientists, educations, inventors, entertainers and more. [http://www.ted.com/] January, 2011.

Additional Technology Tools and Benefit Resources

Benefits of Audiobooks for All Readers By: Denise Johnson (2003) [http://www.readingrockets.org/article/64 .] Denise Johnson is an assistant professor of reading education at the College of William & Mary in Virginia. This article is excerpted with permission from Reading Online, a publication of the International Reading Association, copyright 2003.

List of iPod Touch applications for (special) Education: [http://www.hmi.dk/media/] January, 2011.

List of iPod/iPad applications for (special) education: [http://www.scribd.com/doc/24470331/iPhoneiPadandiPodtouchAppsforSpecialEducation] January, 2011.

I EAR.org : i Education Apps Review [http://www.iear.org] Website contains review of ipad/ipod applications focused on education, both for educators and students.

Audio books resource [http://www.audiobookshelf.com/]

Slideshare about effectiveness of ipods in education
[http://www.slideshare.net/mobile/gpoli/aclassroominyourpocketipodsineducation] January, 2011.

Prezi: Great interactive slide and presentation program [http://prezi.com/]

Assistive technology resources:
[http://www.greatschools.org/specialeducation/assistivetechnology/audiobookspublications.gs?content=954]

6. Books and Academic Articles on DI

Books

Ambrose, S.,and others. How Learning Works: 7 Research Based principals for Smart Teaching Jossey Bass (2010).

Barkely, R. *Attention-Deficit Hyperactivity Disorder, Third Ed.: A Clinical Workbook.* The Guilford Press (2005).

Barkley, R. *Attention-Deficit Hyperactivity Disorder, Third Edition: A Handbook for Diagnosis and Treatment* The Guilford Press (2005).

Benjamin, A. *Differentiated Instruction Using Technology: A Guide for Middle And High School Teachers.*. Eye On Education (2005)

Benjamin, A. *Differentiated Instruction: A Guide for Middle and High School Teachers.* Eye On Education (2002)

Buzan, T. *Mind Maps for Kids: An Introduction- the Shortcut to Success at School* Thorsons (2003).

Charnock, J. *A Non-workbook, Non-textbook Approach to Teaching Language Arts: Grades 4 through 8 and Up.* Fenestra Books (2005).

Dehn, M. *Working Memory and Academic Learning: Assessment and Intervention* Wiley (2008)

Dodge, J. *25 Quick Formative Assessments for a Differentiated Classroom.* Scholastic Teaching Resources (2009).

Fox, J. *Your Child's Strengths: Discover Them, Develop Them, Use Them.* Viking Adult (2008).

Fry, E. *The Reading Teacher's Book Of Lists: Grades K-12, Fifth* Jossey-Bass (2006)

Goldstein, S. *Understanding and Managing Children's Classroom Behavior: Creating Sustainable, Resilient Classrooms (Wiley Series on Personality Processes)* Wiley (2007)

Graham, S. *Best Practices in Writing Instruction (Solving Problems in the Teaching of Literacy)* The Guilford Press (2007).

Guyer, B. *ADHD (Attention-Deficit Hyperactivity Disorder): Achieving Success in School and in Life*, Allyn & Bacon (1999).

Heacox, D. *Making Differentiation a Habit How to ensure success in Academically Diverse Classrooms.* Free Spirit Publishing (2009).

Heath, C & Heath, D. *Made to Stick: Why Some Ideas Survive and Others Die.* Random House (2007).

Jensen, E. *Different Brains, Different Learners: How to Reach the Hard to Reach* Corwin Press (2000)

Lavoie, R. *The Motivation Breakthrough:6 Secrets to Turning On the Tuned-Out Child.* Touchstone (2007).

Levine, M. *The Myth of Laziness* Simon & Schuster (2002).

MacArthur, C.A. *Handbook of Writing Research.* The Guilford Press (2008).

Matlin, M. *Cognition.* Wiley, (2004).

Middendorf, C. *Differentiating Instruction in Kindergarten: Planning Tips, Assessment Tools, Management Strategies, Multi-Leveled Centers, and Activities That Reach and Nurture Every Learner* Scholastic Teaching Resources (Teaching (2007)

Papert, S. *The Connected Family- Bridging the Digital Generation Gap.* Longstreet Press (1996).

Rathvon, N. *Effective School Interventions: Strategies for Enhancing Academic Achievement and Social Competence*. The Guilford Press (2003)

Rief, S.*The Dyslexia Checklist: A Practical Reference for Parents and Teachers (J-B Ed: Checklist)* Jossey-Bass (2010)

Reiff, M. ed. *ADHD: A Complete and Authoritative Guide (American Academy of Pediatrics)* American Academy Of Pediatrics (2004).

Shaywitz, S. *Overcoming Dyslexia: A New and Complete Science-Based Program for Reading Problems at Any Level* Alfred A. Knopf (2003).

Sternberg, R. *Educational Psychology (2nd Edition)* Allyn & Bacon (2009)

Tomlinson, C.A. & McTighe, J. *Integrating Differentiated Instruction and Understanding By Design: Connecting Content & Kids*." ASCD (2006).

Troia, G. *Instruction and Assessment for Struggling Writers: Evidence-Based Practices (Challenges in Language and Literacy)* The Guilford Press (2008).

Wiggins, G & McTighe, J. *Understanding by Design*.Prentice Hall, 2001.

Wright, P & Wright, P. *Wrightslaw: Special Education Law, 2nd Edition*. Harbor House Law Press, Inc. (2007).

ACADEMIC JOURNAL ARTICLES

Roesser, R., Eccles, J, Sameroff, AA. "Academic and emotional functioning in early adolescence: Longitudinal relations, patterns and prediction by experience in middle school." *Development and Pyschopathology* (1998) 10:2:321352 .

[http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=43555]

"How High Schools Become Exemplary: Ways That Leadership Raises Achievement and Narrows Gaps by Improving Instruction in 15 Public High Schools."
[http://www.agi.harvard.edu/events/2009Conference/2009AGIReport.php]

MacArthur, C.A. "Technology and struggling writers: a review of research. *The British Psychological Society Teaching and Learning Writing* p. 159175 BJEP Monograph Series II, 6 2009

Subban, P. "A Research Basis Supporting Differentiated Instruction."
Research Scholar, Monash Univerity, Melbourne, Australia
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7. The Teenage Brain

From the National Institutes of Mental Health

[http://www.nimh.nih.gov/health/publications/teenage-brain-a-work-in-progress-fact-sheet/index.shtml]

Teenage Brain: A work in progress (Fact Sheet)

A brief overview of research into brain development during adolescence.

New imaging studies are revealing—for the first time—patterns of brain development that extend into the teenage years. Although scientists don't know yet what accounts for the observed changes, they may parallel a pruning process that occurs early in life that appears to follow the principle of "use-it-or-lose-it:" neural connections, or synapses, that get exercised are retained, while those that don't are lost. At least, this is what studies of animals' developing visual systems suggest. While it's known that both genes and environment play major roles in shaping early brain development, science still has much to learn about the relative influence of experience versus genes on the later maturation of the brain. Animal studies support a role for experience in late development, but no animal species undergoes anything comparable to humans' protracted childhood and adolescence. Nor is it yet clear whether experience actually creates new neurons and synapses, or merely establishes transitory functional changes. Nonetheless, it's tempting to interpret the new findings as empowering teens to protect and nurture their brain as a work in progress.

The newfound appreciation of the dynamic nature of the teen brain is emerging from MRI (magnetic resonance imaging) studies that scan a child's brain every two years, as he or she grows up. Individual brains differ enough that only broad generalizations can be made from comparisons of different individuals at different ages. But following the same brains as they mature allows scientists a much finer-grained view into developmental changes. In the first such longitudinal study of 145 children and adolescents, reported in l999, NIMH's Dr. Judith Rapoport and colleagues were surprised to discover a second wave of overproduction of gray matter, the thinking part of the brain—neurons and their branch-like extensions—just prior to puberty.[1] Possibly related to the influence of surging sex hormones, this thickening peaks at around age 11 in girls, 12 in boys, after which the gray matter actually thins some.

Prior to this study, research had shown that the brain overproduced gray matter for a brief period in early development—in the womb and for about the first 18 months of life—and then underwent just one bout of pruning. Researchers are now confronted with structural changes that occur much later in adolescence. The teen's gray matter waxes and wanes in different functional brain areas at different times in development. For example, the gray matter growth spurt just prior to puberty predominates in the frontal lobe, the seat of "executive functions"—planning, impulse control and reasoning. In teens affected by a rare, childhood onset form of schizophrenia that impairs these functions, the MRI scans revealed four times as much gray matter loss in the frontal lobe as normally occurs.[2] Unlike gray matter, the brain's white matter—wire-like fibers that establish neurons' long-distance connections between brain regions—thickens progressively from birth in humans. A layer of insulation called myelin progressively envelops these nerve fibers, making them more efficient, just like insulation on electric wires improves their conductivity.

Advancements in MRI image analysis are providing new insights into how the brain develops. UCLA's Dr. Arthur Toga and colleagues turned the NIMH team's MRI scan data into 4-D time-lapse animations of children's brains morphing as they grow up—the 4th dimension being rate-of-change.[3] Researchers report a wave of white matter growth that begins at the front of the brain in early childhood, moves rearward, and then subsides after puberty. Striking growth spurts can be seen from ages 6 to 13 in areas connecting brain regions specialized for language and understanding spatial relations, the temporal and parietal lobes. This growth drops off sharply after age 12, coinciding with the end of a critical period for learning languages.

While this work suggests a wave of brain white matter development that flows from front to back, animal, functional brain imaging and postmortem studies have suggested that gray matter maturation flows in the opposite direction,

with the frontal lobes not fully maturing until young adulthood. To confirm this in living humans, the UCLA researchers compared MRI scans of young adults, 23-30, with those of teens, 12-16.[4] They looked for signs of myelin, which would imply more mature, efficient connections, within gray matter. As expected, areas of the frontal lobe showed the largest differences between young adults and teens. This increased myelination in the adult frontal cortex likely relates to the maturation of cognitive processing and other "executive" functions. Parietal and temporal areas mediating spatial, sensory, auditory and language functions appeared largely mature in the teen brain. The observed late maturation of the frontal lobe conspicuously coincides with the typical age-of-onset of schizophrenia—late teens, early twenties—which, as noted earlier, is characterized by impaired "executive" functioning.

Another series of MRI studies is shedding light on how teens may process emotions differently than adults. Using functional MRI (fMRI), a team led by Dr. Deborah Yurgelun-Todd at Harvard's McLean Hospital scanned subjects' brain activity while they identified emotions on pictures of faces displayed on a computer screen.[5] Young teens, who characteristically perform poorly on the task, activated the amygdala, a brain center that mediates fear and other "gut" reactions, more than the frontal lobe. As teens grow older, their brain activity during this task tends to shift to the frontal lobe, leading to more reasoned perceptions and improved performance. Similarly, the researchers saw a shift in activation from the temporal lobe to the frontal lobe during a language skills task, as teens got older. These functional changes paralleled structural changes in temporal lobe white matter.

While these studies have shown remarkable changes that occur in the brain during the teen years, they also demonstrate what every parent can confirm: the teenage brain is a very complicated and dynamic arena, one that is not easily understood.

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