



# INSTRUCTIONAL COACHING MONTHLY

Wachusett Regional School District, 1745 North Main Street, Jefferson, MA 01522

[www.wrsd.net/literacy](http://www.wrsd.net/literacy) 508.829.1670



## Focus on Technology

### Launching Limelight

By Rachel Kodra, Instructional Coach for Literacy and Limelight

You might have heard the word “Limelight” buzzing around in your school and wondered exactly what it is. Limelight is a web-based product from Pearson that is transforming learning in classrooms all over the country. It consists of four main portals:

**Tests** - helps educators quickly generate tests that are designed to be naturally integrated into day-to-day classroom use or for larger scale school/district level assessments

**Analytics** - allows educators to gather, analyze, and evaluate student learning over time through a variety of reports, charts, and other data management tools

**Communities** - enables educators to communicate with colleagues sharing common subjects, grade levels, professional learning communities, and committees from within their school or district in an engaging and meaningful venue

### Fall/Winter Assessment Dates

WRSD Math Assessment (Grades 3-5)  
November 14 to January 6

WRSD Reading Benchmark Conferences (Grades 1-5)  
January 3 to February 3

AIMSweb (Grades K-4)  
January 13 to February 3

**PowerSchool** - provides teachers with a single login for easy access to their attendance, gradebook, and report cards

In the month of December, teachers of grades 3-5 will receive additional information and training on how to log in to the Limelight site in order to access the district-wide elementary math assessment. This assessment, created in Limelight Tests, has been re-aligned to match elementary pacing guide topics and has been linked to standards. The math mid-term for middle school will also be housed in Limelight for the winter administration.

Tests created in Limelight allow teachers to administer tests via paper/pencil or through student response systems, commonly referred to in our district as “clickers.”

To access the WRSD Limelight site, go to: <http://wrsd.college.com> or click on the Limelight icon on your desktop.

For more information on Limelight, visit <http://pearsonlimelight.com> and be sure to connect with your school administrators, SuperUsers, and instructional coaches to help guide you through this process.

## Problem-Based Mathematics Instruction

By Charlene Griffin, Instructional Coach for Mathematics and iPads

A pedagogical practice that is currently gaining favor among educators across the nation is problem-based mathematics instruction. It is aligned with the constructivist philosophy of education which many teachers believe is a developmentally appropriate and foundationally significant iteration of how children learn. This philosophy postulates that children learn best as they construct their own understanding, when their already-held knowledge meets and is challenged by some observation or information, and is then combined and absorbed into a new and deeper understanding. This construction is certainly student-centered since each child develops his/her understanding in his/her own manner and pace, based on those pre-existing ideas and the way in which the new pieces are “fit in” and connected to the deeper understanding.

In problem-based mathematics instruction, the challenges that confront and eventually help build the students’ conceptual understanding are problems and puzzling tasks that students must work through as they construct their mathematical knowledge. In his series of books on this type of instruction (*Teaching Student-Centered Mathematics*, 2006), math educator John Van de Walle states that problem-based learning is “the best way for students to develop confidence and understanding of mathematics... Teachers must create an environment in which students are trusted to solve problems and work together using their ideas to do so. Instruction involves posing tasks that will engage students in the mathematics they are expected to



learn. Then, by allowing students to interact with and struggle with the mathematics using *their* ideas and *their* strategies - a student-centered approach - the mathematics they learn will be integrated with their ideas; it will make sense to them, be understood, and be enjoyed.”

So what can this type of problem-based instruction look like in the classroom? Before the problem-solving lesson itself, the teacher will need to plan the problem and the logistics of how it will be tackled (including how the students will be grouped and what materials and manipulatives may the students need in modeling and discussing their ideas). The teacher must consider the mathematical ideas and concepts this problem will help students construct and how these fit into the overall unit and curriculum. The teacher should also be prepared to share with the class the expectations that he/she has for this task (for example, perhaps that solutions must be discussed within the

Please see Problem-Based Math on page 3.

## Problem-Based Math continued

group and that reasons and arguments for one's thinking must be modeled and shown in some format or another, including possibly at some point a written explanation). Finally the teacher introduces the task and the expectations to the students providing them with the information that he/she deems necessary without giving too much away or intimating that there is a particular "correct" method or thought-process of arriving at a solution.

During the problem-solving session the teacher begins with a whole-class introduction of the task and the expectations, and then he/she must "let go" to allow students to work out the problem together. During this time, the teacher actively listens to the conversation that is going on within the groups as students struggle with the problem. The teacher should hear students offering suggestions and making conjectures. Students should be attempting to "argue" their ideas with their group, giving their reasons for their ideas. There should be many instances of good "math talk" occurring as students attempt to use relevant vocabulary and references to already-learned concepts as



they talk through their reasons. Students should be using some sort of modeling to demonstrate their thinking, perhaps with pictures, manipulatives, or contextual scenarios. Within this period of the problem-solving session, the teacher may find it necessary to assist a group along, but this must be done without giving away the solution or sanctioning one particular thought-process or strategy over another. The teacher can provide hints but not solutions as he/she moves a group along with questions, suggestions, reminders, etc. During this time a teacher can also be taking notes and anecdotal records of the thinking he/she hears being shared and argued. These notes definitely provide a source of assessment as well as a blueprint to plan for future instruction. One final possibility that can occur during this problem-solving work is that the teacher can meet with some of the groups in order to provide some differentiation of the task as he/she deems necessary. The groups can also be given slightly different versions of the problem to allow some additional scaffolding for some of the groups and some additional extension for others. All of this must be done carefully so that all of the students are still taking part in solving the same problem and they are all engaging in the important tasks of connecting to prior learning, investigating, conjecturing, reasoning, arguing, testing of ideas, modeling, etc.

Finally the session ends with the whole class coming together again and discussing their ideas with the larger group. This final sharing is extremely

Please see Problem-Based on page 9.

## New Fall PEP Purchases: TRX Suspension Training and Indo Boards

By Bradley Clark, Instructional Coach for Physical Education, Health, and Wellness

The Wachusett Regional School District (WRSD) has recently purchased TRX Suspension Training for all 12 district schools! Each school gymnasium will be equipped with sixteen suspension fitness straps for student use during physical education classes. Funding for this equipment was made possible through the Carol M. White PEP grant that was awarded to the WRSD. TRX is a total-body workout that offers over 300 exercises. TRX Suspension Training uses only personal body weight for resistance and can be modified for all age levels. TRX exercises focus primarily on improving personal core strength, flexibility, and muscular endurance. TRX requires minimal space, low maintenance, and no electricity.

All K-12 WRSD physical education teachers recently attended a comprehensive professional training on TRX. The staff learned how to use TRX exercises for group instruction, as well as individual training. We hope to have TRX installed in all schools by late December for student use. For more information, please visit the TRX website at [www.trxtraining.com/](http://www.trxtraining.com/).

In addition to TRX, all schools will be receiving six Indo Board Training kits. Indo Board training is a fun and challenging new way to be active. The Indo Boards offers resistance and balance training with the use of an unstable platform and roller/and or inflatable



*WRSD physical education members attended TRX training on November 10, 2011.*

cushion underneath it. Indo Boards are a highly effective way to build core strength and improve overall body awareness and balance. Indo Board exercises can be modified to meet any student's age or physical needs. Indo Boards are a great way to practice board sports such as snowboarding and surfing. TRX Suspension Training and Indo Boards can be used together as a more challenging form of activity. To learn about the benefits of Indo Boards, visit [www.indoboard.com](http://www.indoboard.com).

*For more information about TRX Suspension Training or Indo Boards, please visit these websites:*

[www.trxtraining.com](http://www.trxtraining.com)

[www.indoboard.com](http://www.indoboard.com)

## Thinkfinity for Science Teachers: A Useful Resource for K-12 Educators

By Deborah LaBombard, Instructional Coach for Science and CPS

Are you a busy elementary or middle school science teacher looking for high impact, productive science resources? Would you like an easy way to search for science lessons, resources, and interactive learning activities by grade and state standard? Then Thinkfinity.org may be the place for you!

SEARCH. Click on your state, grade, and science and then click SEARCH. The Massachusetts science standards for your grade level will instantly appear with a range of materials that fall under that standard. By clicking on VIEW RESULTS, you will find grade-span specific tools and activities that fit exactly into your science curriculum areas.



Thinkfinity.org is a free, web-based K-12 educational resource including lesson plans, podcasts, webinars, thinksheets, and interactives in all curriculum areas, for teachers, parents, and students.

Finding science resources is easy at Thinkfinity.org. Type [www.thinkfinity.org](http://www.thinkfinity.org) into your browser. Click on STATE STANDARDS

Whether you are looking for a slideshow to support your teaching of heredity in first grade or resources for high school physics, Thinkfinity will amaze you with its ease of use, varied resources, and vast amount of tools and materials. Many Thinkfinity resources can be used on a SmartBoard or interactive whiteboard, as well.

Contact me for more information or coaching around the use of Thinkfinity science resources in your classroom. In the coming months, look for future articles in Coaching Monthly about this great resource as well as an optional after school course highlighting Thinkfinity.

**Thinkfinity.org**

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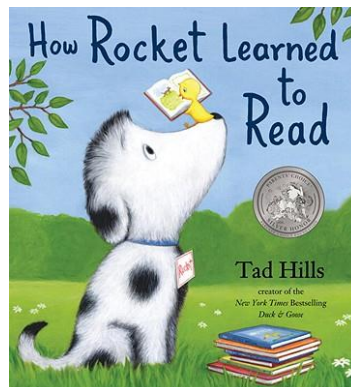
## Best Children's Books of 2011

By Rachel Kodra, Instructional Coach for Literacy and Limelight

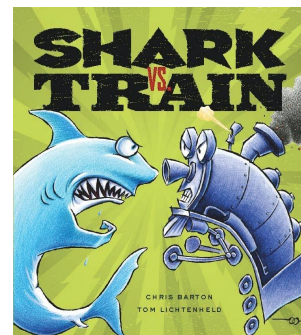
It's that time of year again when television, magazines, and Internet websites begin to publish their lists of the best items for the year. Did you know that every year the International Reading Association (IRA) and The Children's Book Council (CBC) issue their own list of best children's books? Indeed they do! But unlike other top lists you might come across, this one is compiled by children. That's right, the IRA and CBC seek out children from across the United States to read and vote for their favorite newly published children's and young adult books. Published on the IRA's website, [www.reading.org](http://www.reading.org), this trusted list of book recommendations is a valued resource for any educator, parent, or librarian seeking to foster a love of reading with children. Check out the list of this year's recipients and see if any of these titles spark an interest for some of your students! For a more detailed description of these winning titles, visit [www.reading.org](http://www.reading.org) and click on *Children's Choices 2011 Reading List*.

### Beginning Readers (K-2)

- *A Balloon for Isabel*
- *Banana!*
- *Born Yesterday: The Diary of a Young Journalist*
- *City Dog, Country Frog*
- *Daddy's Little Scout*
- *Dogs Don't Do Ballet*
- *\*Even Monsters Need Haircuts*
- *Frankie Stein Starts School*
- *Furious George Goes Bananas: A Primate Parody*



*Two Children's Choice  
2011 Winners for  
beginning readers*



- *Hattie the Bad*
- *\*Hot Rod Hamster*
- *\*How Rocket Learned to Read*
- *If You're a Monster and You Know It*
- *Is Your Buffalo Ready for Kindergarten?*
- *Let's Save the Animals*
- *\*Little Pink Pup*
- *Memoirs of a Goldfish*
- *Miss Brooks Loves Books! (And I Don't)*
- *Mr. President Goes to School*
- *Pete the Cat: I Love My White Shoes*
- *Roly Poly Pangolin*
- *\*Shark vs. Train*
- *Taking Care of Mama*

### Young Readers (3-4)

- *Adrian Peterson*
- *Amazing Greek Myths of Wonder and Blunders*
- *Animal Rescue Team: Gator on the Loose!*
- *\*Babymouse #12: Burns Runner*
- *\*Bad Kitty vs. Uncle Murray: The Uproar at the Front Door*

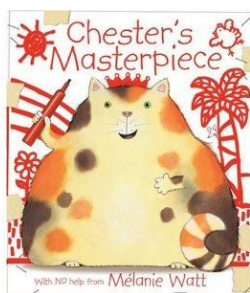
\* Denotes highest number of Children's Choice votes

Please see Best Books of 2011 on page 7.

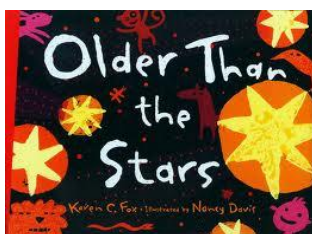
Best Books of 2011 continued

Young Readers (3-4)

- *The Bat's Cave: A Dark City*
- *Bones: Skeletons and How They Work*
- *Chester's Masterpiece*
- *Combat-Wounded Dogs*
- *Copper*
- *Drizzle*
- *\*Encyclopedia Mythologica: Gods & Heroes*
- *\*Finally*
- *Finn McCool and the Great Fish*
- *Goliath: Hero of the Great Baltimore Fire*
- *Heart-Stopping Roller Coasters*
- *I Survived #1: The Sinking of the Titanic, 1912*
- *\*Lunch Lady and the Summer Camp Shakedown*
- *Miniature Horses*
- *Missile Mouse #1: The Star Crusher*
- *The Odious Ogre*
- *Older Than the Stars*
- *Potbellied Pigs*
- *Swim! Swim!*
- *There Was an Old Monkey Who Swallowed a Frog*
- *Young Zeus*
- *Zen Ghosts*



Several Children's Choice 2011 Winners for young readers and advanced readers

Advanced Readers (5-6)

- *31 Ways to Change the World*
- *\*Big Nate: In a Class by Himself*
- *The Billionaire's Curse*
- *Blindsided*
- *Calamity Jack*
- *Chemistry: Getting a Big Reaction!*
- *Dark Labyrinths*
- *The Dreamer*
- *Explorers: Dinosaurs*
- *Ghostopolis*
- *The Grimm Legacy*
- *How I, Nicky Flynn, Finally Get a Life (and a Dog)*
- *I Dreamed of Flying Like a Bird: My Adventures Photographing Wild Animals From a Helicopter*
- *\*It's a Book*
- *Kid vs. Squid*
- *The Line*
- *Love Puppies and Corner Kicks*
- *Lynn Visible*
- *Micro Monsters: Extreme Encounters With Invisible Armies*
- *NERDS Book Two: M is for Mama's Boy*
- *Other Goose: Re-Nurseried!! and Re-Rhymed!! Children's Classics*
- *Planet Earth: What Planet Are You On?*
- *The Popularity Papers: Research for the Social Improvement and General Betterment of Lydia Goldblatt & Julie Graham-Chang*
- *\*The Red Pyramid*
- *\*Smile*
- *The Sons of Liberty*
- *The Strange Case of Origami Yoda*
- *Super Human*
- *Tower of Treasure*
- *Turtle in Paradise*
- *Versus: Pirates*
- *The Wimpy Kid Movie Diary: How Greg Heffley Went Hollywood*
- *X-treme X-ray*
- *Yours Truly, Lucy B. Parker: Girl vs. Superstar*
- *\*Zebrafish*

## Developing Lifelong Readers: Books for Adolescent Readers

By Catherine Schofield, Curriculum Supervisor

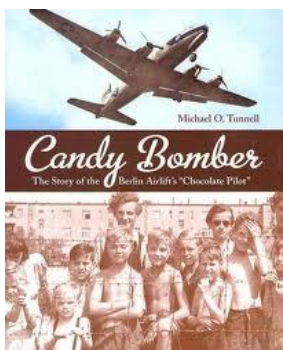
As middle teachers know, the literacy needs of young adolescents are unique and no less critical than the needs of elementary students. According to a joint position statement of the International Reading Association and National Middle School Association (2001), the middle school years are a time for students to “refine their reading preferences; become sophisticated readers of informational text; and lay the groundwork for the lifelong reading habits they will use in their personal, professional and civic lives. During the middle school years, young adolescents can use reading to help answer profound questions about themselves and the world. With good instruction, ample time, and opportunity to read across a variety of types of texts young adolescents can become successful readers both in and out of the school setting.”

Unfortunately, the middle school years can

also be a time when students who can read choose not to, and as a result students’ literacy growth is limited. Student choice is of critical importance during the adolescent years. The International Reading Association’s 2011 *Young Adults’ Choices* list can be a starting point for finding new titles that students in grades 7 and up will find motivating and relevant, and will encourage your students to become engaged, lifelong readers. A complete list of 2011 Young Adults’ Choices can be found at: [http://www.reading.org/Libraries/Choices/ya\\_c2011.pdf](http://www.reading.org/Libraries/Choices/ya_c2011.pdf).

It is important to note that this book list is designed for students in grades 7-12, and includes selections for a range of reading and maturity levels. Many middle school students may still benefit from the guidance of a knowledgeable teacher, parent, or other adult when making reading choices.

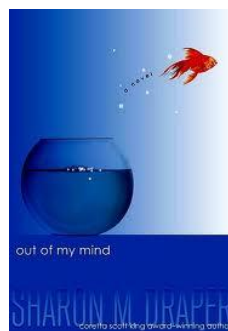
### Sample of 2011 Young Adults’ Choices



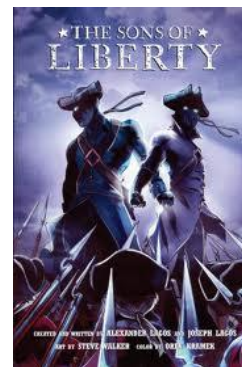
*Candy Bomber: The Story of the Berlin Airlift's "Chocolate Pilot"* by Michael O. Tunnell



*Leviathan* by Scott Westerfeld



*Out of My Mind* by Sharon M. Draper



*The Sons of Liberty* by Alexander Lagos and Joseph Lagos

## Problem-Based Math continued

important as students hear ideas and processes that might not have come up in their own groups. Again this time constitutes another opportunity to use rich math language and modeling techniques. Students come away with the awareness that it is not just the solution that matters, but more importantly the process that led to it.

As we move toward the new Common Core, problem-based mathematics instruction provides a rich opportunity for students to construct and learn the mathematical concepts they need to

understand according to the standards of their grade levels. It also allows for a meaningful context for students to apply the Standards of Mathematical Practice (similar to the former National Council of Teachers of Mathematics Process Standards). As John Van de Walle sums it up, “most, if not all, important mathematics concepts and procedures can best be taught through problem solving.”

I’d be happy to discuss these ideas with anyone further. Just email me and we can set up a time when I am at your school.

Thank you for reading this edition of *Instructional Coaching Monthly*. If you have questions about this newsletter or the district’s instructional coaching program, please contact Catherine Schofield at [catherine\\_schofield@wrsd.net](mailto:catherine_schofield@wrsd.net).