Reaching Middle School Students: A Key to Dropout Prevention

Ask any middle school teacher: sixth grade is a crucial year. Students face more rigorous academic expectations, larger class sizes, and different assessment, grading, and testing practices. Because of more departmentalized staffing, students have fewer close, nurturing relationships with teachers. They may have to travel longer distances to school and encounter more temptations to truancy and negative peer pressure. They may find class work boring or not relevant to the “real world.” In addition, many parents respond to their children’s desire for more independence by decreasing their involvement or supervision. Finally, adolescents must navigate these academic and behavioral challenges while simultaneously dealing with the dramatic emotional and physical changes of puberty.

Students who enter middle school behind grade level are easily discouraged by its more rigorous requirements and may disengage from school even more. If students enter high school poorly prepared and fail to navigate ninth grade successfully, they tend to drop out altogether; studies indicate that only 10 to 15 percent of students who repeat ninth grade will graduate.

What’s an educator to do?

Clearly, schools must recognize the importance of these years and provide adequate support to keep students on a successful trajectory. Identifying the risk factors for school failure at this stage is crucial. Schools should implement strategies to support students and parents, and provide opportunities for students to engage in meaningful activities that help them develop a sense of purpose and identity.

Cooperative Learning and Real-World Experience: A Combination for Success in Math Class

By Cathy Sweeney, Ph.D.

Mr. Santo Serna, seventh grade teacher at McAuliffe Junior High School in San Antonio, Texas, uses cooperative learning, technology, a local supermarket’s advertisement, and good pedagogy to engage students in his lesson on ratios, rates, and unit costs. Relying on everyday experiences helps demonstrate the importance of the skills being taught, and cooperative learning taps into the developmental strengths of middle school pupils.

Mr. Serna introduced the topic of ratio tables by showing a PowerPoint he had created on the smart board. After some
MINNESOTA EXTRA-HELP LAB BUILDS
SKILLS, SHOWCASES CREATIVITY

By Fran Sion

The Talent Development Middle Grades program offers an extra-help reading lab for students who need additional support to reach grade level proficiency. The Savvy Reader’s Lab—also known at some schools as the Computer and Team Assisted Reading Acceleration lab, or CATARA—develops students’ ability to construct meaning through reading and writing and helps students assume greater responsibility for their learning. The lab at Cass Lake-Bena Middle School in Cass Lake, Minnesota, which Ms. Dianna Morrison has directed since its opening in September 2005, has provided many opportunities for students to expand their reading skills and exercise creativity.

During this elective lab period, students enjoy whole-class activities, team learning, and independent, self-selected activities. For part of every cycle, students read from the same book, chosen by the teacher to fit the class’s instructional level. This enables the teacher to model reading strategies using a core book that is familiar to all students. TDMG provides comprehensive lesson plans for each chapter, which include activities that address skills measured by standardized tests. After completing the book, students work on a final project to enrich their understanding of the literature studied.

In addition to this whole-class instruction, a block of time is regularly scheduled for students to read independently from developmentally appropriate books. During this time, students apply the strategies that have been modeled, taught, and practiced. They then move to one of four learning centers where they continue to develop and practice reading and writing. The learning centers include a listening center, computer center, information center, and writing center.

As they read both the core books and their self-selected books, students apply the strategies taught and modeled to encourage growth in decoding, vocabulary, and comprehension. They maintain a folder of completed work and work in progress. Ms. Morrison regularly evaluates these folders and is pleased with the development she witnesses both in reading and writing.

Student projects connected to core books provide many opportunities for creativity to flourish. For example, the novel *Seedfolks*, by Paul Fleischman, has thirteen chapters, each of which is told from the perspective of a character in a multi-ethnic neighborhood. The characters are brought together as they transform a vacant lot into a community garden. Ms. Morrison encouraged students to write a fourteenth chapter that connects to those that preceded it, and to create a character who joins the neighborhood project. One student, Juan Isais, made himself the central character in his chapter. Playing football in the vicinity of the lot, he meets both Kim and Curtis, two of the original gardeners. Their conversations, which Juan details, inspire him to start growing tomatoes in his own plot. Other students created acrostic poems in which each letter represents an attribute displayed by a character or a detail of his or her life.

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TEN REASONS TO USE TRADE BOOKS IN THE MIDDLE SCHOOL CLASSROOM

By Leslie Jones

1. Trade books allow students to practice and emulate the defining behaviors of able, avid, independent readers: reading, comprehending, and appreciating whole books.

2. For many students placed at risk, students in whose homes books and other signs of a literate environment are absent, experiencing the joy and sense of accomplishment at reading a complete book does not occur at all unless it occurs in the secondary level English language arts classroom.

3. Trade books enable teachers to respond to trends in children’s literature like the Harry Potter craze and the popularity of award-winning novels like *The Watsons Go to Birmingham – 1963* and *Holes*, works that take years to make it into anthologies, and then only in excerpted form.

4. By using trade books, teachers can easily tailor reading selections to suit the varying reading levels of their students.

5. Trade books give teachers the flexibility to make interdisciplinary connections with ease.

6. Students get a greater sense of the writer’s craft by reading complete works as opposed to excerpts in anthologies.

7. Reading complete books in the middle school English language arts classroom prepares students for high school reading experiences.

8. Anthologies are expensive. It costs approximately $32,000 to purchase anthologies for an 800-student middle school, at approximately $40 each. For that same $32,000, a school can purchase about 6,400 paperback trade books at roughly $5.00 each, enough for approximately 213 class sets of 30 copies. Of course, teachers’ editions and accompanying materials increase the cost of using anthologies significantly.

9. Because anthologies are so expensive, students are rarely allowed to take them home, a definite disadvantage for students placed at risk. Trade books are far less expensive to replace.

10. A significant number of America’s secondary English language arts classrooms are staffed with new and out-of-field teachers. Many do not have the content knowledge and experience to wend their way successfully through the literature presented in anthologies, juggling supplemental materials, CD-ROMS, audio recordings, etc. Trade books, together with Talent Development Middle Grades Discussion Guides, give teachers all they need to lead their students through rich literary experiences.

Leslie Jones brings extensive teaching and reading experience to her role as director of reading, English language arts for TDMG.

For more information about the Talent Development Middle Grades program, visit our website at http://web.jhu.edu/CSOS/tdmg
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guided discussion, the class reviewed examples of ratio tables on the board. Students then worked in groups to develop their own tables using a local supermarket’s sale flier.

As Mr. Serna moved around the classroom answering questions, students were initially uncomfortable developing their own tables. However, he continued to encourage them to discuss the assignment and to try to do the work. After some relevant dialogue, students started to create their own tables. Mr. Serna continued to give support as needed.

Mr. Serna asked students to use the smart board to share their ratio tables. He also prompted the class to ask questions about the information shared. The students asked pertinent questions and enthusiastically volunteered to share their work. They became more confident as they worked through the assignment.

Given the social nature of the middle school pupil, cooperative learning is an effective method to use. Effectiveness, however, depends on careful management and keeping the students focused. By giving students a real-world task to solve with teammates and providing support, Mr. Serna was able to channel their natural desire to socialize into a learning experience.

It was evident that Mr. Serna had carefully prepared for the lesson and his students reaped the rewards. They were engaged the entire period and collaborated to accomplish challenging tasks. By continuing to guide his class through the lesson rather than providing the answers, he supported students while promoting significant learning. John Dewey, a proponent of learning by doing, would have been very proud.

Dr. Cathy Sweeney is a math facilitator for the Talent Development Middle Grades program.

Seventh grade students create ratio tables based on a supermarket flyer.

McAuliffe Junior High School teacher Santo Serna’s students tackle ratios and tables with teammates.
No doubt about it: everyone loves a mystery. A skillfully written book of suspense and intrigue offers an excellent opportunity to develop students’ reasoning skills, powers of observation, and imagination. The Student Team Literature program includes a variety of mysteries at every level, introducing students to new settings and unfamiliar periods of history through the adventures of young modern-day protagonists.

Younger readers will enjoy Avi’s Windcatcher (RL5, IL3-7). A boy visiting his grandmother on the Connecticut shore is drawn into the mystery of a Revolutionary War shipwreck, but his interest angers a sinister couple with a powerful motor boat and very few scruples. In E.L. Konigsburg’s Newbery award-winning From the Mixed-Up Files of Mrs. Basil E. Frankweiler (RL5/IL4-8), when comfort-loving Claudia and her frugal brother Jamie run away to live in New York’s Metropolitan Museum of Art, they decide to solve the mysterious origins of a small, unsigned Renaissance statue. A third “historical” mystery is Zilpha Keatley Snyder’s The Egypt Game (RL6.6/IL5-7). Five young people create an elaborate game recreating the pomp of ancient Egypt, but their fantasy involves them in real-life danger when a mysterious killer haunts their small California town.

Many mysteries’ unusual settings take readers on a journey of imagination. Virginia Hamilton’s The House of Dies Drear (RL5/IL5-8) follows a young boy who unravels the mysteries of Ohio Valley caverns once used by escaping slaves on the Underground Railroad. In Laurence Yep’s Thief of Hearts (RL5/IL5-8), Chinese-American Stacy and immigrant Hong Ch’un work together to pursue a criminal in San Francisco’s Chinatown. Jean Craighead George’s “ecological mystery,” The Missing ‘Gator of Gumbo Limbo (RL5/IL3-7), is set in the Florida Everglades. Twelve-year-old Liza must solve the mystery of a giant alligator’s disappearance before a government official can find and destroy it. In Louis Sachar’s popular Holes (RL5.8/IL5+), two boys unfairly sent to a work camp in a barren Texas desert solve a century-old mystery and address the demands of justice in their own lives.

Some mysteries take readers on a journey through time. Shakespeare’s Spy by Gary Blackwood (RL6/IL5-9) is set in Elizabethan England. Widge, a young apprentice in the Lord Chamberlain’s Men, must find out who is stealing Mr. Shakespeare’s scripts and betraying the troupe. At the other extreme, The Ear, the Eye, and the Arm by Nancy Farmer (RL6/IL7+) is a wild science fiction adventure set in Zimbabwe in the year 2194.

Other mysteries address present-day social issues. In Walter Dean Myers’ The Young Landlords (RL5/IL6-10), a group of urban teenagers unexpectedly become the owners of a run-down rental property and face a host of challenges, including solving a theft of which a friend is unjustly accused. Robert Cormier’s very challenging I Am the Cheese (RL7/IL8-12) uses flashbacks and several different voices to reveal a disturbing picture of a witness protection program gone awry.

And, of course, some mysteries are just plain fun. In Ellen Rankin’s The Westing Game (RL7/IL5-8), sixteen memorable characters—presumptive heirs of the late Samuel Westing—are paired up for a contest to see who can discover Mr. Westing’s murderer. Finally, Debbie Dadey and Marcia Jones’ Ghosts Don’t Eat Potato Chips (RL3.5/IL2-5) and Vampires Don’t Wear Polka Dots (RL3.5/IL2-5) offer struggling readers an enjoyable introduction to this popular genre.

Former Fulbright scholar Ann Maouyo is the author of TDMG Discussion Guides for mysterious books such as Windcatcher, The Young Landlords, and I Am the Cheese.
Talent Development helps prevent dropouts

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Rather than lowering academic standards, the Talent Development Middle Grades program features targeted interventions to help students perform at higher levels. Double-dose reading and mathematics classes provide extra help for struggling students—some of whom request placement in these popular computer-assisted classes. The TDMG school climate program models and rewards good behavior and provides appropriate interventions for disruptive students. TDMG’s research-based, standards-based curricula in math, reading/English language arts, history, and science provide a rich academic fare and engaging material and developmentally-appropriate pedagogy. TDMG also helps schools make organizational changes—such as vertical looping, semi-departmentalization, and creation of small learning communities—to facilitate closer student connections with caring adults. Finally, TDMG offers regular coaching and professional development to support teachers.

The groundwork for high school failure originates much earlier than ninth grade. “One reason that the ninth grade finishes off so many students is that many of them have already been struggling and disengaging for three years or more before entering high school,” concludes Johns Hopkins researcher Robert Balfanz. “As soon as kids are off track, we need to aggressively approach these issues.” While many educators and parents think students will grow out of early middle school struggles, “the evidence shows that in high-poverty environments, they don’t” unless they are offered the right kinds of interventions and supports. ♦
Smithsonian Books, a leading publisher of popular and scholarly works, is publishing curriculum authored by Talent Development Middle Grades writers to accompany Joy Hakim’s award-winning series, The Story of Science.

The teaching materials support classroom use of the first two books in the series, Aristotle Leads the Way and Newton at the Center. TDMG writers Cora Teter and Maria Garriott created a rich, multidisciplinary curriculum that divides each book into units of study and provides extensive background information, classroom activities, experiments, and assessments. Garriott and Teter were joined by Kristin Brodowski, Ph.D., in developing material for Newton at the Center.

As she was writing the science books, author Joy Hakim approached TDMG director Douglas Mac Iver, Ph.D., to see if the program would write curriculum to accompany her books. TDMG writers had already produced teaching material to accompany Hakim’s ten-volume A History of US and the PBS series based on her books. Mac Iver secured grant funding to undertake the project because he believed students would benefit from the compelling stories behind scientific discoveries in the Hakim books.

“Students often fail to appreciate and, indeed, are rarely taught the unfolding development of science over time, the contributions of dedicated and focused individuals, and the thrill of discovery and innovation,” he said. The Story of Science and the accompanying curriculum will not only increase students’ scientific literacy, Mac Iver believes, but will also inspire them to pursue advanced study and consider careers in science, technology, and engineering.

The first book in the Hakim series, Aristotle Leads the Way, covers astronomy, chemistry, and physics from Mesopotamia to the Middle Ages. Newton at the Center follows the same fields of study from the fifteenth century to the dawn of the twentieth century. A third volume, Einstein Adds a New Dimension, traces modern physics and astronomy. Curriculum for this third volume has not yet been written.

Each Teacher’s Quest Guide includes background information, a list of relevant national standards addressed, hands-on science experiments to encourage learning by discovery, timeline activities, embedded reading strategies, and review and assessment activities. A time-traveling cartoon character, Professor Quest, summarizes the main point of each lesson, and multiple cross-curricular links suggest additional activities in math, language arts, history, art, and other subjects. The Student Quest Guide for each book includes all student worksheets.

Hakim was delighted to see the publication of materials to better enable teachers to use her books. She said that the teaching materials are “a great combination of solid experiments and reading comprehension, critical thinking, and writing activities.”

The curriculum is ideal for traditional science classes, enrichment programs, and other settings. The curriculum will be available from Smithsonian and other booksellers in early May.
Upon completing Gary Paulsen’s novel *Danger on Midnight River*, which features a group of boys lost in the mountains, students wrote their own survival manual based on the information learned and their own experience. Ms. Morrison provided a blank book in which they composed illustrated chapters such as “How to Build a Fire without Matches,” “How to Eat and Drink in the Woods,” and “Dangerous Animals in the Woods.” The students also included a page of information about the authors.

After reading the novel *Bird* by Angela Johnson, eighth graders extended learning by reading nonfiction articles (included with the lesson plans) on topics related to the reading: pediatric heart transplants, runaways, and coping with the death of a sibling. After completing these articles and activities, students chose one topic that particularly interested them. They did additional research and presented their findings to the class, further enriching their understanding of *Bird*.

In addition, Ms. Morrison asked students to think about how the lives of the book’s main characters might have changed with a different ending. They then composed this final chapter. Some envisioned a different resolution to Bird’s conflict with the stepfather who abandoned her. Whereas the book ended with Bird’s decision not to see him, Toni Butcher wrote an ending in which she does confront him, accompanied by the new friends she has made. Nicole Collins was satisfied with the ending but felt that one additional chapter was needed preceding it, so she wrote one. Some students wanted to see the family reunited. Tausha Rainey felt that a conversation between two characters, Ethan and Jay, had to take place. Ethan needed to know that his heart donor was Jay’s brother. She wrote a moving scene describing this meeting.

Ms. Morrison enhances her lab teaching each year by adapting materials to meet the needs of each student, always with the aim of improving reading comprehension. Her outstanding rapport with the students is apparent in the attitude they bring to the lab and to the quality of the work they produce. Students in her extra-help lab are having an extra-special educational experience.

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