

News notes

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Congratulations Cary Rogers! Cary was picked by Wal-Mart as teacher of the year and received \$1000 for her classroom.

Brian Rothgeb: YEA! "I just have to crow about a special education high school boy. We started a reading contest on Monday through a learning center on Reading. Several of my teen boys have taken passages home to work on them. Nicholas has read 21 passages and completed these at Mastery or above levels, since Monday. I will award each person who completes the contest with a small prize of candy or gum. The winner also gets to pick from 7 prizes, which costs about \$5.00 a piece. We will have 7 contests this year, with the reading and comprehension levels of the work increasing each time. In addition, I am going to try teaching a couple of lessons from a recommended program called Rewards! Bert Moore has stated that it has been successful in catching their children up. If these look promising, I'll let you know. These contests will build reading fluency and comprehension skills. From here, we'll go on to books that they can read at their levels. If I can build a love for reading and improved reading and comprehension skills, I will be happy. I have seen an improvement in writing skills - and am now getting lots of questions on spelling, which shows that they are beginning to take pride in their work - and to ask about how to spell. (I am teaching spell check and dictionary skills to provide them with tools.) We are doing a lot with persuasive writing, which includes reading letters to editors and writing reasons to elect the presidential candidate of their choice. I am going to send letters home that request permission to audio and video tape the class, giving individual speeches. We are developing Power Points that they can present at IEP meetings about themselves also. All of these activities build self-advocacy and life skills that they will need to survive not being taken advantage of. Sorry about the length of the email...but I'm so excited about the progress that I am beginning to see."

Brian Rothgeb is building a pipeline to help students stop carrying buckets.

ARE YOU BUSY? ARE YOU TIRED?

It seems to me that teachers are asked to do a million things but never asked to quit doing something in order to make room. Let me share a story with you that will illustrate but needs to be done to make room for the things that are critical if we are to do the best we can for students.

There was a village about half way down a hillside. A certain teacher was hired to carry buckets of water down to the village. Every day they carried buckets and the village grew and required more water every year. The teacher was working harder and

harder to supply the water. More and more buckets each year until the teacher was nearly burnt out. The teacher got an idea. If there was a pipeline to the village, from the water source, it would be less work to get water to the village. So, everyday the teacher spent a little time building a pipeline, still carrying the required buckets of water to the village. Little by little the pipeline got closer and the water trip shorter as the teacher could get water at the end of the pipeline. They still continued to supply the town by carrying the buckets. Eventually, the pipeline reached all the way to the village and the teacher could charge for the water being delivered but did not have to carry buckets. Then the task was to keep the pipeline in good repair and updated to serve the people.

I believe we could do this with the way we work with students. We have district and federal requirements for our special students. Sometimes districts and federal don't agree. If we teach smarter instead of harder I believe students will win, we will win, districts will win and communities will win. Is there anyone out there who wants to help build the pipeline to make it happen? Call Margo and let's get started.

I have checked out a book to new secondary staff and a few others. This book will help us build a pipeline. I hope many of you will be interested enough to respond. Following this plan IEPs will be clear and easier to write and progress reports will be simple. Students will do better on the state assessment when the IEP is followed. We really must stop only carrying buckets everyday and begin building a way to make teacher's work more effective.

Clear back in 1949 Ralph Tyler raised the questions about improving education. He asked four questions:

1. What educational purposes should the school seek to attain?
2. What educational experiences can the school provide to attain these purposes?
3. How can these educational experiences be effectively organized?
4. How can we determine if these purposes are being attained?

Bloom followed with the now famous Bloom's Taxonomy of Educational Objectives.

In 1956 Bloom wrote that we should use objectives in testing to improve student achievement. For 50 years we have been trying different curriculum designs to get it right. Every human endeavor takes numerous failed efforts to finally succeed. There are four big tenets of education. We need to refine them and to consciously use them. They are:

1. Use a well-articulated curriculum. Know and use clearly articulated learning targets—ones that are robust concepts, generalizations, or procedures rather than only statements of daily classroom objectives- like homework completion. (If we just help a student with homework then we just continue to carry buckets.)
2. Plan for delivery. Plan and use instructional strategies that will help the student remember content and apply

information and skills rather than just to schoolwork. (I'll come and plan with you. We'll work out the bugs and see what strategies work for which students.)

3. Vary assessment. Use a range of assessment methods to clarify the student's status relative to learning indicators, and generate the information necessary to help the student achieve these indicators. (assess weekly with a practice from the KSDE website for the KS assessments)
4. Give criterion-based feedback. Give methodical feedback to the student based on the indicators, and refine recordkeeping and reporting accordingly.

Bloom did not give the teacher explicit guidance to teach to or to track student performance but he did provide a durable structure for communicating about thinking and learning.

That is the way to build the pipeline. Our IEPs should reflect the indicators that students need for this next year. Use the MAP Test and the KS Assessment as guides. Do all your students perform to your expectations? Are we tempted to shift blame to the students for not doing their part? Don't teach for yourself, teach your students. Make your students master learners. Focus on improvements that lead to students being improved learners. That is not homework or homework completion it is mastering indicators from the standards. It is not gathering points. It is gathering skills.

In 1983 the U.S. Department of Education, held schools responsible for the nation's predicted slide from the top of the world's economy, noting that "while we can take justifiable pride in what our schools and college have historically accomplished and contributed to the United States and the well-being of its people, the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a nation and a people." Another report, What Work Requires of Schools, SCANS-Report on Workplace Skills from the US Department of Labor, 1991 issued a warning to parents:

"Parents must insist that their sons and daughters master this (workplace) know-how and that their local schools teach it. Unless you do, your children are unlikely to earn a decent living." Using and testing indicators has become the focus of the NO CHILD LEFT BEHIND ERA. But, soft skills are required in the workplace. Soft skills like being on time, taking direction, pride in work well done, cleaning up the area, using safety rules and working together to accomplish tasks. Workplace skills to not think it is cheating to work in groups to accomplish tasks.

Are students different today? WELL, in 1950 about half of the white students and a quarter of the black students graduated from high school. Students excluded were large numbers of children living in poverty; children who labored on family farms or in family businesses; children who were physically or cognitively disabled; children who were nonwhite or recent immigrants; and children who opt to drop out rather than submit to the drill of academics.

Are teachers different today? How did you really learn to teach? Was it by example from the teachers you had rather than the college classes you took? Then are you different? You can be different but you will have to do things differently. We need to use different learning tools than your teachers did. We need to update our current practices so that the population, technology,

and neuropsychology are reflected in how we teach. **"THE MOST IMPORTANT FACTOR AFFECTING INDIVIDUAL STUDENT SUCCESS IN SCHOOLS IS THE CLASSROOM TEACHER.**

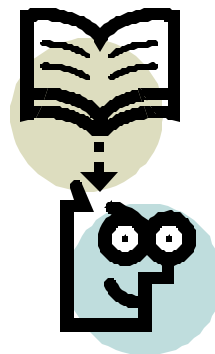
"(Marzano, Pickering, & Pollock, 2001) If you push the normal curve for students you are a teacher.

We have the new tools now. They are:

1. a well-articulated curriculum (state standards and indicators)
2. a plan for delivery (that we need to develop I am here to help)
3. varied assessment
4. ability to give students criterion-based feedback (prepare useful feedback mechanisms in your instructional delivery, assessment and grading)

You now have the tools, use them.

If you continue to carry buckets the increased demand on you will break you down over time. Build the pipeline and everyone will benefit. Tri-County will provide you with the professional development. Let me ask you; is your classroom good enough for my grandchildren to attend? Would this lesson you have prepared today be good enough for them? Are you focused on learning or grades and homework completion?



Answer this question for me: **Why do we "Aim for the Middle"** when we teach mathematic and then hope and pray for ricochet!! We don't do this in READI NG!

Maybe it's an issue of pedagogical expertise. Think about how many times you've heard a teacher say, "I taught it, but they didn't learn it!" What the teacher is really saying is, "I told them or I showed them, but they didn't get it". Traditional mathematics instruction often includes a lecture, followed by examples shown to the whole class. And unfortunately, with this type of instruction, it's only the teacher who is actively engaged in mathematics!!

ALL students are entitled to instruction that meets their needs, not just those fortunate enough to be in the middle! Quality teachers do what it takes to meet the needs of ALL his/her students!

Here are some Tips on Supporting All Students: Equity and Diversity READ ON!

"Equity" and "Diversity" are very deep topics, and as such, there are dangers in boiling them down to a list of tips. The following is not a list of activities one does to be equitable or to celebrate diversity, and should not be looked at as such. Rather, the goal is to provide a starting point for considering equity and supporting diversity within our classrooms. The following headings are very

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broad reminders of how we can continue our efforts to achieve the goal of a mathematics education experience that is equitable and celebrates diversity.

Equity does not mean equal. When considering how equitable one's teaching and expectations are, we must consider the diverse needs and strengths of individual students, as well as the needs and strengths of the whole class. One student may need only a few minutes of extra instruction to master a concept, while the next student may need additional time to work and struggle with a set of manipulatives to develop an understanding which will allow him to own the content. **It is not about how much time each student gets, but rather, how to create the appropriate opportunities for each student to learn mathematics.**

Focus on the individual. Learning our students' names is only the first step in developing a relationship with those individuals. The more we understand and respect the individual's background and strengths, the more we understand their particular needs. How do language, culture, gender, and socio-economics shape our students' world? More importantly, how can we, as teachers, understand, celebrate, and utilize the strengths and differences that make our classes unique? A first day handout or classroom exercise might include a survey that asks students to list strengths and rate past successes with mathematics. A simple exercise such as this can give us a good idea of students' feelings about mathematics and about themselves as math students, providing the contextual starting point for classroom interactions.

Create an environment for success. **Do your students know how important their success is to you?** It never hurts to remind them! The expectations that we hold for our students send clear messages of how we feel about their education. Holding high expectations for all students shows our confidence in their ability and translates into success for more students. An environment that fosters success can be one in which all ideas and strategies are valued, where students share their thinking, listen with interest, and engage all students in consideration of the ideas presented.

Identify your biases, and then get over them! Regardless of individual background or upbringing, we all carry our own biases and stereotypes. As teachers, **we are responsible for helping ALL students succeed, not just the ones that fit into our "box" of people who should do well.** Set aside these biases and stereotypes and harness students' strengths to further every student towards the brimming mathematician and problem solver that they can be.

Create an equitable curriculum that supports diverse needs and celebrates diverse strengths. Not all students learn the same way, so we must vary our approaches to lessons and provide students with manipulatives, visuals, projects, technology and group work to reach as many minds as possible. **Give every student the opportunity to shine every day.** Most of us have to follow a state or district curriculum, with some creativity and work we can meet the state and district requirements while making math interesting, engaging, and attainable for our students.

Be aware of your questioning and listening techniques. **How we ask questions, who we direct them to, and our interest in student responses can have lasting impacts on our students' achievement.** We must believe that we can learn from all of our students' responses. We can learn about the students' thinking and often we can learn alternative ways of thinking about the mathematics itself. Are all students asked to engage in rigorous mathematical thought during the course of a lesson? Are all students given the time to think? All students should have the opportunity to tackle rigorous math every day, and carefully examining and altering our

questioning and listening techniques can better assure that this happens.

Walk the tightrope. We need to meet the needs of all our students, but it often feels as though we walk a tightrope to do this. While I am praising and encouraging the student who sits in the front row and knows the answers to even my toughest questions, **am I simultaneously discouraging and ignoring that struggling student** who sits in the back, never offers answers, and avoids eye-contact when I ask a question? These two students have very different needs, and the one who shouts louder is often more likely to get my attention. After all, the squeaky wheel gets the grease, right? **Engaging and supporting all students is not easy, but it is our duty as classroom teachers.** I challenge you to touch base with EVERY student, EVERY day. Work to give them opportunities to shine, to show their strengths, every day. **You never know when you will turn that corner with a student and have a young scholar on your hands.** (NCTM, 2008)

Just yesterday while I was visiting with a member of our BOE; I was told about a person as a child who announced at KG age how much they disliked school. This went on through school. They have just been awarded a doctorate degree. Never could anyone have guessed that when the student was 13. Sometimes we just have to wait for the student to bloom. And while we are waiting we must be careful not to squash the blossom.

Here is another little piece that I find interesting. How much of it do we do? MEMORI ZATI ON—memorizing the times tables without know what it means and not understanding how to apply it is useless. Likewise memorizing spelling words and not defining them or using them in written work is also useless. Students and teachers sometimes confuse memorization with learning. In the classroom students may model exactly what the teacher showed them without understanding anything about the problem they are solving. That is not useful learning. For students to learn they must create and change using their cognitive structures to process information instead of just repeating what the teacher did. Memorizing stores and recalls information. And it is not a file cabinet where data can be pulled out and used unless that information has been integrated with existing knowledge. It does not generalize that information to other areas or subjects. Memorization as a cognitive structure activates different parts of the mind to reconstruct information. This helps students understand. Just like food eaten must be broken down and transformed through digestion, absorption, and metabolism to be used by the body, information must be broken down and changed to be used by the mind. We may remember what we see but to remember it we have to consciously process it for access. In school students are often overloaded with new information and need to recall it on demand. If they have little or no opportunity or ability to effectively process information, they question why they need to know it, or they resort to memorization, guessing, or mental disengagement. There are three types of cognitive structure memorization called stages of memory.

1. Short-term memory temporarily remembers information available to the senses.
2. Continuous memory makes connections with prior knowledge and experiences.
3. Long-term memory makes information accessible depending on how effectively it is processed.

Integrated information is more likely to be remembered and accessible than disconnected bits of data. Memorized information

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is procedural, dealing with the way things are done, or declarative, recording data and events along with personal meaning. Memory strategies, which are methods of making connections to aid memory, include mnemonics, acrostics, chunking, rhymes, rhythms, concept mapping, outlining, sequences, cartooning, applications, and contextual references. Multisensory input, visualization, and application of information enhance the effectiveness of these strategies. Many factors affect how data is processed for memorization. Some are:

- Emotions associated with information or events as well as one's emotional state at the time.
- Purpose or reason to remember something based on relevance or need
- Beliefs and values, which filter or evaluate information based on perceived level of credibility or importance.
- Kind and quality of information gathered, which determine how accurate and usable the information is.
- Prior knowledge and experience, including level of expertise.

Teachers can mediate students' memory development by encouraging them to visualize and be reflectively aware of how they make connections, identify patterns, formulate rules, and abstract principles to create meaning. Memorized information that is integrated with meaning builds confidence and self-esteem because it helps students know what they know for sure and provides a database for new connections. Sometimes memories change over time because they are compared to other events or perspectives, like new events, feelings, or information color or influence the original data.

At a very early age, students learn that those who remember what is presented in class are considered smart and those who forget are considered dumb.. They begin to feel that something is wrong with them if they can't remember things.