

Four Rivers Currents

March 2008

MINDSET AND HOWLS – THE KEYS TO SUCCESS

I want to share with you an idea about how students might succeed in school – and in life.

The idea comes from a psychology professor now at Stanford named Carol Dweck. She has been studying how someone's idea about intelligence affects their motivation. If someone believes that intelligence is innate and fixed, then they figure either they're smart or dumb and there's not a great deal one can do about it. If, however, a person understands that intelligence can grow and expand, then they will work hard because they're in control of their own destiny. Here's a description of her theory from a recent article:

According to Dweck, people's self-theories about intelligence have a profound influence on their motivation to learn. Students who hold a "fixed" theory are mainly concerned with how smart they are—they prefer tasks they can already do well and avoid ones on which they may make mistakes and not look smart. In contrast, she said, people who believe in an "expandable" or "growth" theory of intelligence want to challenge themselves to increase their abilities, even if they fail at first.

Her research has shown that students with a fixed mindset experienced a downward academic trend while the others moved ahead. She then followed up on her research results by designing a program through which students learn that the brain is like a muscle, that it can grow through practice, training, and plain old hard work. Those kids made significant strides.

"What was important was the motivation," Dweck said. "The students were energized by the idea that they could have an impact on their mind." Dweck recalled a young boy who was a ringleader of the troublemakers. "When we started teaching this idea about the mind being malleable, he looked up with tears in his eyes, and he said, 'You mean, I don't have to be dumb?'" she said. "A fire was lit under him."

We spend a great deal of effort here trying to convince our students to work hard. We set our course standards so that they are challenging but reachable for any student who is willing to put in the effort. That's why we think students' HOWLS are so important.

If you already believe that intelligence is not fixed and that it can grow, keep on believing and encouraging your kids to work on their HOWLS. If you need more convincing, ask our 7th graders what they learned about their brains at the beginning of this year.
~ Peter Garbus, Principal

From the Executive Director's Desk...

Admissions interest in Four Rivers has reached a new high. Our sixth annual admissions lottery, held last Thursday, February 28, 2008, included 141 applicants. There were 73 students applying for 36 spaces in our new 7th grade, including 11 siblings. For grade 8, with no openings yet identified, there were 18 applicants. With very limited openings in the high school, there were 36 applicants for 9th grade and 8 applicants for 10th. As in years past, no new student will be admitted to 11th or 12th grades.

Thursday morning, with a click of the mouse by an official of the Franklin County Council of Governments, a computer-generated random sort produced our lottery results. Welcome to our next 7th grade, the Class of 2014, and to the new students who will be joining upper grades!

We are grateful to all the families who applied and showed such strong interest in the school. Thanks, too, to all the teachers, current parents, and students who represented Four Rivers so generously at our Admissions Information Sessions. Special kudos to our enthusiastic Student Admissions Team, led by seniors Emma Sweitzer and Sarah Brown-Anson—the best team ever!

Looking ahead, 2008 English Language Arts MCAS tests are coming for grade 10 on March 25-27, and for grades 7 and 8 during that last week in March and the first week in April (exact days to be announced).

Lastly, we wish to announce that the annual Four Rivers Variety Show, to be held April 4th at the Shea Theater, will be dedicated to Kaleigh DeMello, a 10th grader who was seriously injured in a sledding accident in late January. Profits from the event will go to support her medical care and her family. Other activities to provide assistance are being planned by students and Family Council members. Classmates and staff have been in touch with Kaleigh and her family since the accident, and we all wish her a strong recovery.
~ Ed Blatchford

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Four River Charter Public School is dedicated to educating young people and lives of learning and offers a rigorous academic program aligned with the Massachusetts curriculum and an emphasis on character development for moral and social responsibility. Three central themes – nature, technology and community – pervade the teaching and learning at the school. Four Rivers works closely with parents and seeks both to serve and learn from the many resources of Franklin County.



Four Rivers Charter Public School
248 Colrain Rd., Greenfield, MA 01301

7th Grade News

MATH and SCIENCE

The 10th grade recently served as critics in a critique of 7th grade cell models. The 7th graders made last-minute adjustments to their model cells, practiced their pronunciation and got ready to explain the choices they had made for their cell model materials. The tenth grade biology students brushed up on their knowledge of cell structure and functions (a good MCAS review for them) and endeavored to squelch their nervousness about being called upon to serve as ‘experts.’ For the 7th graders, there would be no written test, but rather a cell gallery where they would have to show what they know. Now that they know the names, shapes and structures of cells, they are applying those mental models to understand what cells do and how each of the parts works together in the “machinery of life.” They have had to think a bit about chemistry to understand how photosynthesis and respiration in plant and animal cells are chemically connected cycles. They have also applied their math knowledge of ratios to understanding the idea of higher and lower concentrations of atoms as they flow from one side of semi-permeable cell membranes to the other side. And most recently they have been trying to picture and understand how DNA works to construct the proteins that keep organisms alive.

After reading about the historical experiments that Redi and Pasteur used to disprove the idea of spontaneous generation, each student set up their own, single-variable experiments to try to discover how bread mold grows best. They checked their experiments daily, documenting the amount of mold growth on the bread inside the sealed plastic baggies, and were definitely bummed out if their experiment was moldless. They also didn’t expect to have to explain the experiment to prospective students, but they all could describe the experiments clearly when Mr. Blatchford asked them to share their work during the Wednesday admissions tours. Not to be outdone by science class, math has been a whirlwind of hands-on work as well. Seventh grade students have been hard at work doing data analysis critical to the school’s state reporting. They sent out a survey to all grades asking students to rate and describe their experience at Four Rivers in a variety of categories. 178 of the 192 Four Rivers students responded, and for a week, the seventh graders counted, calculated percents and measured circle graphs to display the interesting results. Just before break they had a small class gallery of the beautiful posters they created and commented on the trends and patterns that they found most intriguing and surprising. If you would like to see the results of the survey, just stop by the 7th grade hallway and have a look at the display of their work.



Above, Ian Jennison displays his cell model made from a cantaloupe. Below, 10th grade students visit the 7th grade to critique the the cell gallery.



COLLEGE COUNSELLING NEWS

College Admissions Information Evening

Thursday, March 6th at 7PM in Common Room

TOPICS

Types of Post-Secondary Education and Training

Academic Preparation

Developing A “Good Fit” College List

Standardized Testing

Selection Criteria for Admissions

Financing

Resources

ALL FAMILIES WELCOMED.

JUNIOR AND SENIOR FAMILIES STRONGLY ENCOURAGED TO ATTEND.

A One-Stop Spot on the Internet for College Planning and Financing Needs

www.mefacounselor.org

Search for colleges, register for ACT/SAT, search for scholarships, estimate cost of attendance, save for college, etc.

For families at all grade levels!

College and Technical School Acceptances

Rachel Becker: *California College of the Arts with merit scholarship*

Sarah Brown-Anson: *Early Action to Hampshire College, Earlham College, and Kalama zoo College; Regular Decision to Marlboro College. All with merit scholarships*

Edward Douville: *Universal Technical Institute – Motorcycle Mechanics Institute*

Katelee Johnson: *St. Andrew’s Presbyterian College*

Caitlin Meehan: *American International College’s Nursing Program with merit scholarship*

Rachel Palmer: *Elms College’s Nursing Program and American International College’s Nursing Program with merit scholarship*

Kyle Pratt: *Ithaca College with merit scholarship*

Jesse Sobek-Rosnick: *Universal Technical Institute*

ANNOUNCEMENTS

SPORTS NEWS

The basketball season is over and the boys finished with 5 wins -7 losses. We had a nail-biter against Putney School which we lost by two points, 43-41, to finish the season. The team came a long way from its humble beginnings, and was a much better team when we finished than when we started. We got better, learned to play as a team, and had fun doing it.

The spring Ultimate season will be upon us soon with practices beginning the last week of March. We have over eighty students interested in playing. There will be three boys teams and two girls teams; a place for everyone. The only equipment you will need for the season is a decent pair of field cleats. We have a cleat exchange box located as you enter the high school. Feel free to add to it or help yourself to some cleats if you need them. I suggest you start getting into shape now. The schedule for all five teams is already posted online at highschoolsports.net. As the season goes along there are always schedule changes that occur and whenever that happens we will post it on that site.

RMV Workshop for Parents and Students

How to Obtain a License

How to Register a Car

What is Safe Driving

The Registry of Motor Vehicles is offering a free workshop on these topics and more.

WHEN: Tuesday, April 8, 2008

WHERE: Four Rivers Charter Public School

TIME: 7:00—8:00 pm

To reserve your space, contact Cathy Mitchell (Parent of 12th grader) at 772-6014 Or cpm2you@yahoo.com

NURSE'S NOTES

In April I will be conducting annual health screenings. Students in the Nursing Program at GCC will be assisting me with this project. This is strictly a screening; any positive findings require a complete assessment by the child's physician. A notice will be sent home after the April break to the parents of students who need follow-up at the doctor's. Areas to be screened are:

Height ~ Weight ~ Vision ~ Hearing ~ Blood Pressure

Postural: this is for early diagnosis of scoliosis (curvature of the spine) and is state mandated for grades 7, 8, & 9. There will be both a male and female conducting this section. Girls are asked to wear a bathing suit under their regular clothing; boys wear shorts or a bathing suit. Confidentiality and privacy will be strictly maintained throughout the testing.

A letter and permission form will be mailed later this month to all parents. If you have questions or concerns please contact me at school (413-775-4577) or via e-mail: jmilton@fourriverscharter.org. Thank you for your cooperation with this program.

Jeanne Milton R.N.

2008 Spring National College Fair in Springfield

Fair Hours:

Sunday, March 2, 2008, 12:00 p.m.— 4:00 p.m.

Monday, March 3, 2008, 9:00 a.m.—12:00 p.m.

Event Location:

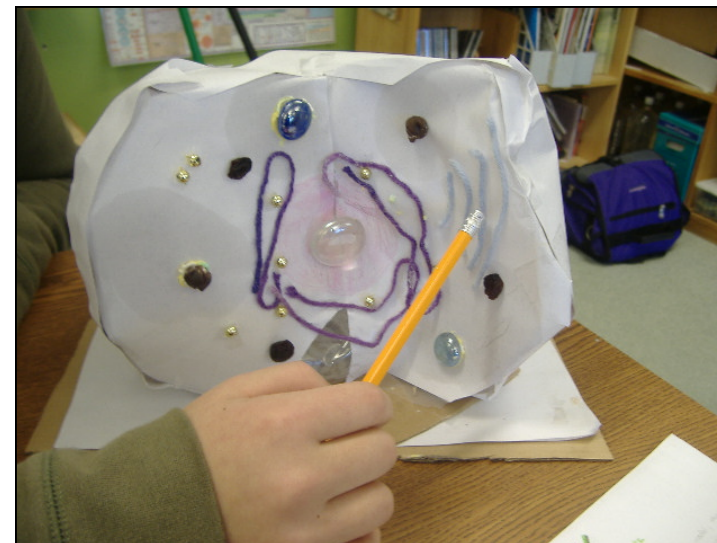
[Eastern States Exposition \(The Big E\)](#)

The Young Building
1305 Memorial Avenue
West Springfield, MA
413/737-2443

The event is free and open to the public

*More information to be found at
www.nacacnet.org/NCF*

7th Grade Cell Gallery



Clockwise from above left : Aliyah Sarro-Schwartz's cell; Kirsten Mattson poses with her cell model, and Tristen Conolly display's her colorful model.

HUMANITIES

As the second half of winter makes us feel like there will never be an end to the snow, work in history has us exploring the hot and arid land of Egypt. Prior to the winter break, the seventh graders worked in groups to create timelines of Egypt's intriguing history. The ups and downs of its different kingdoms were explored, as well as some of each period's famous rulers and monuments. Next we turn our eyes to the different social groups that make up Egyptian society and investigate how social structure made this civilization's accomplishments possible.

We are in the process of wrapping up a poetry unit in English that has the students using devices of rhyme scheme and sensory images to bring alive and make concrete their abstract ideas. We also continued our work in Lit Groups in which students work to not only complete readings and conduct discussions, but also reflect on their strengths, challenges and growth as readers over the course of the winter

DIV II NEWS

ENGLISH

Division II English has focused on discussion and analysis of texts, making connections between texts and life, and the writing process. The 9th grade just finished *The Secret Life of Bees* and is working on a narrative writing unit where students experiment with style and voice. Look out for a Writer's Café in the future! The 10th grade just finished *Ender's Game* and has focused on using quotes to support a claim through a thematic analysis of the text. Students have also reviewed five paragraph essay structure in preparation for the MCAS. Tenth grade English is currently exploring social commentary through a reading of *The Crucible*, and will continue to focus on writing for academic audiences.

SCIENCE

Biology

Biology students used their own previous knowledge about DNA to build models of the molecular structure of this fascinating molecule. They were then asked to compare and contrast their models to an illustration of the actual structure. It is great to see the 10th grade students remembering and building off of the concepts they learn in 7th grade. The students are getting ready to learn the sterile techniques involved in culturing bacteria, which they will be exposing to several different mutagens to see how different substances can alter the base pair sequences of DNA. We have also started to take practice MCAS tests to review the concepts that we learned earlier in the year.

Environmental Science

The 9th grade students continue to learn about how we can reduce our carbon emissions with a focus now on automobiles. The students have been busy conducting research on alternative-fueled vehicles to create advertisements that they will be sharing at Expo Night. Entering the class you are likely to hear excellent creative thinking and questioning as students debate about which vehicles have the least impact on our environment.

HISTORY

U.S. History, 9th Grade: Students are working on projects related to the Bill of Rights and the Constitution. Some are preparing to perform a brief one-act dramatic reading that depicts the experience of a Japanese American woman being interned by the U.S. government during WWII, others are researching the controversy behind the Patriot Act, and still others are creating drawings that symbolize the key themes of Supreme Court cases focused on the First Amendment.

U.S. History, 10th grade: Students are creating collages based on quotes about the rights/freedoms described in the first and fourth amendments of the Constitution. Through completing the collages, students will explore the ways in which the rights described in the amendments can truly have meaning in American society.

Both 9th and 10th grade students will be taking orders for pizza and Dean's Beans coffee in the next two weeks in order to raise funds for the Gettysburg trip, happening April 30th thru May 2nd. Please support the students if you can.

DIV III NEWS

MATH

In Consumer Math, we are wrapping up our work on credit and debt by learning about credit history and credit scores -- how they are determined, and their impact on loan interest rates and insurance policy premiums. IMP-3 students are using a long-term problem about population growth to learn about how to model rates of change in general. We are starting with linear functions, discovering their limitations, and then moving on to more complex (but more accurate) functions. While half of the IMP-4 students are out doing field work for their senior expeditions, the rest of us are immersed in learning about navigation using map, compass, and GPS units. One of our goals is to "find the math" in these pursuits and develop curriculum related to navigation that we can use now and provide for future students.

SPANISH

Spanish II ~ The class is beginning a unit on body parts and health-related vocabulary. Students will be creating skits describing a visit to the doctor's office in order to incorporate new words and expressions.

Spanish III ~ The students have been working hard on many new grammatical concepts using the subjunctive mood. They are currently reading poetry by Cuban poet Nicolas Guillen and drawing connections to *The Giving Tree* by Shel Silverstein. They will finish the unit by writing their own poems about an ideal place.

Spanish IV ~ The class has been doing an in-depth research project on Spanish painters including El Greco, Velazquez, Goya, Miro, and Picasso. During class we are taking time to look at works from each artist and to discuss the artistic period during which each artist painted.

Benefits for 9th & 10th

GETTYSBURG TRIP

The proceeds from this month's
Hillside Pizza &

Dean's Beans Coffee

fundraisers are going to the
9th and 10th graders to offset
the cost of their spring trip to
Gettysburg.

*Thanks to dedicated parents of the
Family Council for all their work in
making these fundraisers continue to
be successful*

VARIETY SHOW

Coming April 4th

to the Shea Theater

Proceeds from this year's Variety Show will be donated to Kaleigh DeMello and her family to help with medical and travel expenses. A tenth grader at Four Rivers, Kaleigh was injured in a sledding accident in late January.

Additional donations may be made to:

*Kaleigh DeMello Fund, Greenfield Savings Bank,
(Attention: Kristin Pearce), P O Box 1537,
Greenfield, MA 01301*