

# Four Rivers Currents

February 2009

## A Good School Getting Better All The Time

As we present our school to prospective students and their families, it sometimes helps to remind us all of what this school does well, even as we continue to work on further improvement.

Our mission sets in front of us a challenge that is both important and provocative. How do we contribute to a sustainable society? What are the relationships between community, nature, and technology? What kind of world will allow the most people to live a healthy life while preserving resources and opportunities for future generations? When we take these questions seriously in our curriculum and in the kinds of learning expeditions we establish, our students engage with perhaps the central problems of the modern world. So we don't have a gym. What we do have are the right questions driving our learning.

We are also aimed at the right set of student outcomes. While we are still refining the exact set of descriptors, the school knows that it wants its graduates to be equipped with knowledge and skills for the 21<sup>st</sup> century. That means being able to solve problems and collaborate on teams. That means being able to take the same information available to all and find creative and unique interpretations that might shed new light on the data. That means being able to communicate ideas and understanding through writing and speaking, but also through creative expression using ever increasing multi-media tools. The Commonwealth of Massachusetts has begun encouraging all of its schools to strive towards 21<sup>st</sup> Century skills. We're already on our way.

Another strength of our school is that every graduate completes a Junior Internship and Senior Expedition on their path towards becoming capable, confident independent thinkers. Both of these experiences require students to determine what interests them. They have to dig in to those interests and figure out a real world job placement connected to those interests and, for Senior Expedition, they have to design a significant year long exploration of some part of their interests. These two experiences do not happen in every school. For us, they represent some of the most important learning students do with us.

Perhaps most importantly, our teachers engage most of our students most of the time in learning important skills and essential knowledge. Our academic administrative team has been doing walkthroughs of every classroom at least once every two weeks. We look at different aspects of the classrooms each time, but we always pay attention to how well engaged the students are. The overwhelming majority of students in every classroom every time we go around seem to us engaged in the work they are doing, or at least they are focused and productive.

We know that our school is not yet all it can be. Those of you who completed the midyear surveys have given us valuable input to continue getting stronger. We know, for example, that we want every student at our school to feel challenged and to his or her full abilities. In a project-based environment, we should be able to find ways to stretch, spark, or inspire, though that takes learning, development, and a great deal of work from our faculty. We also know that we can't be all things to all people. Our program has to be focused in order to best use limited resources. That self-knowledge keeps us humble and honest and hopefully prevents us from over-promising. There is no limit, however, to our imagination and ingenuity. This school can be inventive, dynamic, and effective – limited only by the number of good ideas we can generate and implement with the community and staff we've gathered.

We continue to reach out to new families interested in joining our community. Just remember that we reach out to you as well. Happy February.

~ Peter Garbus, Principal

~ Edward Blatchford, Executive Director

## 7th Grade News

### Our Colorful Spanish Day - by Alicia Wills

We had a very interesting Spanish class. It wasn't one where you learn about the colors, the months, songs, and the days of the week, your clothing, descriptive words, numbers, or the alphabet. No, it was not about those types of things. It was about a fashion show. How this fashion show worked was you got paired up with a partner and you got to dress them up. Some of you might be asking, "What does that have to do with Spanish?" Well, we had to write a description in Spanish of what we picked out for our partner to wear. Then you had to read the description to the class. I was Helen's partner. She had a lot of fun decorating my outfit. I had a big green dress with a pink stomach wrap around, some tiger striped high heels, a red bonnet with white stars, and little black bag. I looked really extremely different—not exactly an every day outfit or at least that I would wear. I dressed her up in a little black dress with big flowers all over it, I was going to make her wear plaid pajama pants under that, but instead I made her wear a little white sweater-type-thing, some blue fuzzy gloves, a little brown bag, and a green Christmas ribbon for her hair.

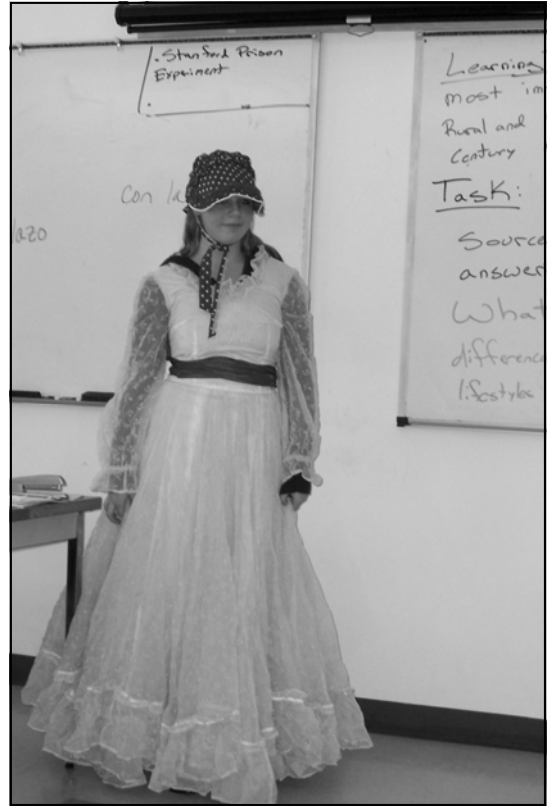
### From a Story to a Play in One Trimester!

By Grace Walker

Have you ever adapted a story into your own words? This is called paraphrasing. The seventh grade class is taking drama right now, taught by Mrs. D, who is an EXCELLENT teacher. She has us do many games to get us in the acting mood. We practice acting without using props in our games to help us think of what to do when we have no props. We do a lot of improvisation. After winter break, we started working on a story theater project. Story theater is when a group of people get together and turn a story into a play. The stories have to do with a problem in the world. The ones that we are doing are about world hunger. The classes have been divided into small groups, each with 4-5 people in them. Some of the stories are "Why the Hare Runs Away," and "Aunt Misery." Each group will write a script and develop the characters in the story. We will perform them at the end of the trimester

### Cells of All Kinds! By Helen Perham

Squeeeeeeeesh tut, tut, tut, POP! The hair jell cytoplasm for Kennedy's cell made ridiculous sounds. This month we learned all about cells, their different parts, and their actions. Not only did we have to build our own cell, but we also had to present it to the whole class! (Talk about intimidating....) We showed off our cells by making a key with all the parts of the cell you were assigned, either animal or plant. People used materials found around the house to represent the organelles and other parts of the cell. From gummy worm golgi bodies to shiny sequin ribosomes, this project was a cell of a time!



### Is Bread Supposed to Look Like This? – by Genlyne Fisk-White

On Wednesday, January 21, the entire seventh grade was in for a surprise. We all gathered in Ms. Locke's classroom, and there were cooking supplies everywhere! Then we were all informed that we were going to be making homemade Mesopotamian bread using an ancient recipe. We got to work. The dough turned out mushy and grainy. There were a variety of responses to its taste once it was cooked from "delicious!" to "yuck!"

## 8th Grade News

### 8th Grade Math and Science

In math, we're exploring how mathematical models can be used to represent situations and enable us to make predictions about them. Recently we were contracted by FunShine Amusements, Inc., a fantastic(al) company seeking to design and test some new rides for their New England park. Our first assignment was to test a scale model of a concept ride called "The Eggstraordinary Dip," which takes its riders on a bungee drop over a pond in an egg-like container. With chicken eggs and bungee bands we carried out test drops over about an 8 foot distance, created best-fit graph models of our data, and predicted the best type and number of band to use for a theoretical 18 foot drop. Then, we put our predictions to the test over our hallway balcony. Some eggs got the most thrilling ride--plunging straight toward the floor and then springing back up just before contact! Our work is currently under review by FunShine's director, Mr. Tim Smith (whom we hope to meet soon) and its Project Manager, Ms. LaFey, who spent a good bit of time with us (and had a weird way of wearing Ms. Gilbert's wardrobe). If all goes well, we expect to test another new ride soon.

In science, we've begun to play with chemistry, in the interest of mixing chemicals and making things explode (as some of us hope, everyday) but also as an opportunity to explore how scientists do their work and how they make meaning of the world. So far we've focused on the fundamentals of chemistry--chemical and physical properties of various elements and the atomic theory that helps to explain their uniqueness--as well as developing some sound lab techniques. Soon we'll be making soap and later investigating acid rain as we explore two applications of chemistry in today's society.

### CONGRATULATIONS TO THE 8TH GRADERS...

whose soggy slogging, careful calculation and diligent documentation last spring at the vernal pool in Greenfield's Highland Park, has lead to it being officially certified by the Massachusetts Natural Heritage and Endangered Species Program. The official letter notifying us arrived this week.

With the issuance of the **certification number 4991**, the pool and the surrounding 100 feet beyond its margins are potentially protected under the Massachusetts Wetlands Protection Act Regulations, Massachusetts Surface Water Quality Standards, Title 5 of the Massachusetts Environmental Code and the Massachusetts Forest Cutting Practices Act Regulations.

### English & History

In Eighth Grade English, we have been playing with poetry, both as a focus on its own, and in the interest of improving our facility with written prose. After first performing a kickoff safari, in which poems boasting loads of notable components were located languidly lurking around school grounds, we dived into reading and listening. We have taken time to define the hows and whys, the styles and kinds of poetry, and have identified and applied a pile of writing devices. Students are now wrestling with this ruck of written rudiments and reel at the brink of writing rhymes and verses of their own.

In history, we wrapped up our study of China with a pair of catalog pages celebrating the achievements and reflecting on the global significance of Chinese innovation. Our focus has turned to Africa, where we are currently looking at the non-state and village roots of cultural behaviors important in the continent's great Middle Ages kingdoms and city-states. Students are working toward understanding the importance of trade in building those city-states, and will be creating Chamber of Commerce flyers celebrating the virtues of African civilizations.

## DIV II NEWS

### 9th Grade Environmental Science

The students have been finishing up their study of global climate change by planning an environmental action. They have done some investigation of the Four Rivers campus to see how we can reduce our carbon emissions. They also have been learning about the history of environmental activism. The students have creative ideas about ways that they can change their school and community. They will be creating plans to put these ideas into action later this trimester.

### 10th Biology

The students have been learning about the cell cycle and how it regulates cell division. They are working on examining the processes of mitosis and meiosis. We soon will be looking more closely at the structure of DNA and protein synthesis. The students will be conducting a lab in which they culture bacteria cells and expose them to several different kinds of mutagens. They will observe and analyze how mutations change the structure of DNA and the effect this has on living things.

### Math

In 9<sup>th</sup> grade math we finished our probability unit by studying geometric probability. We now turn our minds to statistics, beginning with collecting data, creating charts and scatter plots, and eventually creating mathematical models to fit our data. Embedded in this topic will be an in-depth study of linear equations.

In 10<sup>th</sup> grade math we continue a variety of topics in geometry. Currently we are playing with right triangle trigonometry and special right triangles. We will go outdoors in the next week or so to take on the challenge of measuring tall items around our campus. In addition, we will work on figuring out how many linear board feet of wood we might obtain if we were to cut down particular trees.

### High School Spanish

Spanish 2--Students created and shared original children's short stories with each other using the past tense. They also finished a unit on Mexican food and tried making their own guacamole. The class hopes to continue exploring recipes from Spanish-speaking countries later this month.

Spanish 3--The class has been exploring Central America and researching the literacy rates across the region. They have started reviewing the subjunctive mood and employing it in their conversations.

Spanish 4--Students have reenacted scenes from airports to employ new vocabulary and grammar. They have read literature about the traditions associated with "El dia de los reyes" or Three Kings Day. The class has also been researching the history of the "Dirty War" of Argentina through internet articles, newspaper articles, and movies.

## DIV II & III NEWS

### **Division II English** by *Mari Roulston*

In 10th grade English class, we are exploring the vast category of social commentary through everything from seemingly innocent cartoons to the dark, science fiction novel *Ender's Game*, filled with military manipulation and other nefarious plot twists that challenge our thinking and understanding of our own world. However, we have surpassed analyzing cartoons and songs and are now putting our newfound ideas to the test! A debate! Good versus evil or logic versus emotion? On a lighter note, we've been studying up for the MCAS with student-led mini lessons and diligent reminders that grammar and punctuation are important. We'll be sure to ace it!

### **Division III Social Studies**

*Islam* students are preparing to conduct peer teaching on focused topics on the Qur'an. Students have been taking an in depth look at the variety of experience within the Islamic world, using, among other sources, the *New York Times*' Generation Faithful series on Muslim youth to design an entertaining speed dating activity. Students have now begun to investigate the use of *Shariah* law in different countries and regions and its implications.

*Government* students have researched and written their first full bills, in our model congress simulation, on CO2 reduction solutions. Students examined several different general policy options that reflect those being considered by Congress this year, both related to the economic stimulus package and more broadly. Students will also begin taking part in Model Congress events this month and next month, in which they simulate congressional debate in competition with delegations from other schools. One delegation of our students already took part in a three-day model congress conference at American International College in Springfield a couple of weeks ago.

### **IMP-3 and IMP-4**

It's almost time for 11th graders to take the SAT college admission exams! In IMP-3 we are about to begin reviewing SAT rules, strategies, and math content. You can help your student by developing a preparation schedule together and checking in about progress. The late spring exams this year are May 2 and June 6 (details at [www.collegeboard.com](http://www.collegeboard.com)).

In IMP-4 we are beginning a unit that reviews a broad range of function families -- linear, quadratic, exponential, logarithmic, trigonometric, reciprocal, and others -- in which we will develop new ways of representing, modeling, and combining them to solve problems.

### **PSYCHOLOGY**

During the past month students completed an in-depth investigation of clinical depression, and used that as a window into the many different ways that psychologists understand the causes and treatment of mental disorders in general. In our last several classes we completed a quick overview of the broad range of mental disorders recognized by professionals in the field, which will help each student select a single mental disorder to study in depth for the rest of the trimester.

## DIV III NEWS cont...

### ENVIRONMENTAL SCIENCE — Living Off The Grid

We spent last month investigating how much electricity students use within their homes and effective ways of conserving that energy. This month we have been focusing on the process of how that electricity is produced and the method of delivery to their homes. Our snow storm delayed the date, but last week we were treated to a visit from Walton Congdon, a retired science teacher with a wealth of information about wind and solar energy.

He shared his knowledge, expertise and experience about the practicality of using solar, wind and hydro energy. His presentation included actual wind turbine blades, photovoltaic cells and a microhydro-generator for the students to examine. Visits to area homes that are actually off the grid are scheduled so that students will be able to gain first hand knowledge about the advantages and disadvantages of life off the grid. In preparation, the students have been learning about the foundational elements of solar and wind energy.

### PHYSICS — The Physics of Driving

During the month of January in Physics we have been exploring Newton's Second Law of Motion. Last trimester we discussed how acceleration is a derivative of velocity and this trimester we are investigating how velocity is a function of the mass of a body and the forces that act upon it. As part of a student initiated and designed lab, we took an accelerometer (a device that electronically measures acceleration) on the school activity bus to cement the connecting of this concept to the physics of driving.

Students developed their own data tables to accurately record a variety of different measures in real time during the trip. We are now in the process of integrating the data to develop a detailed picture of what's happening inside a vehicle during normal driving conditions.

## COLLEGE COUNSELLING NEWS

### **SENIORS ~ File Your FAFSA**

Regardless of where you are attending school or training next year, file the FAFSA at [www.fafsa.ed.gov](http://www.fafsa.ed.gov)

This is the only mechanism for institutions to distribute state and federal funds including grants, loans, work-study, and the John and Abigail Adams Award.

### **College and Technical School Acceptances**

**University of Vermont**

**Humboldt State University**

**Massachusetts College of Liberal Arts**

*Students and Families, please notify Ms. Childress about any acceptances and scholarship offers.*

### **College Admissions Information Evening**

*Coming in March. Date to be announced.*

#### **TOPICS**

*Types of Post-Secondary Education and Training*

*Academic Preparation*

*Developing A "Good Fit" College List*

*Standardized Testing*

*Selection Criteria for Admissions*

*Financing Resources*

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

[www.mefacounselor.org](http://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!

**Christine Childress, College Counselor**

**[cchildress@fourriverscharter.org](mailto:cchildress@fourriverscharter.org)**

# ANNOUNCEMENTS

## REMINDER ABOUT AFTER SCHOOL RESPONSIBILITIES

### After School Time

Students may be at school after regular dismissal only if they are enrolled in an after school activity (i.e. sports, homework club/extra help, after school offerings). Any student waiting for a ride after school must attend and participate in HW Club until his or her ride shows up.

All after school activities, including sports, start at 3:15 (1:45 on Wednesdays). It is the responsibility of each student to arrive at after school activities on time.

Homework club and extra help end at 4:15 unless arrangements are made with a teacher ahead of time. Students should be picked up promptly at 4:15.

### Homework Club and Extra Help Guidelines

Students are expected to be in homework club by 3:15 each day. They must check in with the teacher running homework club or extra help by 3:15.

Students may attend either extra help in a teacher's classroom or Homework Club in the Common Room. Once in homework club or extra help, students are expected to remain there for the duration of the after school time. They may not use this time to play on the fields or socialize.

Homework club and extra help are times for students to get work done. Behavior during this time must be respectful for both fellow students attending and teachers running after school help.

Computers may be used for work purposes during Homework Club or extra help sessions with permission of the teacher in charge. Laptops must be used on a desk or table (not on laps or while sitting on the floor). Computer screens must be visible to the teacher in charge who may request that they all be facing the same direction. Laptops must be properly returned to the computer cart at the end of the work session.

### Late pick-up

Students must be picked up by 4:15 (except when other arrangements have been made and for events like games and practices in which coaches are scheduled to be at school after 4:15). School personnel are not expected to stay past 4:15 on a daily basis. After 4:15 there may not be adult supervision and students may not have access to buildings.

### After School Pick up Locations

Sports: Students should be picked up in the main parking lot at the designated time.

Homework Club: Students being picked up by 4:15 should wait for their rides on the sidewalk between the Middle School and the Farmhouse.

If a pattern emerges of a student being picked up later than the regular after school time the student may lose after school privileges.

**Matthew Leaf**

**Dean of Students**

## ***LOST CLOTHING?***

***Students' coats, hoodies, shirts, backpacks cleats  
and more***

**Claiming deadline: February 13  
(then disposal)**

**Lost & Found Containers in High  
School, Ground Floor**

## ADMISSION SEASON UPDATE

Just a reminder that our last Admissions Information Session is Wednesday, February 11, 7:00-8:30 pm, in the Common Room of the High School. Attendance at our first three sessions has been very high, and we appreciate all the help from the Family Council and the student admissions team in welcoming interested parents and students. The deadline for completed applications is February 25 at 5 pm, and we will hold the lottery on the 26<sup>th</sup>. We will continue to have Wednesday morning tours of the school, for applying families, 8:30-10:00 am, by appointment, on February 4<sup>th</sup>, 11<sup>th</sup>, and 25<sup>th</sup>. Please let anyone you know who is considering applying of this final the deadline!

**In the coming days all current parents of grades 7-11 will be receiving a letter asking you to let us know your plans for enrollment at Four Rivers for the 2009-10 school year.** Please respond promptly—it helps us greatly in our admission process to know of any openings next year. And if you have questions about the coming year, give Peter Garbus or Ed Blatchford a call.

~ Ed Blatchford



*Seventh graders Courtney Benoni, Katie Soltysik and Genlyne Fiske-White examine cells through a microscope.*

*Four River Charter Public School is dedicated to educating young people for lives of learning and service. The school offers a rigorous academic program aligned with the Massachusetts curriculum frameworks 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

## NURSE'S NOTES

During the recent single digit temperatures, many students were inadequately dressed for outdoors. Coats, hats, and gloves remain in lockers or classrooms during recess. Here are a few things to keep in mind:

- We lose 50% of our body heat through our heads: WEAR A HAT!
- Cold temperatures create dry, chapped, cracked, and, sometimes, bleeding hands and cuticles. WEAR GLOVES, USE HAND MOISTURIZER; APPLY ANTIBIOTIC OINTMENT TO CUTICLES 1-2 TIMES A DAY
- Always carry chap stick or lip moisturizer
- Stay properly hydrated: DRINK LARGE AMOUNTS of WATER
- Outdoor activities are carefully timed, using wind chill factors as a guide. I will continue to monitor students for appropriate dress to

## TEEN

### ART EXHIBIT

*Artspace Community Art Center's Annual Teen Art Exhibit ends February 13th. Participating in this year's exhibit are **Four Rivers** students, as well as students from Frontier, Pioneer, Greenfield High, Mohawk, Turners Falls High and Mahar.*

**The exhibit is open:**

## PARENTS! TEACHERS! STAFF! INTERNSHIP SEASON IS HERE!

The 11th graders are setting up their internships now and are looking for mentors! Below is a list of the things students are interested in doing. If anyone knows anyone who works in any of the fields listed below, or if you yourself do, we would love to hear from you! Contact Ms Durkee by phone or at her school e-mail, [sdurkee@fourriverscharter.org](mailto:sdurkee@fourriverscharter.org). Thanks!

Teacher

Pizza-maker or baker

Coach who works with young kids

Woodworker

Writer

Journalist

Music teacher

Guitar-maker

Professional musician or conductor

Architect