

Cannon River STEM School

Independent Charter School District 4194-07



2009-2010 Annual Report on Curriculum, Instruction
and Student Achievement

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Nalani McCutcheon, Director

Phone: 507-331-STEM (7836)

Fax: 507-384-3436

mccutcheon@cannonriverstemschool.org

Cannon River STEM School

1800 14th St. NE

Faribault, MN 55021

www.cannonriverstemschool.org

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INTRODUCTION

At Cannon River STEM School, adults and children alike aspire to become excellent questioners, able to investigate the world with confidence and character. We are a K-8 public charter school in Faribault, MN with an emphasis on science, technology, engineering and math.

MISSION

Our mission is to foster each student's innate curiosity and joy of discovery. We prepare students who are well educated, socially aware, scientifically literate, respectful, and responsible citizens in the global community. We achieve this by combining student-centered, collaborative and experiential instructional methods with exceptional parental and community involvement, and by using the environment as an integrating context.



VISION

Cannon River STEM School's vision is to be the preeminent leader in Science, Technology, Engineering, and Math (STEM) education in Minnesota by creating a community of students who love to learn.

To reach this vision, CRSS will integrate the following tools and methods throughout the instructional program:

- Place-based Education
- Inquiry-based Education
- Project-based Education

HISTORY OF SCHOOL SITE

Cannon River STEM School occupies four buildings on the nearly 60-acre St. James Campus of Shattuck-St. Mary's School in Faribault, Minnesota. (CRSS is not affiliated with Shattuck-St. Mary's, but leases the facility from Shattuck.)



The main classroom building, Old Main, was built between 1860 and 1880. It was originally the St. James School for Boys. Old Main currently houses grades 1-3, computer lab, media center, special education services and the administrative offices. Grade 4 is located in the old (decommissioned) chapel. Grade 5 will be temporarily located in Old Main until Winter Break and Grades 6 and 7 will be temporarily located in either Old Main or in a portable classroom until Winter Break at which time they (grades 5, 6 and 7) will be moving into their brand new space attached to the Gymnasium. Our two section kindergarten is located in the Armstrong building attached to the cafeteria.

While on a historic campus, CRSS possesses the latest technology, including 114 computers, 9 SMART Boards, classroom sets of digital cameras, thermometers and other exploratory equipment, GIS software, etc.

SCHOOL GOVERNANCE

Cannon River STEM School is governed by a seven member Board of Directors.

BOARD ROSTER

Name	Position	Appointment/Expiration	Email
Rob Hardy	Chair (Community Member)	December 6, 2008/January 2012	rbhardy3rd@gmail.com
Teri Menard	Vice-Chair (Parent)	July 30, 2009/January 2011	Teri@TeriMenard.com
Julie Finnesgard	Treasurer (Parent)	January 14, 2010/January 2013	julief@tsbf.com
Caren Putrah	Secretary (Parent)	August 20, 2009/January 2011	cputrah@yahoo.com
Chris Broden	CSP Grant Manager (Parent)	February 15, 2009/ January 2012	chris.broden@yahoo.com
Deb Scheil	Member (Teacher)	July 16, 2009/January 2012	dscheil@cannonriverstemschool.org
Cheryl Freund	Member (Community Member)	September 10, 2009/January 2013	cjfreund@live.com

GOVERNANCE

CRSS has 7 Board members, 6 of whom have completed all three required training modules. The remaining Board member has completed two of the three and will complete the third by December 31st, 2010. In addition, Board members each have a copy of the Charter School Board University Handbook, and every other month's Board meeting will include a discussion about some topic from the book.

CRSS's first year was spent operating from the original charter application document, drawing strategic goals from the charter proposal. Strategic planning will be conducted in FY11 to guide the school as the mission and vision are refined.

The CRSS Board meets monthly at 7 p.m. on the second Thursday in the school cafeteria. The Board's Finance Committee at 6 p.m. on the evening of the regularly scheduled Board meeting. The Building Committee led by the ED meets regularly with the landlord to plan for the anticipated new spaces. Agendas and minutes, as well as all Board policies, budgets and audited statements are posted on the school's website: www.cannonriverstemschool.org.

SCHOOL MANAGEMENT AND ADMINISTRATION

Cannon River STEM School has three administrative positions. All three individuals served the entire FY10 School Year and have returned for FY11:

- Nalani McCutcheon, Executive Director
- Ginger Kranz, Curriculum Development Coordinator
- Nicole Broden, Office Manager

In addition, CRSS is supported by contracted consultants to provide additional administrative functions:

- Mike Pocrnich, BKDA, Financial Management & Accounting
- Tammy Pulver, Designs for Learning, Special Education Director

CRSS has operated without any major stumbling blocks, coordinated an expansion of both the campus facility and the student body (starting with a two section Kindergarten in FY11,) maintained fiscal integrity and had 100% retention of teaching staff. Additional administrative staff, added in FY11, are helping to formalize systems and procedures.

As CRSS's Executive Director does not hold an administrative license, she attended the three-day seminar, "Charter Leader Assessment and Development Program", jointly sponsored by the University of St. Thomas and the Minnesota Association of Charter Schools, on October 20, 21, and December 3, 2009. Activities were designed to rate 10 skills required by charter school directors and provide a framework for developing a professional development plan, as required by best practice and Minnesota law. Results of the competency skill assessment were shared with the CRSS Board, and the Executive Director developed a professional development plan with the following goals:

- To develop staff to provide balanced and integrated experiences in STEM (science, technology, engineering and math) content and in place-based instruction.
 - The Executive Director worked with the leadership team to develop a professional development plan for staff to build their knowledge and skills in STEM and place-based instruction. The Executive Director arranged for a professional development contract to be forged with River Bend Nature Center to provide support in place-based education. She also arranged for speakers and professional field trips on Engineering, Project Based Instruction and Technology.
- To establish a financial framework that will result in a fund balance of at least 5% in 2010 and builds by 5% each subsequent year.
 - The Executive Director worked to contain budgeted expenses and to build the school's fund balance. The ending fund balance more than doubled from the original approved budget, and a 22% fund balance is projected for FY11. While a \$75,000 line of credit was the anticipated need, the school only tapped into the line of credit four times and paid the balance in full within 4 weeks of each draw.
- To develop a plan for the reorganization and expansion of the Cannon River STEM School's physical infrastructure to accommodate grade and section expansion through 8th grade.
 - The Executive Director worked with Shattuck-St. Mary's to develop a plan for a Middle School Village and Elementary School expansion that will result in 13 newly constructed classroom spaces to support the expansion of the school from 135 students to just over 400 students in FY19.

The Cannon River STEM School Board completed a formal review of the Executive Director at the September, 2010 Board meeting. The review was positive with strengths particularly noted in the finance and community building areas. The review took into account surveys from board members and staff interviews. The Board Chair will meet with the ED to determine future goals.

TEACHING/INSTRUCTIONAL FACULTY INFORMATION

Cannon River STEM School utilizes both certified and non-certified staff to provide instruction and support for our students.

CERTIFIED STAFF

Cannon River STEM School had 7 classroom teachers and 3 specialists in FY10. All ten certified staff served the entire FY10 School Year and have returned for FY11:

- JoBeth Thompson, Kindergarten Teacher, FF#445377
- Sarah Olson, 1st Grade Teacher, FF#418655
- Dan Church, 2nd Grade Teacher, FF#445651
- Ryan Johnson, 3rd Grade Teacher, FF#428272
- Sarah Mueller, 4th Grade Teacher, FF#447365
- Deb Scheil, 5th Grade Teacher, FF#237990
- Ben Wallerus, 6th Grade Teacher, FF#447624
- Jane Jirik, Special Education Teacher, FF#325669
- Kyle Schafer, PT Music Education (.2 FTE), FF#446240
- Nicole Herzog, PT Art Education (.3FTE), FF#407130

Over the past two summers, staff have devoted an additional 21-25 days of work in addition to the service year expectations. In addition, all classroom and special education staff devoted a week of the summer toward Responsive Classroom training. CRSS has a robust professional development plan which has ensured that all staff attend national/regional conferences such as NSTA, NCTM, ASCD, as well as participate in in-school professional development (including 6 early dismissals, 4 release days, weekly staff meetings, and an all faculty book study.)

Each staff member had two formal evaluations by the Executive Director, including pre-observation and post-observation conferences. Staff were evaluated focusing on Charlotte Danielson's Domains of Teaching, and professional development plans are being developed for FY11. In addition, teachers had observations from the Curriculum Development Coordinator and in some instances were provided release time to observe other teachers in their subject area.

As a learning community, Cannon River STEM School emphasizes developing professional development plans that support all our staff allowing them to grow to their full potential.

NON-CERTIFIED STAFF

In addition to the certified staff, CRSS employed two paraprofessionals, providing essential support in early intervention:

- Theresa Brownlee, Special Education paraprofessional
- Alicia Blais, Special Education paraprofessional (early intervention)

SCHOOL ADMISSIONS, ENROLLMENT AND STUDENT ATTRITION

Cannon River STEM School conducted its admissions through a lottery process, with applications drawn and ordered into classes or waiting lists on March 14th, 2009. Waiting lists were then maintained and used to fill openings until the lottery on March 13th, 2010. In FY10, CRSS had an enrollment high of 139 students, with an October 1 student count of 135.

All told between September 8th, 2009 and September 7th, 2010 24 students withdrew from CRSS to transfer to another school in the area, and 5 withdrew based on moving out of the area. With the exception of 7th grade, all vacancies have been filled by students on the waiting list. FY11 began with 183 students enrolled in grades K-7.

ACADEMIC PROGRAM

Students at Cannon River STEM School are involved in inquiry-based, project-based, place-based learning. We believe that learning should extend beyond the walls of a traditional classroom into the natural environment and the local community. The CRSS curriculum is integrated, so that all subject areas—science, math, language arts and social studies, as well as art, music, and P.E.—will be connected, and students will learn to see all knowledge as connected, rather than artificially separated into discrete disciplines. Authentic project-based, inquiry-based learning will enable students to see the connections between subjects, and the connections between what they are learning and the world around them.

Though we are a STEM school, we realize that strong reading, writing, and comprehension skills are the gateway to other disciplines. CRSS staff will dedicate a significant portion of each day to build each child's literacy through differentiated instruction. Literacy centers, games, guided reading, conferencing, and a variety of other strategies will be a part of the curriculum. With our commitment to student-centered, integrated learning, students will engage in a variety of literacy activities in the context of other subjects. This experience will provide students with meaningful opportunities to build connections and utilize their emerging and developing skills.

Through its integrated, multidisciplinary approach, CRSS helps students develop the higher-level critical thinking skills needed to solve problems in the real world. Just as important, the curriculum promotes the school's mission of fostering each child's innate curiosity and joy of discovery.

CRSS staff have been working to formalize the curriculum and develop integrated curriculum maps. During FY11, the CRSS Board will be reviewing and formally adopting our curriculum.

PERFORMANCE GOALS

The performance goals identified in our Charter Application and Contract with our Sponsor are as follows:

- Student Academic Goal: 80% of CRSS students, who attend CRSS for a year, will show an average gain of one year in reading as measured by a Minnesota State Department of Education approved test. 90% of students more than one year behind grade level will show an average gain of 1.3 years in the same test.
- Student Academic Goal: 80% of CRSS students, who attend CRSS for a year, will show an average gain of one year in mathematics as measured by a Minnesota State Department of Education approved test. 90% of students more than one year behind grade level will show an average gain of 1.3 years in the same test.

- **School Goal:** At least 90% of all stakeholders will indicate that they are overall satisfied to very satisfied with the academic program, school climate, parent involvement, communication, and school safety issues at CRSS as indicated on a professionally developed and validated Stakeholders Satisfaction Survey.
- **School Goal:** By the end of each academic year 90% of CRSS students and teaching staff will work with professional scientists, engineers, and land managers on research or restoration projects through a Partnering Organization.

PROGRESS TOWARD PERFORMANCE GOALS

- **Student:**
 - Being our first year, we were pleased with progress toward our academic goals. Our staff have analyzed the sub-strands and been intentional on working to enhance the curriculum in areas where we perceive greater progress can be made.
 - Overall, CRSS scored 64.93% proficient in Math as compared to the State 65.89%. CRSS scored 75.94% proficient in Reading as compared to the State 72.34%. CRSS scored 57.9% proficient in Science as compared to the State 46%.
- **School:** Results from our Parent Satisfaction Survey indicate the following:
 - 85% of parents report being pleased with our academic program.
 - 98% of parents report their child feels safe at school.
 - 96% of parents report that communication with school helps support their child(ren)'s learning.
 - 82% of parents report being satisfied to very satisfied with the opportunities to be involved with their child(ren)'s learning.
 - 91% of parents report being satisfied to very satisfied with the quality of their child(ren)'s teacher.
- **Environmental**
 - 85% of parents report their child(ren)'s learning has been enhanced by frequent time spent outside for instruction and recreation.
 - 92 % of parents report their child(ren) are curious about the world around them and are learning how to investigate the answers to their questions.

Assessment Data Overview, 2009-2010

MCA Strands	Vocabulary Expansion	Comprehension	Literature	Number Sense	Patterns, Functions & Algebra	Data, Statistics & Probability	Spatial Sense, Geometry & Measurement
CRSS average points total	24.2	62.1	61.5	57.1	21.1	25.8	41.2
Statewide average points total	23.3	60.7	60.1	57.2	21.5	27.5	42.2
CRSS difference from state average	0.9	1.4	1.4	-0.1	-0.4	-1.7	-1

MCA Math '10	% Who Pass w/MAP Score	NWEA MAP MATH RIT		MCA Reading '10	% Who Pass w/MAP Score	NWEA MAP READING RIT	
		FALL MAP Math Score	SPRING MAP Math Score			FALL MAP Reading Score	SPRING MAP Reading Score
4.51 over proficient	67	211.31	221.4	6.96 over proficient	71	204.97	212.82
	Actual 64.1	Average Growth: 10.09			Actual 76.9	Average Growth: 7.85	

NWEA MAP Science Average RIT	
Fall	Spring
200.98	207.15
Average Growth: 6.17	

TEST DATA (NWEA MAP & PEARSON MCA-II)

While our first year's numbers were good, we look forward to being able to build on one year's worth of history and being better able to use MAP scores to help us meet the needs of our students. Faculty have begun the process of implementing an RTI program that should serve us well.

INNOVATIVE PRACTICES

All of our classes spend significant time using the environment as a context for learning. We have a 55 acre campus and even our kindergarteners have explored the woods and ravines. As our teachers have become more comfortable with our campus, they are using it more and more as part of their curriculum.

Every class engaged in engineering projects last year, based on our emphasis on engineering. As teachers become more knowledgeable they are gravitating to greater use of project-based learning.

As a faculty, we work on an inquiry philosophy and instilling the scientific process in all that we do.

Our school specifically looks for projects that link into our community and our place. Our first grade students researched the options for a class pet, determined what was needed to set up and care for it, raised the money and traveled to the local pet store to purchase the pet. Our fifth graders began a project working with a local farmer and the Rice County Historical Society to explore and excavate the historic Wallcot Mills site, using geography, chemistry and math to try to reconstruct the location of buildings and identify the contents of the remnants. Our kindergarteners researched birds and bird feeders to develop a plan for our bird feeding station and presented a 3-d model, a proposed drawing, a purchase order for the feeders and seed, as well as an explanation of what birds would be attracted to the feeders to the ED. Our students will have a lasting and positive impact on our campus and our community!

Our school also focuses on parent involvement. In FY10, five family work days were hosted, inviting the entire school community to help set up the school, organize the library and clean up the campus. Four of the work days involved 50-80 adults and children attending to the work that needed to be done. For the last work day of the year, all students were invited to stay after school under the supervision of their teachers (aided by parents) to do school service, ending with a picnic supper and a public presentation of The Physics Force! We also have a conference before the start of school where parents and child can meet individually with their teacher to talk about hopes and dreams for the year, and we host parent information nights throughout the year to help build parents knowledge on topics that are important to them. For these parent information nights, children are either ask to not be present, or staff figure out options for child care on campus so that parents can learn without interruption. In all things, we aim to be a community of learners.

PROGRAM CHALLENGES

SYSTEM DEVELOPMENT

Starting from scratch means building systems from the ground up. All of our procedures, forms and methods of operation needed to be developed based on our school and our needs. Much of the year was spent staying one step ahead of the next system to design. Since our campus had never accommodated an elementary school of our size before, we needed to figure out how cars would flow through campus, how lunch would get served, and how students could safely move from building to building. Our staff have had to develop effective means to communicate their location on our 55 acre campus, and figure out how everyone stays in the loop when classrooms dispersed amongst multiple buildings and there is no natural hub for collecting. While we have made great strides, there is still more to be figured out!

TIME/SMALL STAFF

As with many charter schools, Cannon River STEM School has a bare-bones staff that work extra hours to provide students with an excellent education. Instructional staff receive far less preparation time than they would in a traditional setting, and are often called on to perform many additional functions during the course of the week. While we seek to formalize our curriculum, we also want to challenge our instructional staff to stay current on best practices and continue to move toward a stronger inquiry, project and place-based program. This focus on continuous improvement takes significant time and energy from our highly dedicated and skilled staff.

MIDDLE SCHOOL DEVELOPMENT

As our school continues to expand through to 8th grade, our challenge is to develop appropriate rigor and independent work so that our students can be successful when they transition to a larger academic setting. Middle school students have greater needs for enrichment activities and extra-curriculars. It will be a challenge to provide a rich enough program to engage students through 8th grade with the limited resources that small class sizes provide.

SPACE

The existing buildings on the St. James campus are not configured in a manner that meets the classroom needs of Cannon River STEM School. Our landlord, Shattuck-St. Mary's has been gracious enough to embark on an expansion plan that will provide for 13 new classroom spaces over the next five years. This means, however, that our campus will be in a perpetual state of construction.

FINANCES

The FY10 audited ending fund balance is \$209,444 (17% fund balance). The projected FY11 ending fund balance is \$323,748 (22% fund balance).

CRSS in FY10 obtained a \$75,000 line of credit that was tapped 4 times, always paying off the balance within a month. We ended the year with no debt. Our fund balance policy calls for a 25% fund balance at the end of FY14, and we are well ahead of that goal, projecting a 22% fund balance at the end of FY11.

AUTHORIZER

Audubon Center for the Northwoods is CRSS’s sponsor, having a three year contract with CRSS covering FY10-FY12. ACNW is a private, non-profit residential environmental learning center, a wildlife rehabilitation facility, and a conference & retreat center nestled on the shores of Grindstone Lake near Sandstone, MN in east-central Minnesota. ACNW offer a great variety of environmental learning experiences for people of all ages, with programming in natural history and science, team-building, adventure programming, and outdoor/environmental education.

Our liaison is Steve Dess. Steve can be contacted at: 651-260-3782.

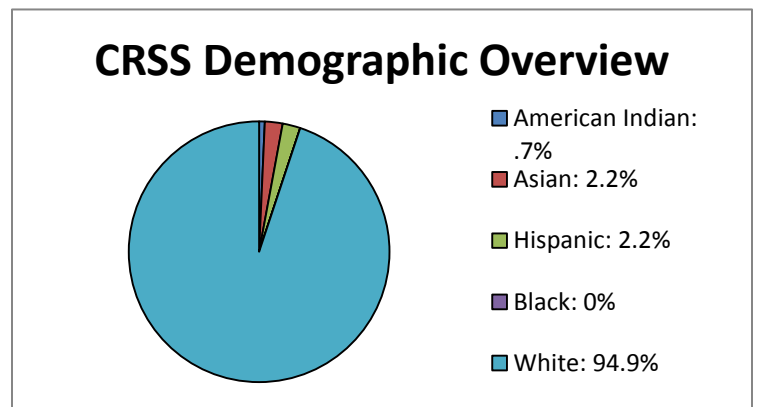
SCHOOL’S STATE REPORT CARD

DEMOGRAPHICS

Cannon River STEM School had 135 students at the October 1 Child Count in FY10 in grades K-6. The 88% of students were from the Faribault area, with 10% from Northfield and the remainder from Medford, Morristown and Prior Lake.

21% of CRSS students qualified for free or reduced lunch, and 7% of students received special education services.

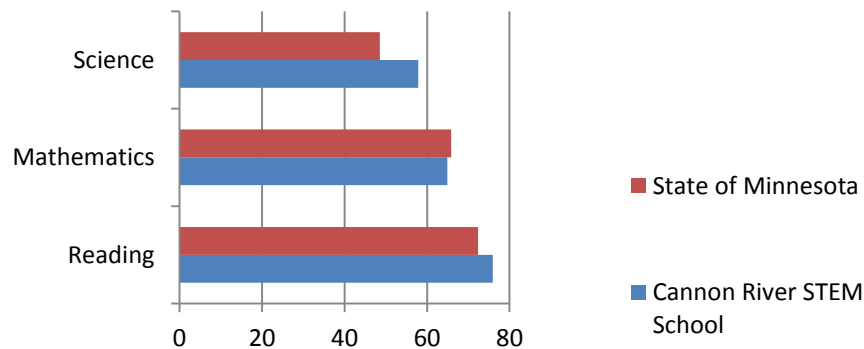
Student to Teacher ratio was 15:1.



AYP AND STUDENT ACHIEVEMENT

CANNON RIVER STEM SCHOOL has 8 eligible groups and has met 100.0% of the requirements for [Adequate Yearly Progress](#) under No Child Left Behind.

MCA-II Test Data for FY10



	Reading	Mathematics	Science
State of Minnesota	72.34	65.89	48.58
Cannon River STEM School	75.94	64.93	57.89

NON-PROFIT STATUS

Cannon River STEM School is a 501c3.

INDICATORS OF FUTURE SUCCESS

Specific indicators of future success:

- High demand. Our waiting lists for all but the 7th grade are still strong and in some cases quite lengthy, this even after adding a second section of Kindergarten and expanding class sizes in the upper grades.
- Strong, collegial staff: CRSS has 100% retention in staff, and everyone has worked 2-3 weeks over the summer to prepare for the school year. Our CSP grant has allowed us to provide strong professional development for our teachers, and we have been intentional about building community.
- Commitment to the social curriculum. Every full time instructional staff member was sent to Responsive Classroom training and we are working to incorporate RC throughout the school.
- Development of a culture of learning. CRSS has worked to build a learning community that extends beyond the students to the parents, visitors and staff. We all learn together and that is resonating in our community.