REACH FURTHER.

Educating students to compete locally, nationally and internationally.

Charlotte-Mecklenburg Schools

PROJECT CHARTER

SCIENCE AND MATH

INCEPTION DATE: DEC. 15, 2006

PMOC Update 12-19-2007

THIS PROJECT SUPPORTS THE FOLLOWING DISTRICT GOALS:

- ☒ I. High Academic Achievement
- ☒ II. Effective Educators
- ☒ III. Adequate Resources and Facilities
- ☐ IV. Safe and Orderly Schools
- ☐ V. Freedom and Flexibility with Accountability
- ☐ VI. World-Class Service
- ☒ VII. Strong Parent & Community Connections

THIS PROJECT SUPPORTS THE FOLLOWING STRATEGIC PLAN 2010 MEASURABLE OBJECTIVES:

Goal #	Objective #	Objective description
I	1	Eighty percent of schools will make expected or high growth on ABCs (54% as of 2005-2006)
I	3	Eighty-eight percent of students will achieve at or above standard on mathematics EOG tests in grades 3 through 8
I	4	Eighty percent of students will achieve at or above standard on the science EOG tests in grades three through eight (testing will begin 2007-2008).
I	6	Eighty percent of students will achieve at or above standard on the End-of-Course (EOC) composite tests (66 percent as of 2005-2006).
I	7	Disparity based on race, ethnicity and socioeconomic status will not exceed 10 percentage points on all academic measures.
I	8	Students graduating on time will increase by 3 percent each year (72 percent as of 2005-2006).
I	9	The number of students who drop out will decrease by 3 percent each year (23 percent as of 2005-2006).
I	10	CMS will meet or exceed the national average on Advanced Placement exams (combined scores) with scores of 3, 4, or 5 (42 percent as of 2005-2006, compared to the national average of approximately 62 percent).
I	11	Seventy-five percent of students will meet or exceed the national average on the SAT, while the percentage of students who take the test will also increase (50 percent met or exceeded the national average as of 2005-2006; 69 percent of graduates took the test).
I	13	CMS Students will meet or exceed the national average on the National Assessment for Educational Progress (NAEP, also called the Nation's Report Card) in reading, mathematics, and science.
II	1	CMS will increase the percentage of its schools with effective teaching staff. That effectiveness will be measured by subjective and objective evaluations, and the percentage will be set after a district-wide accountability system required by CMS Board of Education policy AE has been adopted.
III	Instructional materials and supplies 1	All schools equipped with CMS standard instructional materials and supplies (53 percent of all schools; 100 percent of all FOCUS schools (those with high concentration of low-income students) as of January 2005.
III	Facilities 1	Conduct a comprehensive evaluation of facilities planning and construction.

VII	7	The number of district-sponsored partnerships that focus on improving academic achievement and increasing school safety will increase by 25 percent
VII	8	The number of volunteer hours devoted to improving academic achievement and mentoring at-risk youth will increase by 25 percent

THIS PROJECT SUPPORTS THE FOLLOWING STRATEGIC PLAN 2010 STRATEGIES: (PLEASE NOTE WHEN A STRATEGY IS SHARED WITH ANOTHER PROJECT CHARTER)

Strategy numbers come from the *CMS Strategic Plan 2010: Educating Students to Compete Locally, Nationally and Internationally*.

Goal #	Strategy #	Strategy description	Shared with another charter (Y/N)
I	C-2	Refine the comprehensive math model	N
I	C-3	Integrate writing across the curriculum	Y
I	C-7	Expand access to more rigorous courses.	Y
I	C-8	Expand the comprehensive K-8 science model	N
I	C-10	Expand students' use of technology	Y
I	C-13	Address the needs of children in poverty	Y
I	C-17	Expand after-school programs at middle school	Y
I	C-19	Promote increased participation in study abroad programs	Y
II	C-3	Refine professional development for improved instruction	Y
VII	C-1	Develop parent and community agreements	Y
VII	C-11	Strengthen community partnerships and volunteers	Y
VII	C-14	Build parent and community involvement	Y
VII	C-15	Redesign and restructure Web site	Y
VII	C-17	Improve communications with parents and public	Y

Project Overview

Project Introduction and Context

Quality science and math instruction is critical to the future success of our CMS students, our schools, our community and our nation. The CMS Board of Education's bold Vision requires CMS to provide ALL students the best education available anywhere. Furthermore the Board of Education has committed the school system to achieving 3 goals: 1) provide all students with the opportunity to perform to their fullest potential; 2) ensure there is no discernible achievement gap based on race, gender, or economic level; and 3) prepare all students to be successful in institutions of higher learning or the workforce without remediation.

As the need for STEM (science, technology, engineering, and math) professionals increases, our students need a solid background in science and math in order to be eligible for these exciting and high paying careers. Our current teachers are working to prepare their students for a future that cannot be imagined, but will surely require a strong understanding of science, technology, engineering and math. Many of our current teachers have never worked in a STEM field and do not have the real world experiences to make the concepts in their North Carolina Standard Course of Study relevant to their students. There teachers need experiences and professional development that help them make the connections between their concepts and the real world. Other science and math teachers come into the classroom with a wealth of real world experience, but need professional development on managing inquiry, helping students interpret informational text, and classroom management techniques. Guidance counselors and administrators must be kept informed about the importance of taking physics and calculus for future success, and know the appropriate course sequences that will allow all students to take 4 years of science and math.

CMS must provide ongoing quality professional development appropriate for all our teachers and administrators. Math students take EOGs from 3rd through 8th grade, then must score a "3" on the Algebra 1 EOC to graduate. They must also complete 1 math course beyond Algebra 2 to graduate. Science students will be taking a 5th grade and 8th grade EOG, must pass Earth/Environmental Science and a physical science, and must score a "3" on the Biology EOC to graduate. For the past 3 years only 55% of CMS students taking the Biology EOC have scored a "3" or higher. These rigorous high school requirements mean that K-8 science and math experiences MUST prepare these students to read informational text, think critically, and interpret data. Teachers must be supported with appropriate active learning strategies, the big ideas of each course they are teaching, current technology, and management techniques appropriate for all the science and math classes they are teaching. Students must be provided with appropriate learning experiences, so that they are ready to take advantage of AP and IB science and math learning opportunities. Classrooms must contain the necessary infrastructure, including equipment, materials and textbooks. Administrators must also be provided with professional development to enable them to recognize, facilitate, and support quality teaching and learning in science and math classrooms.

One major goal of this project charter is leadership. A Director of science and math will be hired to provide vision for science and math. The Director of science and math will create and monitor appropriate district wide math and science initiatives, and will advise principals and teachers about best practices leading to improved student achievement. The director will develop international standards, develop appropriate professional development that will facilitate improvement in teaching and learning, and provide ongoing information about innovations in science and math teaching and learning. The executive director will also work with community partners to maximize opportunities for students and teachers in science and math.

In support of the CMS Strategic Plan 2010, this project will focus on providing the vision necessary to provide the infrastructure, the professional development, adequate materials and supplies, pacing/alignment documents, and ongoing professional development to support quality K-12 science and math teaching and learning. This project will also focus students, teachers, parents, and community members on the science and math skills necessary for our students to be able to compete successfully in the global marketplace.

Key desired results that are to be accomplished by the project.

Project Oversight

Role	Description	Person responsible
Executive Sponsor	Ultimate authority. Responsible for the project, its desired results and specific outcomes.	Dr. Ruth Perez
Owner	Assists in developing the project charter and project plans, executes project reviews and disposes of issues and change requests.	Dr. Cindy Moss
Project Manager	Develops and maintains project charter and plans, executes reviews, tracks issues and change requests, manages budget and is responsible for technical quality of solution.	Bill Scott

Service Integration Team

Responsible for the execution of project tasks:

Ann Marie Clinton, Executive Assistant for High School Curriculum and Instruction
Jennifer Pearsall, ELL Specialist
StephanieRange, Director of Advanced Studies
Karen Thomas, Director of School Counseling Services
Jerry Shepardson, Director of Instructional Technology
Val Morgan, Exceptional Children's Specialist
Dr. Louise Jones-Principal of Hopewell High School
Dr. Philip Cauthen-Principal of Vance High School and former chemistry teacher
Aliscia Johnson-Principal of Harding High School
Tim Sennett-Principal of Math and Science School at Garinger
David Foxx-Asst Principal of Myers Park High School and former Earth science teacher
Pam Espinosa-Principal of McClintock Middle School
Crystal Cooper-Principal of Morehead Elementary School
Bantikassegn Workalemahu-Physicist with the Assessment Department
Kevin Earp-Safety Officer
Cathy Wigington-Parent and Chemist
Samantha Evans-Communications team
Lynn Roberson-Executive Director of CMS Partnerships Office
Scott Reynolds-4th grade teacher from Winterfield Elementary
Walter Hall-3rd grade teacher from Morehead Elementary School
Tammy Dorcas-science teacher from Davidson IB Middle school-Intel Science School of Excellence
Steve Houser-TD teacher from Providence Springs and Presidential Award winner
Hollace Stephenson-Biology teacher from Myers Park High School
Susan Foxx-Resource teacher from North Learning Community
Sandra Ducote-Resource teacher from Central Learning Community

Larry Logan-CTE Specialist

Dr. Olivine Roberts-Executive Director of South Learning Community

Stephanie Staeckler-REACH Project Director from Discovery Place

Advisory Team

The team that reviews results and makes recommendations prior to finalization. See attached Public Engagement Categories for guidance.

Dr. Elizabeth Perry-local physician working on DPI Math Curriculum Updates

Governor James Martin-past president of the Charlotte Area Science Network and physics professor

Dr. David Royster-Director of the Center for Math, Science, and Technology Education at UNCC

Hilary Davidson-Director of Community and Stakeholder Relations, Duke Energy Foundation

Dr. James Cuttino-UNCC Director of Motorsports and Automotive Research Center

Suzanna Thornton-Carolinas College of Health Sciences, Director of Education

Rob Corbin-Vice President of Education at Discovery Place

Customers

All elementary, middle and high school students and staff.

Project Scope and Deliverables

Deliverable: A specific product or event to result from a project.
Examples include such things as a training session, a document, a software product, a process definition, etc.
Tasks: The detailed task assignments for individuals to product the project's deliverables.

Status Key: ■ Complete ■ On Schedule ■ Caution ■ Danger

[SP#: Strategic Plan number – see attached]

SP #	Deliverables and Tasks	Person Responsible	Start Date	Due Date
1.0	**Examine the research for best practices in science and math teaching and learning**	Cindy Moss/Bill Scott/Chris Triolo	9/13/2007	5/15/2008
1.1	Present findings of the APQC (American Productivity and Quality Consortium) Benchmarking study of Science and Math to the Service Integration Team in September	Bill Scott Tanya Shank	9/13/2007	2/16/2007
1.2	Present findings of APQC Benchmarking study of Science and Math to Science and Math Lead Teachers and Dept Chairs	Bill Scott, Chris Triolo, Tanya Shank, Ormond Cottle	9/5/2007	12/5/2007
1.3	Participate in NSF funded WestEd research project on most effective elementary professional development in science.	Wayne Fisher	9/5/2007	5/20/2008
1.4	Participate in NSF funded Meredith College research project on understanding the K-8 NCSCOS math objectives	Barb Bissell	9/17/2007	9/17/2008
2.0	**Create a mission and vision statement for CMS Science and Math**	Chris Triolo, Bill Scott, Barb Bissell, Wayne Fisher	9/5/2007	11/5/2007
2.1	Share the mission and vision statement with lead teachers, AF, and math facilitators.	Chris Triolo, Bill Scott, Barb Bissell, Wayne Fisher, Tanya Shank, Ormond Cottle	11/5/2007	2/10/2008
2.2	Post the mission and vision statement on all CMS Science and Math materials	Chris Triolo, Bill Scott, Barb Bissell, Wayne Fisher, Tanya Shank, Ormond Cottle	11/5/2007	2/10/2008

3.0	**Create a comprehensive Science and Math Model for CMS**	Bill Scott, Chris Triolo, Tanya Shank, Ormond Cottle, Wayne Fisher, Barb Bissell	9/5/2007	11/5/2007
3.1	Create a comprehensive Math Model that incorporates remediation and acceleration	Bill Scott, Ormond Cottle, Barb Bissell	9/5/2007	11/5/2007
3.2	Create a comprehensive Science Model that incorporates remediation and acceleration	Chris Triolo, Tanya Shank, Wayne Fisher, Kathleen Koch	9/5/2007	11/5/2007
3.3	Share the comprehensive Math and Science Models with lead teachers, AFs, Math Facilitators, and administrators	Bill Scott, Chris Triolo, Wayne Fisher, Barb Bissell	11/5/2007	3/16/2008
4.0	**Attend conferences and read literature to remain current on national and international trends in science and math education**	Cindy Moss, Bill Scott, Chris Triolo	7/5/2007	8/30/2008
4.1	Science and math team members will attend state and national conferences to remain current	Cindy Moss, Bill Scott, Jack Whittemore, Ormond Cottle, Jeffrey Vincent, Barb Bissell, Chris Triolo, Tanya Shank, Kathleen Koch, Wayne Fisher	9/15/2007	9/1/2008
4.2	Science and math team members will share their conference learnings through Lead Teacher meetings, Dept Chair meetings, Academic and Math Facilitator meetings	Cindy Moss, Bill Scott, Jack Whittemore, Ormond Cottle, Jeffrey Vincent, Barb Bissell, Chris Triolo, Tanya Shank, Kathleen Koch, Wayne Fisher	9/15/2007	9/1/2008
4.3	Science and math team members will participate in leadership roles in state and national organizations	Cindy Moss, Bill Scott, Jack Whittemore, Ormond Cottle, Jeffrey Vincent, Barb Bissell, Chris Triolo, Tanya Shank, Kathleen Koch, Wayne Fisher	9/15/2007	9/1/2008
4.4	LASER Team will share their vision and learnings with SIT and other stakeholders	Cindy Moss, Rob Corbin, Scott Reynolds, Mary Webb, Amy Burton	9/10/2007	9/1/2008
4.5	Science team members will work as part of the Local Arrangements Committee for the October 2008 National Science Teachers Conference to be hosted in Charlotte	Cindy Moss, Chris Triolo, Tanya Shank, Kathleen Koch, Wayne Fisher	9/15/2007	11/5/2008
4.6	Director of Science and Math will serve on the 21st Century STEM Education Federal Commission	Cindy Moss	7/1/2006	10/30/2007
4.7	Director of Science and Math will serve on appropriate local, state, national, and international	Cindy Moss	7/1/2006	8/30/2008

	committees to keep CMS connected.			
5.0	**Examine science and math EOG/EOC data to determine particular issues with EC and ELL students**	Bantikassegn Workalemahu/Bill Scott/Chris Triolo	9/15/2007	3/2/2008
5.1	Examine research data to determine which strategies are proven to work best with EC students and math.	Bill Scott/Val Morgan/Bantikassegn Workalemahu	9/15/2007	3/3/2008
5.2	Examine research data to determine which strategies are proven to work best with EC students and science	Chris Triolo/Tanya Shank/Val Morgan/Bantikassegn Workalemahu	9/15/2007	3/3/2008
5.3	Examine research data to determine which strategies are proven to work best with ELL and math	Bill Scott/Ormond Cottle/Jennifer Pearsall/Bantikassegn Workalemahu	9/15/2007	3/3/2008
5.4	Examine research data to determine which strategies are proven to work best with ELL and science	Chris Triolo/Tanya Shank/Jennifer Pearsall/Bantikassegn Workalemahu	9/15/2007	3/3/2008
5.5	Create CMS strategy for EC students in science and math	Chris Triolo/Bill Scott/Val Morgan	10/15/2007	4/3/2008
5.6	Create CMS strategy for ELL in science and math	Chris Triolo/Bill Scott/Jennifer Pearsall	10/15/2007	4/3/2008
5.7	Share CMS strategy for EC students and ELL in science and math with principals	Chris Triolo/Bill Scott/Jennifer Pearsall/Val Morgan	10/15/2007	4/3/2008
5.8	Examine CMS math and science EOG/EOC data for trends among EC and ELL populations	Bantikassegn Workalemahu	10/15/2007	4/3/2008
5.9	Share trends in EC/ELL student scores in science and math with principals	Chris Triolo/Tanya Shank/Bill Scott/Ormond Cottle/Jennifer Pearsall/Val Morgan	10/15/2007	4/3/2008
6.0	**Determine professional development needs and schedule offerings for 2007-2008 school year and summer 2008**	Chris Triolo/Bill Scott/Ormond Cottle/Tanya Shank	9/5/2007	4/15/2008
6.1	Review 2007 summer courses offered, attendance and feedback	Chris Triolo, Bill Scott, Tanya Shank, Ormond Cottle, Barb Bissell, Wayne Fisher	9/5/2007	10/5/2007
6.2	Create K-8 Science Leadership Courses with CMSTE (Center for Math, Science, and Technology Education	Wayne Fisher, Tanya Shank, Chris Triolo, Alisa Wickliff	9/5/2007	10/30/2007

6.3	Meet with Professional Development Staff to discuss the collaboration between science and math and PD	Cindy Moss/Chris Triolo/ Bill Scott	9/5/2007	11/1/2007
6.4	Research grant possibilities to fund the professional development needed to create culture change in science and math classrooms	Bill Scott/Chris Triolo	9/5/2007	12/15/2007
7.0	**Support the CMS Chemical Hygiene Plan**	Chris Triolo, Tanya Shank, Kathleen Koch, Wayne Fisher	9/5/2007	6/5/2008
7.1	Conduct professional development on safety for secondary science teachers	Chris Triolo, Tanya Shank, Kathleen Koch	7/1/2007	9/1/2008
7.2	Communicate with secondary dept chairs and principals about the state requirement for school based Chemical Hygiene Plans and Science Safety Committee	Chris Triolo	9/5/2007	12/15/2007
7.3	Collect individual school Chemical Hygiene Plans from each middle and high school	Chris Triolo	9/5/2007	6/5/2008
7.4	Evaluate CMS and school based safety issues, based upon safety audits	Kevin Earp	10/5/2007	4/5/2008
7.5	Plan to correct safety problems	Kevin Earp	4/5/2008	12/10/2008
8.0	**Provide assistance to elementary schools in scheduling and delivering science 3 times each week, including at least one inquiry experience for students each week.**	Wayne Fisher	9/5/2007	6/5/2008
8.1	Develop partnerships with local businesses to underwrite the "Engineering is elementary" curriculum for 3rd-5th grade science classes	Lynn Roberson/Cindy Moss/Beth Perry/ Wayne Fisher	9/5/2007	6/15/2008
8.2	Work with Billingsville to appropriately add meaningful science experiences for students there.	Wayne Fisher	6/15/2007	6/15/2008
9.0	**Create and implement the use of formative assessments for CMS K-12 teachers of science and math**	Chris Triolo/Bill Scott Banti Workalemahu	9/5/2007	6/15/2008
9.1	Provide instruction on appropriate formative assessments to lead teachers, AFs, and Math facilitators	Chris Triolo, Bill Scott, Ormond Cottle, Jeffrey Vincent, Tanya Shank,	9/5/2007	6/15/2008

		Kathleen Koch, Wayne Fisher, Barb Bissell		
9.2	Create timeline and action plan for revising and creating CMS assessments for February and November 2008 in math grades 3-8 and in science grades 5 and 8	Cindy Moss	9/5/2007	10/5/2007
9.3	Form committees of master teachers to write assessments for 5th grade science, 8th grade science, and 6th-8th grade math	Bill Scott, Ormond Cottle, Jeffrey Vincent, Barb Bissell, Chris Triolo, Tanya Shank, Kathleen Koch, Wayne Fisher	9/5/2007	11/5/2007
9.4	Form committees of master teachers to review CMS assessments for 5th grade science, 8th grade science, and 6th-8th grade math	Ormond Cottle, Kathleen Koch	10/5/2007	12/5/2007
9.5	Present current assessments in science and math to Math Facilitators, Academic Facilitators, Lead Teachers, and Dept chairs for review	Ormond Cottle, Tanya Shank	9/15/2007	11/15/2007
9.6	Submit CMS tests for 6th-8th grade math, 5th and 8th grade science to Assessment Office for editing and printing	Ormond Cottle, Kathleen Koch	12/5/2007	12/20/2007
9.7	Form teams of master teachers to write CMS mid-terms for high school math and science courses	Bill Scott/Chris Triolo	10/5/2007	2/2/2008
9.8	Form teams of master teachers to review CMS tests for high school math and science courses	Bill Scott/Chris Triolo	11/5/2007	2/2/2008
9.9	Submit CMS tests for high school science and math courses to Assessment Office for editing and printing	Bill Scott/Chris Triolo	3/1/2008	3/15/2008
10.0	**Collaborate and communicate with appropriate CMS departments to ensure science and math classrooms have adequate infrastructure and resources**	Chris Triolo/Bill Scott/David Foxx	12/15/2007	3/3/2008
10.1	Meet with Sandy Fish to verify Materials Standards Inventory Lists	Chris Triolo/Bill Scott/David Foxx	12/15/2007	3/15/2008
10.2	Meet with department chairs to discuss and explain MMIS process	Chris Triolo/Bill Scott Inventory Dept	10/10/2007	12/15/2007
10.3	Create process for department chairs to monitor their equipment and material needs to order	Chris Triolo/Bill Scott/ David Foxx	10/15/2007	12/15/2007

	appropriately			
10.4	Communicate with K-12 principals about materials and infrastructure needed for science and math instruction	Cindy Moss/Bill Scott/Louise Jones/Phil Cauthen	11/15/2007	2/15/2008
11.0	**Collaborate with community organizations (working with Chamber of Commerce) to create meaningful partnerships**	Cindy Moss/ Lynn Roberson	9/5/2007	6/20/2008
11.1	Meet with Charlotte Area Science Network (CASN), Charlotte Chamber of Commerce and subgroups, local businesses, CPCC, and local universities to discuss needs in science and math	Cindy Moss	9/5/2007	7/7/2008
11.2	Create streamlined process for community/businesses to provide experts at the appropriate time and place in schools	Lynn Roberson/Cindy Moss/ Elizabeth Bennett	9/5/2007	6/30/2008
11.3	Create streamlined process for school-based personnel to request outside experts in their classrooms	Lynn Roberson/Cindy Moss/Elizabeth Bennett	9/5/2007	6/30/2008
11.4	Create training for science and math professionals to assist with classroom instructions, projects, Science Fairs, science and math competitions, etc	Lynn Roberson/Cindy Moss/Bill Scott/ Elizabeth Bennett	10/6/2007	6/30/2008
11.5	Create STEM Career Family nights for each Learning Community	Cindy Moss	9/5/2007	5/15/2008
11.6	Expand the relationship with Discovery Place to increase opportunities for student field trips and teacher professional development	Cindy Moss	12/6/2006	8/15/2008
11.7	Expand the relationship with Carowinds to increase opportunities for students and teachers to see how math and science are used in everyday life.	Cindy Moss	3/15/2007	8/15/2008

11.8	Plan monthly breakfasts of community stakeholders to discuss needs of science and math teachers and students	Cindy Moss	9/5/2007	8/10/2008
11.9	Work with Andy Papathaniuos at NC Motorsports Assoc to plan teacher in-service and student learning opportunities	Cindy Moss	9/1/2007	8/30/2008
11.10	Create, schedule, and publicize Science and Math Family Saturdays	Kathleen Koch	9/5/2007	6/20/2008
12.0	**Plan/initiate Study and Travel program (with college credit) for science and math students completing 4 science and 4 math courses during high school**	Cindy Moss David Royster	9/5/2007	6/1/2008
12.1	Develop/distribute guidelines for students to qualify for the trip West-Harding, North-Hopewell, Northeast-Vance, East-Independence, South-Providence, Central-Myers Park	Chris Triolo/Bill Scott Karen Thomas	9/5/2007	10/5/2007
12.2	Develop partnership with CMSTE (Center for Math, Science, and Technology Education) at UNCC to provide college credit for the experience	Cindy Moss David Royster	5/5/2007	8/1/2007
12.3	Develop fund-raising plans for school based use	Cindy Moss	8/10/2007	8/10/2008
12.4	Develop plan to rollout this opportunity to all CMS high schools for 2008-2009 school year	Cindy Moss/Louise Jones/Phil Cauthen	2/2/2008	3/3/2008
13.0	**Create and initiate the 9th grade Earth/Environmental Science Global Technology Project**	Cindy Moss Kathleen Koch	9/5/2007	2/2/2008
13.1	Meet with Duke Energy "Efficiency" group to develop curriculum	Cindy Moss Kathleen Koch	9/5/2007	6/5/2008
13.2	Train teachers on the curriculum and use of the technology	Cindy Moss Rob Corbin	6/10/2009	9/30/2008

13.3	Implement Global Technology Project in 9th grade Earth/Env Science Class	Chris Triolo Kathleen Koch	8/23/2008	6/10/2008
14.0	**Develop a CMS strategy to address algebra skills PreK-12**	Cindy Moss, Bill Scott, Ormond Cottle, Barb Bissell	9/5/2007	12/1/2008
14.1	Research the best possibilities for professional development to increase capacity of K-5 teachers of math	Barb Bissell, Ormond Cottle	9/5/2007	10/5/2007
14.2	Research the best possibilities for professional development to increase capacity of 6-8 math teachers	Ormond Cottle, Bill Scott	9/5/2007	10/5/2007
14.3	Research the best possibilities for professional development to increase the capacity of high school math teachers	Bill Scott, Jack Whittemore	9/5/2007	11/1/2007
14.4	Research the best possibilities to remediate Algebra 1 students who have failed EOC	Bill Scott, Jack Whittemore	9/5/2007	11/1/2007
14.5	Create an integrated plan to focus on Algebra skills preK-10	Bill Scott	9/5/2007	10/5/2007
14.6	Investigate financial resources to underwrite CMS Algebra plan	Cindy Moss, Bill Scott	9/5/2007	11/5/2007
14.7	Create and schedule Summer 2008 weeklong workshops for K-8 and high school teachers to provide them with best practices strategies to teach algebra skills.	Cindy Moss, Bill Scott, Ormond Cottle, Barb Bissell	10/5/2007	8/30/2008

Project Interdependencies and Impacts

Identify other projects and/or efforts that relate to, that affect, or may be affected by, the project being planned. Also, identify major organization groups, processes, standards, etc. that could affect, or be affected by, the project. Document each related project's (and/or other entity's) relationship to your project, the interdependencies among projects (and/or other entities), and a degree of impact of "High", "Medium" or "Low"

Projects/Efforts	Description of Dependency or Impact	Degree of Impact	Schedule Dependencies
Advanced Studies Project Charter	The Advanced studies SIT and the Science and Math SIT will work together to increase access to all Honors and AP/IB science classes.	High	Quality teaching and learning must occur in science and math in K-8 classrooms, so that high school students are prepared to take Honors/AP/IB classes and succeed.

Quality Employee Recruitment	Research has shown that the most important factor in student success is the quality of their classroom teacher. The decisions made by HR in hiring science and math teachers have a major impact on student achievement and performance	High	The quality of the teacher in science and math classrooms is the most critical factor in student success
Professional Development Charter	Research has shown that quality professional development that is valuable to teachers is a key tool to retaining teachers. Science and math teachers must have continuous professional development as science, math and technology changes at nearly the speed of light.	High	Science and math educators have many opportunities for employment and seek out quality professional development experiences. Teachers who feel they are given the ability to stay current in their field and form professional learning communities are most likely to remain the classroom and be successful.
Achievement Zone	The students in the Achievement Zone will need high quality science and math teaching and learning to be successful. The deliverables of the Science and Math Project Charter will be most important at the schools in the Achievement Zone.	High	Students in the K-8 schools of the Achievement Zone may be behind in reading and math, so working with the teachers and schools to integrate science, math, reading and writing will be critical to their students' success.
No Child Left Behind	With tests in math in grades 3-8, science in grade 5 and 8, 4 EOCs in high school science and 3 EOCs in high school math, achievement in science and math are critical to school's abilities to achieve their AYP.	High	The CMS culture must be one where ALL students receive quality teaching and learning experiences in science and math. That means that science and math teachers must work hand-in-hand with EC and ELL instructors to provide all students with the opportunity to master science and math concepts.

New Positions Required

Staffing Summary Resource Type	# of FTES	Duration	Hours	Budgeted (Y/N/Pending)
Director of Science and Math	1	Full time	Full time	Y
Elementary Science Specialist	1	Full Time	Full Time	Y
Elementary Math Specialist	1	Full Time	Full Time	Y

Project Conditions

Document any assumptions that could significantly affect the project.

Project Assumptions	Description
CMS will provide funding for materials and equipment needed to teach science and math.	Money is required on an annual basis to supply materials and equipment needed to teach the standard course of study.
Building administrators will schedule science and math in appropriate classrooms and for appropriate amounts of time.	Room assignments and blocks of time will be allocated to provide adequate facilities and time for quality science and math teaching and learning to occur.
Building administrators will work to provide technology resources for science and math teachers	Building administrators will facilitate the use of computer rooms, laptop carts, etc to provide science and math teachers and students with needed technology
CMS will provide funding for ongoing professional development to keep science and math teachers current in their content and pedagogy.	Science and math teachers will have the opportunity to participate in quality, ongoing professional development during their career in CMS.
CMS will provide safe working conditions for students and staff in science.	Building administrators will work to create schedules that only place science teachers in science rooms, and do not place non-science teachers in rooms with hazards. Building administrators will create and sustain site level Science Safety Committees to provide safe working conditions for students and staff.