# PEORIA CHARTER SCHOOL INITIATIVE

August 3, 2009

Ken Hinton Peoria Public Schools 3202 N Wisconsin Peoria, IL 61603

Dear Ken:

Enclosed is the Design Framework for the Math, Science and Technology Charter School from the Peoria Charter School Initiative. We look forward to working with you and others from District 150 as we refine and complete our planning for a charter school within District 150.

We'd be happy to meet with you or others from the District to discuss the Design Framework.

Sincerely,

Roberta Parks

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**PCSI Board Secretary** 



# Math, Science, and Technology Charter School

### **Design Framework**

Submitted to:
Superintendent Ken Hinton
Peoria Public School District 150
3202 N Wisconsin Avenue
Peoria, IL 61603

August 3, 2009

## **Executive Summary**

"Our children are falling behind; they are simply not 'world-class learners' when it comes to mathematics and science," said Senator John Glenn, Chairman of the National Commission on Mathematics and Science Teaching for the 21<sup>st</sup> Century in its report to the nation in 2001. The imperative for the U.S. is to increase its capacity for education, economic, scientific, and technology innovation. A January 2006 report of the National Science Foundation states: "If the U.S. is to maintain its economic leadership and compete in the new global economy, the nation must prepare today's K-12 students better to be tomorrow's productive workers and citizens. Changing workforce requirements mean that new workers will need ever more sophisticated skills in science, mathematics, engineering and technology....In addition, the rapid advances in technology in all fields mean that even those students who do not pursue professional occupations in technological fields will also require solid foundations in science and math in order to be productive and capable members of our nation's society." (Written statement of Dr. Warren M. Washington May 2, 2006.)

As part of a local effort to improve math and science education, the City of Peoria, through its Renaissance Park Commission, entered into a Memorandum of Understanding with the Peoria Public Schools - District 150 (D150) Board of Education to research and develop a project proposal for a Math, Science and Technology Academy in March of 2006. The Osher Lifelong Learning Institute at Bradley University (OLLI) agreed to form a study group to perform the research and report their findings. Between March and October 2006, they defined the problem, conducted local interviews, explored best practices, evaluated models and options, and developed and refined a set of recommendations.

Based on these recommendations, the District 150 Board of Education convened a group of community leaders, school administrators and parents in 2008 to evaluate bringing a charter school to Peoria. This group researched, evaluated, and visited charter schools across the country. Through their work came the recommendation for another choice option within D150 -- the Math, Science, and Technology Charter School (MSTCS). Please note: the charter school is not yet officially named and for convenience purposes will be referred to throughout this document as MSTCS.

Several of the individuals and organizations that were an active part of the group convened by D150 made the decision to apply for the charter to operate the MSTCS. They are forming a 501(c) 3 organization called the Peoria Charter School Initiative (PCSI). The design framework is being submitted by the PCSI Board of Directors.

The MSTCS is a grade 5-12, college-preparatory school that focuses on mathematics, science, and technology. The mission of MSTCS is to provide students with an innovative, world-class education – rich in math, science and technology, preparing them to become bold inquirers, problem solvers and ethical leaders. They will be skill-ready for post-secondary education and to meet the workforce needs of a global economy. MSTCS will be located in the City of Peoria and will serve any child within the

D150 boundaries regardless of their academic or socio-economic background. The pillars of MSTCS are:

- Rigorous College Preparatory Curriculum with Math, Science, and Technology Emphasis
- Personalized Education
- Higher Standards and Expectations
- Knowledgeable and Skilled Staff
- Data-driven Instruction through Ongoing Assessment of Learning
- Increased Student Engagement
- Increased Parent-School Relations
- Community Partnerships

MSTCS will use a standards-based, college-preparatory curriculum that focuses on mathematics and language arts at middle school level and math, science, and technology at the high school level. MSTCS will make sure that the curriculum is aligned to Illinois State Standards. High school graduation requirements will exceed the traditional public school in Illinois and will include community service hours as well as a senior thesis for all students.

In terms of pedagogy, the goal is not to subscribe to one teaching method but to have many successful teaching methods designed to maximize classroom learning. MSTCS believes in allowing teachers to teach in an environment that supports successful practices and strategies, so that each teacher can customize their instruction according to students' needs. The teachers will use a combination of the following instructional techniques: direct instruction, problem-based learning, project-based learning, and collaborative learning. Use of these techniques will provide an engaging, dynamic learning environment for students to explore the questions they have about the world. MSTCS will utilize a variety of instructional approaches to teach advanced concepts and thinking skills in both mathematics and science.

It is important to personalize education and relationships between teachers and students. MSTCS will hold clearly defined high expectations for academic achievement and conduct for all students regardless of background. By extending the school day, week, and year, students will have more time in the classroom to acquire the academic knowledge and skills that will prepare them for the nation's best colleges and the world beyond.

Higher standards and expectations will be reflected through grade promotion and graduation requirements and school-wide discipline policies. Students' participation in after-school activities and school-wide events are not only expected but mandatory in most cases. These high expectations and standards will be communicated to students, parents, and the larger community prior to enrollment and throughout each student's educational experience.

A comprehensive selection process for staff will allow MSTCS to hire teachers who understand urban education, embrace the program design at MSTCS and work to meet the needs of students at all times. The staff selection process will require demonstration lessons, classroom visits, online screening tests, comprehensive interviews, review of transcripts, referrals, and reference checks. The intent is to recruit teachers locally as well as throughout the state and nation to find high quality teachers with diverse backgrounds and experience. Staff will be supported with professional development opportunities, teamwork, and the adequate tools needed to maximize their teaching capacity. The organizational structure will treat teachers as professionals and include them in the decision-making process within the school. They will be given the autonomy to implement their own teaching methods and strategies with the expectation that their students will show progress throughout the year as measured by the interim assessments and nationally recognized norm-referenced tests.

MTSCS will engage students with many opportunities beyond the classroom. The staff will sponsor after-school clubs, math Olympiad teams, science project teams, and debate teams as well as after-school tutoring, and weekend classes for students who need extra help. MSTCS will also organize local, national and even international trips for students, parents, and staff members. Through community partnerships with businesses, colleges/universities, and other interested organizations and individuals, the students will participate in apprenticeships and internships, providing them with authentic opportunities to conduct research, gain technical experience, and participate in career exploration.

MSTCS will open in the fall of 2010 with grades 5, 6, and 7, and add one grade level each year through 2015. By the 2015-2016 school year, MSTCS will complete its growth, serving a total of 600 students in grades 5 through 12. The first year estimated operating budget will be approximately \$2.2 million and will increase each year as new grades are added. Through strategic budgeting and financial management, MSTCS will be able to attract and retain high quality teachers by providing average salaries that are comparable with D150. Additionally, through collaboration with D150, the charter school will be housed in a District property, thereby eliminating the expense of rent or mortgage payments.

The PCSI Board of Directors consists of individuals with diverse expertise and backgrounds and one common characteristic – their impressive commitment and service to Peoria. The team has a wealth of experience spanning education, government, business and community development. The PCSI Board of Directors will conduct a nationwide search for school administrators with start-up experience who will be instrumental in bringing the vision to reality.

In order to meet the deadline of an August 2010 opening and to insure outstanding programming and establish a track record of success, PCSI is currently investigating purchasing services from a high quality charter management organization. If this option is selected, PCSI will seek a management organization with following qualities:

- not-for-profit organization
- a proven successful model of college preparatory education that focuses on math, science, and technology
- excellent record of high college acceptance, as well as high graduation, attendance, and retention rates of students
- high levels of teacher retention and performance
- clear understanding of local control by PSCI Board of Directors.

Regardless of which option is selected, MSTCS will be a strong asset to Peoria and strongly connected to the needs and interests in the community. In addition to the existing high quality choice opportunities that currently exist in D150, MSTCS will be yet another option for parents and students.

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#### **Education Plan**

#### A-Curriculum

MSTCS will implement a standards-based, college-preparatory curriculum focused on mathematics, science, and technology that gives the staff flexibility to implement various teaching methods that address needs of all students. School administrators will meet regularly with all teachers to gather important classroom-level feedback. This will ensure that the curriculum is modified in a timely manner according to the identified needs of the students. Students lacking grade level skills will be provided with the necessary academic support. Please refer to Section B, School Culture and Climate for more details.

The emphasis of the MSTCS curriculum will be on mathematics and language arts in grades five through eight. This focus will continue into high school but MSTCS will also have strong science and technology components as part of the high school curriculum. Grades five through eight will spend more time studying mathematics and English (reading, writing, and grammar). The high school curriculum will offer a variety of electives in math, science, and technology in addition to a core curriculum sequence that will include more math, science, and technology requirements than is found in more traditional public schools in Illinois. Below is the middle school sequence with total weekly instructional time:

3	
Mathematics	450 minutes a week (90 minutes a day)
Language Arts	450 minutes a week (90 minutes a day)
Science	225 minutes a week (45 minutes a day)
Social Studies	225 minutes a week (45 minutes a day)
Art	135 minutes a week (3 times a week of 45 minutes)
Computer	135 minutes a week (3 times a week of 45 minutes)
Physical Education/Health	135 minutes a week (3 times a week of 45 minutes)
Life Skills	45 minutes a week
Total	1800 minutes a week (45 minutes is one instructional period)

MSTCS students will be taking 90 minutes of mathematics a day in grades five through eight. The extra time that students will spend on math will allow them to take Algebra I in grade eight. Qualifying students will earn high school credit and start with Geometry in their freshman year.

The Language Arts curriculum will utilize a theme-based structure which will focus on both traditional language arts and on 21st century literacy skills. The school year for each grade will be divided into four distinct theme-based units and will include literature that addresses each specific theme. Additionally, teachers will also be encouraged to bring in other media that relate to the theme, especially media related to new technologies and real world experiences. The intent will be to move beyond the English/Language Arts (ELA) standards through a relevant and dynamic curriculum that meets the students where they are culturally, technologically, and academically. A snapshot of the major subjects within the curriculum as well as thematic units at the middle school level is provided in Appendix B.

The computer curriculum at the middle school level will consist of keyboarding, internet research, Microsoft applications, desktop publishing, basic programming, web design, and internet publishing. Students in grades five through eight will take computer classes in the computer lab taught by a computer teacher. There will be a high level of collaboration between computer teachers and subject teachers in order to integrate computer technology into content areas. Teachers will collaborate in grade-level team meetings.

MSTCS curriculum will not only be aligned with the Illinois State Standards but will go beyond this required level and align to the College Readiness Standards, a college-prep set of standards created by ACT. Alignment and implementation will be monitored systematically by curriculum mapping. Curriculum mapping will help to ensure that the curriculum spirals upward from early grades through high school. The curriculum of MSTCS will be mapped using four categories: skills, strategies, content, and testing. Comprehensive mapping will ensure that students are receiving a powerfully scaffolded and deliberately sequenced curriculum designed to maximize student achievement across grade levels. The spiraling curriculum will eliminate redundancies, balance the genres and content that students are exposed to, and allow students to apply the skills and strategies that are most critical to their success.

The high school graduation requirements will exceed a traditional public school in Illinois and include community service hours as well as a senior thesis. The high school curriculum will be designed in a way that each MSTCS student will graduate with at least pre-calculus in math and physics in science. Electives in science and mathematics, including zoology, genetics, microbiology, astronomy, organic chemistry, statistics and trigonometry, will provide additional opportunities for students to excel in science and math. MSTCS will offer electives in areas beyond science and math that address a large spectrum of interests. These electives may include African American and/or Latino History, International Studies, Economics, Graphic Arts, and Computer Networking. Below are the high school graduation requirements of MSTCS:

4.0 credits Mathematics	1.0 credit Physical Education			
5.0 credits English	1.0 credit Fine Arts			
4.0 credits Science	1.0 credit Computer Technology			
3.0 credits Social Studies	1.0 credit College-Career Pathways			
12 II Credite World I andilade	5.0 credit Electives (1 credit must be in Computer Technology)			
40 hours Community Service	Senior Thesis			
Total: 27 Credits (1 credit is 225 minutes of instruction per week, total of 150 hours in a year.)				

The MSTCS high school curriculum will include unique classes such as ACT/SAT prep and College Path for juniors and seniors to prepare them for college entrance exams and the application process. College Path walks students through the process of apply to colleges, applying for scholarships, writing essays, and interacting with college admission officers, professionals, college students and others. Writing will also be incorporated into the high school curriculum.

MSTCS has identified Project Lead The Way as a critical component of the educational experience for the students. It is hoped that MSTCS will implement Project Lead The Way (PLTW) at both high school and middle school levels but at this point that is still dependent upon funding. Project Lead The Way is a nationally recognized program that works to build future generations of successful engineers and technologically-savvy graduates. PLTW recently received the National Education Commission of the States award in June 2009. PLTW is a series of middle and high school courses that are project-centered, problem-based and technology-integrated, preparing students to excel in high-tech fields. According to an evaluation by High Schools That Work, PLTW students scored significantly higher in both mathematics and science high school assessments. The National Center for Education Statistics 2006-07 True Outcomes report explains that students who participate in PLTW are five times more likely to graduate college as science, technology, engineering and mathematics (STEM) majors than those who do not. MSTCS will implement Gateway to Technology, which is the middle school curriculum of Project Lead The Way beginning in grade six. The Gateway to Technology program consists of five nine-week units, which will be embedded into the science, mathematics and computer curriculum.

The curriculum will bring together best-practices in math and science education, helping to achieve the goal of empowering students with high intellectual standards as they prepare for college, careers and citizenship in the global economy. Teachers will teach in an environment that supports their successful practices and strategies so that each teacher can customize instruction according to students' needs. The teachers will utilize a unique mix of the following instructional strategies:

- Direct instruction a systematic way of planning, communicating, and delivering a mastery of information in the classroom. In direct teaching, the teacher transmits to students what is known via the teacher, a book, a video or other repository of knowledge.
- Problem-based learning an educational approach that organizes curriculum and instruction around carefully crafted problematic situations adapted from realworld issues. Learners are encouraged to gather and apply knowledge from multiple disciplines in their quest for solutions.
- Project-based learning a model for classroom activity that shifts away from the classroom practices of short, isolated, teacher-centered lessons and instead moves to learning activities that are long-term, interdisciplinary, student-centered, and integrated with real world issues and practices.
- Collaborative learning when two or more students work together to solve problems and complete tasks. Examples of collaborative learning techniques include think-pair-share and three step interview.

#### **B-School Culture and Climate**

MSTCS will personalize education by supporting the development of meaningful, sustained relationships among teachers, students, and parents. This means setting clear, coherent goals and expectations that are well communicated to students and parents and providing opportunities for students to complete real-life, meaningful projects.

Incoming students will be admitted regardless of their test scores or previous academic or behavioral history. The only admission requirements for the school will be the students' and parents' willingness to make a commitment to education and residency within the D150 boundaries. This first commitment plays an essential part in establishing the culture within the school and the likelihood of student success.

School design will be able to meet the needs of students with different academic backgrounds. The overarching philosophy of MSTCS will be that intelligence is not an innate ability; rather that achievement is the outcome of effort, which is driven by motivation. Therefore, academics will be augmented by rich and meaningful extracurricular activities to motivate students and encourage positive attitudes toward schooling and education. A positive school culture in which success is recognized and celebrated will play a key role in the success of MSTCS students.

Due to the non-selective nature of charter schools, it is anticipated that many students will be below their grade level academically upon entering. The school model will have academic support or safety net programs, such as after—school, one-on-one or small-group tutoring, Saturday classes, pull-out programs, and peer tutoring. Students will be strategically placed in such programs based on their needs and academic weaknesses. Ongoing assessments of learning and data-driven instruction will be a key component in

the school design. Interim assessments will be administered every six to nine weeks and data analysis will allow the teachers to alter instructional strategies and place students in support programs as necessary. Each teacher will know exactly how much their students have learned and what skills the have mastered.

Teachers will work together in teams to plan lessons, analyze data and develop strategies to increase student learning. The entire staff – teachers, administrators and support personnel – owns the success of all students at MSTCS. Qualitative studies support the direct correlation of data-driven instruction, collegial relationships, and productive teamwork to student achievement. MSTCS will incorporate the best practices of successful schools in urban environments.

#### The core features of MSTCS will include:

- Personalization Through personalized relationships each student will have daily, individualized support for achieving milestones toward their own goals and the schools goals.
- Building Relationships -The mentorship program will support students and allow strong relationships to develop. Furthermore, the middle school will serve as a feeder to the high school thus helping to maintain relationships. Through these ongoing relationships the focus will be on graduating students who think critically and creatively and who are committed to a lifetime of learning and civic involvement.
- High Standards and Performance-based Assessments MSTCS will hold clearly
  defined high expectations for academic achievement and conduct for all students
  regardless of background. Students, parents, teachers, and staff will create and
  reinforce a culture of achievement and support through a range of formal and
  informal rewards and consequences for academic performance and behavior.
  With an extended school day, week, and year, students will have more time in
  the classroom to acquire the academic knowledge and skills that will prepare
  them for competitive colleges.
- Adaptive Pedagogy Through individualized learning, multiple instructional strategies and smaller class sizes, MSTCS will expect students to achieve a level of academic performance that will enable them to succeed in the nation's best colleges and the world beyond.
- Knowledgeable and Skilled Teachers MSTCS will recruit highly qualified content area teachers that will be among the brightest and most talented in their field. They will demonstrate skills in technology so they can infuse it in their curriculum area. Many will have advanced degrees and understand the multifaceted needs of different learners.

- Collaborative Planning and Professional Development Curriculum integration will be fostered through professional development, team-teaching, and gradelevel collaboration.
- Family and Community Connections Students, parents, and faculty will be a
  part of a school culture that fosters strong communication between school and
  families. Everyone will make and uphold a commitment to the school and to each
  other to put in the time and effort required to achieve success. Such commitment
  could include events such as Annual Community Breakfasts, International
  Dinners, Parent-Teacher Organizations, and student-centered activities
  organized by the school.
- Home Visit Program MSTCS will have a home visit program that will provide an
  opportunity for the school, family, and local social service agencies to work
  together to ensure the success of all students.
- Authentic Curriculum The standards-based curriculum blends direct instruction, project-based learning, collaborative learning, and problem-based learning, to bring relevance to learning.

Use of these techniques reflects core beliefs in providing an engaging, dynamic learning environment for students to explore the questions they have about the world and ways to positively give back to others. MSTCS will utilize a wide range of instructional approaches to teach advanced concepts and thinking skills in mathematics and science, as well as other disciplines. Technology will be infused throughout the curriculum. .

- 1. The culture and climate of the school incorporates five essential attributes. They are: Focus on student achievement MSTCS will have a laser-like focus on student achievement and work relentlessly to help students excel in the classroom, on standardized tests and other objective measures.
- 2. High Expectations Students, parents, teachers, and staff create and reinforce a culture of achievement and support, through a range of formal and informal rewards and consequences for academic performance and behavior.
- 3. Commitment Students and parents will select MSTCS as a <u>choice</u>. Because of the lengthened school day and year and the high standards that the curriculum will require, the commitment of parents and students will be critical to the students' success.
- 4. Determination There are no shortcuts when it comes to success in either MSTCS or life. Teachers will do what needs to be done with students to help them be successful. With extended school day, week, and year, students will have more time in the classroom to acquire the academic knowledge and skills that will prepare them for competitive colleges, as well as more opportunities to engage in diverse extracurricular experiences.
- 5. Involvement Successful schools require great student and parent involvement. Parents and teachers should expect to participate in helping students learn

through projects, competitions, trips, educational camps, and all other school-related activities.

A positive school culture and climate will be created and sustained through professional development, curricular collaboration, a strong academic team, community partnerships, and personalized instruction.

MSTCS will have academic support programs in place to assist students with weak academic backgrounds. In order to support their learning and meet their needs, MSTCS will have the following academic support programs in place:

- After-school tutoring
- Saturday school
- Pull-out programs

- Summer programs
- Peer tutoring

Safety, order, and student discipline will be fundamental to learning at the MSTCS. While students need a challenging curriculum, dedicated teachers, and proper materials, a safe and secure learning environment will be a top priority. School administration and staff will be responsible for maintaining discipline and safety at MSTCS.

MSTCS will implement a school-wide discipline policy that reflects high expectations and values. Staff will be trained on the school-wide discipline policy in order to provide students with consistency. The discipline policy will be detailed and address issues most likely to happen in schools. This policy will be communicated to all parents and students before the school opens through small group meetings.

The student handbook will include all disciplinary procedures such as detentions, suspension, expulsion, appeal to suspensions and due process as well as parents' and student's rights. MSTCS will apply thoughtfulness and due process procedures for all of its students. Different due process procedures will be articulated for students with disabilities. MSTCS will stay apprised of the current legislation and will commit to staying in compliance with any federal law regarding student discipline for children with disabilities. The student handbook will also include an acknowledgment page that all parents and students sign and return to the school within the first week of school.

All MSTCS students will be required to wear uniforms. The uniform will consist of branded school shirts with an option of khaki or navy blue pants. School shirts will be available for sale from the school (estimated to be \$12 - \$15). Khaki pants or skirts can be purchased at any clothing store. Students scheduled to enroll in the school who can not afford to purchase the school shirts will be able to request assistance. When such request is granted, MSTCS will provide uniforms.

#### C-Benchmark Assessment Systems/School-wide Data

MSTCS will establish both long and short term goals at the beginning of the school year. Progress will be reviewed quarterly and will be evaluated at the end of each year and again after five years. The short and long term goals will be specific to students,

parents, teachers, board, administrators and partners at MSTCS – the primary stakeholders in the school's academics, operations, and community.

The goals in the first year will differ from those in subsequent years to the extent that the first year will be focused on establishing a structure, routine, and system for operating the school that works to achieve long-term goals. The emphasis in the first year will be on establishing a recruiting process for students, preparing the building facility, hiring the staff, fine-tuning the board and management structure of the school, and most importantly, establishing a positive school culture that reflects the school design.

MSTCS will use a combination of diagnostic, authentic, state-mandated, standardized tests, as well as nationally-recognized, norm-referenced assessments to measure the school's goals and students' progress over time. These will include:

- Northwest Education Association (NWEA) Measure of Academic Progress (MAP)
- Pre-SAT and ACT as part of PSAE
- ISAT and PSAE
- KTEA: Kaufman Test of Educational Achievement for special education students
- Interim Assessments that mirror the ISAT and PSAE as authentic assessment

NWEA MAP tests are state-aligned computerized adaptive tests that accurately reflect the instructional level of each student and measure growth over time. MAP tests provide highly accurate results that will be used to:

- Identify the skills and concepts individual students have learned
- Diagnose instructional needs
- Monitor academic growth over time
- Disaggregate data for students as a group and subgroups
- Make data-driven decisions at the individual, classroom, grade and school
- Place new students into appropriate instructional programs

The Pre-SAT (PSAT) is a standardized test that provides practice for the SAT Reasoning Test. It also gives the students a chance to enter National Merit Scholarship Corporation (NMSC) scholarship programs. The PSAT measures critical reading skills, math problem-solving skills, and writing skills. Students will take the PSAT to receive feedback on their strengths and weaknesses relating to the skills necessary for college study. This will serve as a guide to the students' preparation for college.

MSTCS students will take the ACT as part of the PSAE, the mandated test administered to all grade 11 students in Illinois. The ACT assesses high school students' general educational development and the ability to complete college-level work. The multiple-choice tests cover four skill areas: English, mathematics, reading, and science. The Writing Test, which is optional, measures skill in writing a short essay. MSTCS will

organize summer and winter ACT Camps and Saturday ACT classes. MSTCS students will take sample ACT tests in grades 9 through 11 to monitor progress.

The required ISAT tests in grades 5 through 8 and PSAE in grade 11 will be analyzed each year to determine the strengths and weaknesses of the students. Such test results will play an important role in determining which students will receive additional academic support and any needed adjustments to curriculum and/or instruction.

MSTCS will work with area colleges and universities to identify graduate students, university professors, and specialized consultants in the field of middle and secondary mathematics and science education to assist with the evaluation plan for school performance. The MSTCS instructional and administrative staff of the school will utilize their expertise to monitor school performance as well. They will have the opportunity to collaborate with external researchers and specialists to gather formative and summative feedback on their performance relative to how the school is achieving its goals.

Besides the academic data, MSTCS will collect data and assess the school's performance against the following:

- Student and teacher attendance rates
- Parent teacher conference attendance rate
- College acceptance rate
- Teacher retention each year
- Transfer rate

- Drop out rate
- Suspension rate
- Retention rate
- Scholarship awards
- Stakeholder satisfaction

#### **D-School Year**

Compared to a traditional public school with 180 instructional days and 5.5 hours students spend in school, MSTCS students will spend almost 33% more time in school. MSTCS will have 200 instructional days in the school year. The students will also have longer school days. The typical school hours will be from 8:00 a.m. to 3:20 p.m. MSTCS students will have 45 minutes of after school clubs, one-on-one tutoring, and special interest activities such as math Olympiad team, science fair teams, and debate teams.

The impact that MSTCS will have on the lives of students will be even greater when most students stay and participate in after school clubs and tutoring, special interest activities, trips, and weekend activities. MSTCS will be a big part of the students' lives.

Additionally, MSTCS will have four parent-teacher conferences in a year. To accommodate parent schedules, the teachers will be available on Saturdays for parent conferences. Staff will report to school two weeks before the school starts every year. They will have professional development opportunities, team building activities, and prepare for the school year.

MSTCS will develop a school calendar for the 2010-2011 school year and communicate it to parents and students well in advance. In the development of the calendar consideration will be given to the D150 calendar to try to alleviate any conflicts for families and staff with children in the traditional D150 schools.

#### E- Professional Development

Professional development plays a critical role in establishing a school culture where learning is valued. Creating collegial relationships between and among the staff shifts the focus on teaching and learning to <u>all</u> members of the school community. Three types of teams at MSTCS that foster collegial relationships are:

- Grade Teams -- teachers who teach the same grade collaborating across disciplines and focusing on individual students
- Subject/Instructional Teams -- teachers who teach the same subject, focusing on best practices and curriculum
- Leadership Teams -- administration, grade team leaders, and instructional team leaders, focusing on school academics, atmosphere and upcoming events

Each team will have prescribed agendas for their meetings which will take place on a regularly scheduled basis. Teachers will share best practices, bring educational articles, observe each other in the classroom, and analyze student data together. These meetings will be effective in establishing collegial relationships and mutual respect among the faculty.

Additionally, current professional publications, books, and videos regarding innovative educational methods will be made available to faculty and staff. Faculty and staff will also be provided opportunities for study, travel, workshops and conferences, and teacher exchanges. The school will also partially reimburse teachers for tuition that furthers their development as teachers.

Some of the professional development will take place two weeks prior to the start of school. This program will be called MSTCS Summer Teacher Institute. Teachers at the Summer Institute will understand the educational philosophy, goals, and vision of MSTCS. Staff will spend time on team building, discussing research, sharing ideas, and developing values that will be acted on throughout the school year. A significant portion of the Summer Institute will be dedicated to teachers working in teams preparing their annual plans and lesson plans for upcoming year.

During the school year one day of every other month will be designated for professional development. MSTCS teachers will use these days to work with field experts and each other with the goal of improving overall student achievement. MSTCS will have a professional development committee that consists of teachers who will work with the school administration to develop an effective professional development plan for the school. It is anticipated that MSTCS will also collaborate with area colleges and universities for professional development.

MSTCS will share their best practice successes with other schools and teachers within D150. This can be done through joint professional development and other means where appropriate.

#### F-Parental Involvement

MSTCS recognizes the importance of parental involvement in the education of the students and the learning community. At MSTCS, the belief is that involving parents more often and more productively requires changing the location of some of the parent involvement from the school to the home, the emphasis from general policies to specific skills, and the focus from the general population of students to the individual child.

MSTCS is committed to the use of technology at the highest level possible to help in engaging and involving parents in their children's education and the school. The school's website will provide information and online presentations. It will also have frequent surveys and polls designed to solicit parent opinions regarding issues important to the school and the students. This site will be a resourceful and functional place that provides parents and students with in-depth coverage of school events, student progress, daily assignments, class notes, and useful links. MSTCS will also use an online student information system (such as Power School) that will give parents online access to classroom records such as homework, assignments, current grades, and attendance and discipline records. MSTCS will educate parents about this system on an ongoing basis, provide training for parents to help them get maximum value from the system, and open the school's computer labs for use after school in case parents do not have access to the Internet at home.

MSTCS will organize four parent-teacher conferences in a school year. The parent-teacher conferences will be in the middle of each academic quarter so parents will have adequate time to work with their children to raise their grades if needed. Not all parents in the urban areas have the flexibility to take time from work to attend parent-teacher conferences. Therefore, teachers will be available on Saturdays to increase attendance at these conferences.

MSTCS will have an active parent teacher organization (PTO). The PTO will meet regularly and help the school increase parental involvement. They will also help the school as parents groups do across the country in organizing some fundraising activities. The PTO can also be of great assistance in recruiting new students by passing out flyers, spreading the news by word-of-mouth, and promoting MSTCS in the community, etc.

MSTCS will develop quarterly newsletters that include information and updates about the school. The newsletters will be printed in more than one language if needed. Newsletters will include updated calendars, highlights of successful students, teachers, and parents, reports on benchmarks and anything else that needs to be communicated to the parents.

Historically parents hear from the school about their children when something is wrong. MSTCS intends to change this trend and reach out to parents once a month. This outreach is the responsibility of the teaching staff. In grade teams, teachers receive an assignment to a set of students. Each teacher is then responsible to make a phone call to parents on his/her list once a month. This way every parent will get a phone call from MSTCS once a month. These calls will not be designed to deal with problems such as discipline. Certainly, should a parent need to be contacted about these types of issues a call or direct contact will be made, but that would be in addition to monthly calls.

MSTCS also realizes the important role the schools in urban communities play in educating the whole family. Therefore, there will be a series of classes, workshops, seminars, conferences, and training for parents under a Parent University program. Parent University will include seminars on parenting, communication, education, economics, health, technology training, computer classes, ESL classes and more. As parents and families identify needs or interests, MSTCS will attempt to address them. MSTCS staff or other local experts will be invited to lead or teach these programs.

MSTCS will organize events to recognize the parents and show them that they are valued at MSTCS. These events may include Mother's and Father's Day celebrations and honor roll parent dinners.

MSTCS will also organize home visits. Each year a target group will be selected and visited by the school staff. The purpose of the home visit is to show the school's commitment to the parents and their children and to send a message of care and investment in their children. A visit packet will be given to the parent that includes information and updates about the school, articles of interest to parents and perhaps a book or other educational item as a gift for the student.

Probably the most effective tool to increase parental involvement at MSTCS will be the small group meetings with parents and students upon acceptance to MSTCS. School leaders will share the mission, policies, regulations, expectations, opportunities, and programs at the school with the parents and answer their questions.

#### G- Student Centered Learning

MSTCS highly skilled teachers will guide the students toward active learning, with a deep emphasis on learning and understanding. Students who take ownership of their learning are more motivated and see the relevance of learning, which all equates to higher student achievement. MSTCS embraces student centered learning as a strategy to increase student achievement and success. Students must discover their own learning style, understand their motivation to learn, and acquire effective study skills that will be valuable throughout their lives. To put this approach into practice at MSTCS, teachers will:

 Help students develop achievable goals and facilitate ongoing monitoring of progress towards these goals

- Act as a facilitator within the learning environment helping students develop full responsibility for his/her learning
- Help students work cooperatively in groups and ensure they know how to exploit all the available resources for learning
- Assist student learners to see himself/herself differently as a result of the learning experiences.

#### H-Math, Science, and Technology Component

The math, science, and technology components of MSTCS have multiple layers.

MSTCS students will be taking more mathematics than most traditional public school students. They will have 90 minutes of mathematics in middle school grades. Having more instructional math time will allow the teacher to integrate more hands on activities, use of manipulatives, and technology to ensure mastery. Teachers will also have more time to focus on each child thus personalize his/her instruction. Students will be able to ask questions and get assistance from their teachers. They will also have more time practicing, drilling, working in teams, and studying independently.

Math instruction at MSTCS will follow a traditional middle school curriculum sequence in grades five through seven. Then, all students will take Algebra 1 in grade eight. Students who meet certain criteria will earn high school credit for this class as well. Algebra 1 in grade eight will help students better transition to high school and be ready for a rigorous high school math curriculum.

MSTCS will prepare selected groups of students for regional, national, and even international math competitions such as Math Counts and Intercontinental Math League. Students will prepare for such competitions after school and on weekends. MSTCS will also celebrate mathematically significant days such as Pi day and also introduce famous mathematicians to students on bulletin boards and permanent posters around the school. These types of exposures and celebrations will make math more relevant to the students and part of the school culture. Students will be encouraged to do math projects for the annual project fair.

MSTCS high school students must have at least four years of math in order to graduate. Students will graduate with at least pre-calculus. Those who choose to excel in math will be able to graduate with AP Calculus credit. With Algebra I taught in grade eight it is assumed that most students will graduate with Calculus if not AP Calculus. In addition to the core math courses, electives such as statistics and trigonometry will be offered at the high school level.

MSTCS will have state of the art science labs with all the necessary equipment and technologies including smart boards. Science instruction will include many projects and hands on activities to engage all students. Project based teaching will be observed in

science more than any other subjects. The Gateway to Technology program, as part of Project Lead The Way, will primarily be integrated into science in grade eight. Project Lead The Way is project-centered, problem-based and technology-integrated. It prepares students to excel in high-tech fields and improve higher order thinking and problem solving skills. Project Lead The Way will be part of the high school program. Two of the Project Lead The Way courses will part of the science requirement for graduation as all students complete at least three courses of Project Lead The Way prior to graduation.

MSTCS will have number of science electives offered at the high school level. These could be in the fields of biology, chemistry, physics, zoology, genetics, botany, microbiology, organic chemistry, or astronomy.

MSTCS students will prepare and participate in local, state, national, and even international science fairs. As some students prepare for science fairs under supervision of MSTCS science teachers, others will be preparing under a professor or graduate students at local colleges, utilizing their labs and resources to work on more advanced level science projects. Professors and graduate students from local universities and professional scientists in the community will be invited to be judges at the MSTCS science fair that all students enter.

MSTCS will also seek partnership opportunities with both research and health organizations in the community to offer additional science classes as well as internships.

MSTCS staff will be aware of the technology trends that will have significant impact education and will strategically integrate them into the program. Increasingly, technology skills are critical to success in almost every arena. It is clear that those who are more facile with technology will advance while those without access or skills will not. Additionally the digital divide, once seen as a factor of wealth, is now seen as a factor of education. Therefore, biggest component of the technology program focuses on teaching MSTCS students technology skills. This will be done strategically across all content areas.

Teaching the technological skills across content areas will be done in the following six categories:

- Collaborative Environments, i.e. social networking platforms, community websites, classroom management systems, multiplayer gaming environments, or even virtual worlds
- Online Communication Tools, i.e. instant messaging, online conferencing, micro blogging platforms, and online broadcasting
- Mobiles, i.e. cell phones, global positioning devices, graphing calculators, and laptops

- Cloud Computing, i.e. flicker, Google, YouTube which are networked computers that distribute processing power, applications, and large systems among many machines
- Smart Objects, i.e. devices that use quick response codes and connected to larger information sources or interactive books and maps
- The Personal Web, i.e. personalized pages, blogs, and blackboard type online communication tools through which teachers can tag, categorize, publish and review work online

MSTCS will focus on including these six categories in the classroom to ensure student proficiency. MSTCS will have a dedicated position of Technology Coordinator to supervise and assist teachers in implementing technologies in teaching and learning. It will be the Technology Coordinator's responsibility to keep abreast with the latest technology, train the teachers, and monitor implementation.

#### I- Career Exploration Component

Research concludes that students with access to career information, resources and programs and who make the connection between academic coursework and future goals are more likely to:

- increase self-esteem
- demonstrate better school attendance and school achievement
- take higher level courses such as AP
- earn higher test scores on the ACT exam
- graduate from high school
- complete post secondary education
- succeed in the workplace.

MSTCS believes that weaving career exploration components throughout the curriculum design will result in greater student achievement, graduation rates and numbers of students entering post-secondary education. MSTCS will place an emphasis on teaching approaches to provide exploratory vocational/career/occupational learning experiences for middle and high school students along with making the connection between what he/she is learning in school to real-world situations. Students will participate in career assessments, linking achievement levels to identified career interests, goal setting, use of career speakers in the classroom, group and individual visits to job sites, job shadowing and internships. Career exploration will be a part of all instruction by relating skills being learned to skills needed in the real world.

#### K- Student Recruitment

MSTCS will serve 225 students during its first year (i.e., grades 5, 6, and 7, with 75 students in each grade). Each successive year, MSTCS will add one grade per year until grades 5-12 are fully represented at the school. In the 2015-2016 school year when

MSTCS is at full capacity, it will serve 600 students in grades 5-12. The growth plan of MSTCS is shown on the table below:

	Grade Levels	Total Student Enrollment
First Year	5-6-7	225
Second Year	5-6-7-8	300
Third Year	5-6-7-8-9	375
Fourth Year	5-6-7-8-9-10	450
Fifth Year	5-6-7-8-9-10-11	525
Sixth Year	5-6-7-8-9-10-11-12	600
Maximum	5-6-7-8-9-10-11-12	600

The MSTCS will actively disseminate announcements to the public through as many available routes as is practical, including (but not limited to):

- organizing open house meetings at the local community gathering places
- posting and distributing flyers in various communities
- attending community organizations' meetings of all kinds
- direct mailings
- visiting public and private elementary schools, after-school programs, youth and community centers, and business and civic organizations within the City of Peoria
- working through churches
- disseminating materials door-to-door
- utilizing local news and media resources

Just as the school experience will be highly personalized, it is important that the recruitment process also be personalized. The PSCI Board of Directors and others who are involved in recruiting students must reach out to meet students and parents where they are comfortable. Using the above methods will help ensure that the invitation to hear directly about MSTCS is widely circulated.

The MSTCS will use all the methods described above to help ensure that students of all races, languages, disabilities and abilities learn about the opportunities offered to children by the charter school. MSTCS does not discriminate against any students based on their academic ability, achievement level, athletic ability, disability, race, creed, national origin, religion, or on any other grounds.

#### L- Serving Specialized Population

Special education programs and services at MSTCS will be provided in accordance with federal laws and regulations as well as the student's Individualized Education Plan (IEP). MSTCS is currently in discussions with D150 about providing all special education services to the students. Obviously, MSTCS staff will still be involved in significant coordination functions as it is assumed that students will be mainstreamed as much as possible.

MSTCS will establish a special education committee including the D150 special education coordinator and teachers. Professional training and development for staff involved with the education of students with disabilities will include the following: referral process to the special education coordinator, development of a student's IEP, implementation of a student's IEP, evaluation of a student's progress toward meeting IEP goals and objectives, meeting reporting requirements to parents, and discipline of students with disabilities.

To the maximum extent appropriate, students with disabilities will be educated in regular classrooms with non-disabled students. Students with disabilities will have an equal opportunity with students in the regular education program to participate in nonacademic, extracurricular and ancillary programs, services, and activities.

A student suspected of having a disability will be referred in writing to the D150 special education teacher/coordinator for an individual evaluation and determination of eligibility for special education programs and services. Referrals may be made by any professional staff member of the school. A copy of such a referral, along with the procedural safeguards notice described in Federal Law, will be sent to the student's parents. Initial evaluations, re-evaluations and revisions of IEP's, and the procedures relating thereto are the responsibility of the D150 special education coordinator. The MSTCS will implement the IEP developed by the special education coordinator and committee for each student with a disability.

As required by IDEA, the student's regular education teacher will be involved in the development and implementation of a student's IEP, provided that the student is, or may be, participating in the regular education environment. MSTCS will ensure that the teacher is knowledgeable about the student's needs and will help implement any modifications or accommodation as determined by the Special Education Committee. Every teacher of a student with a disability will be provided a copy of the student's IEP and training will be provided by the special education coordinator, as needed, to ensure their understanding of the student's needs and his or her specific responsibilities related to implementing the student's IEP.

Students at the MSTCS with limited proficiency in English will achieve proficiency in the English language through the use of the school's services and teaching methods. If needed, MSTCS will hire at least one ESL certified teacher and will adapt staffing according to the student population. MSTCS will ensure that ELL (English Language Learner) students will not be excluded from curricular and extracurricular activities based on an inability to speak and understand the language of instruction. Any student suspected of having limited English proficiency will be tested to determine if and what level of services, if any, are necessary. Proficiency in the English language of an ELL student will be measured at least once in every semester utilizing standardized assessment tools to determine whether continued special services are warranted.

#### Leadership, Oversight, Staffing and Operations

#### A - Design Team Capacity

Based on the research conducted by the original group convened by D150 (the MST Advisory Committee) along with many other interested community, parent and educational (both K-12 and higher education) representatives, the PCSI Board of Directors has served as the design team. A significant amount of time has been spent visiting other charter schools and specifically other charter schools with a math, science and/or technology focus to better understand the characteristics that have resulted in highly successful schools. Additionally, research into best practices for MST and STEM schools has been conducted. This research has been used as the foundation to develop the design framework for MSTCS.

From that basic foundation and research, the PSCI Board of Directors led by Dr. Vicky Stewart, Dr. Cindy Fischer, G.M. (Mac) Pogue and Roberta Parks, have developed the design for the MSTCS and this design framework application. The PSCI Board of Directors will engage a diverse team of expert teachers, business representatives, scientists, parents, university professors, and D150 representatives to work over the next two months to refine and enhance the design for the final application. That work will ensure that MSTCS represents the needs and expectations of the diverse community.

#### **B- Oversight**

The PCSI Board of Directors is responsible for providing oversight, governance and policy making decisions for the school, being accountable to the Peoria Public School D150 Board of Education for agreed upon outcomes. The PSCI Board of Directors will hold the charter for MSTCS.

The PCSI Board of Directors will consist of a diverse group of local community leaders with a variety of backgrounds and experiences. PCSI will be governed by a 6-11 member Board responsible for upholding the mission of MSTCS. The PCSI Board of Directors, like the board of any non-profit organization, has the responsibility to set policy, monitor and hold oversight on all financial matters relating to the school, and hire the chief staff person, in this case the principal/school leader. The Board protects the public interest and upholds the public trust by applying the highest standards of service in governing the school according to its by-laws, the charter contract, and relevant state and federal statutes. It is the duty of the Board of Directors to oversee overall operations of the school, decide on major policy matters (including the school's strategic plan and operating budget), elect new board members and officers, approve committees, appoint all staff with recommendations from the principal/school leader and appoint and evaluate the principal of the school.

The Board of Directors assesses the performance of the school as a whole according to internal and external accountability goals. When appropriate, Board members will respond to opportunities to make personal and organizational resources and talents

available for the benefit of the school. In order to successfully undertake all these responsibilities, the Board will organize, manage, and assess itself in an efficient, business-like manner.

The PCSI Board of Directors will likely form an advisory board. The Advisory Board would be a diverse group of volunteers that offers advice and counsel to the PCSI Board of Directors. They would provide counsel on various aspects of school development and implementation and recommend resources to support the mission of the school. Advisory Board members must believe in the school's mission and stay apprised of its progress in achieving its goals. They will not make policy decisions as that right is reserved for the Board of Directors. However, the Board of Directors may receive counsel from the Advisory Board when it is needed. It is anticipated that representatives from organizations with partnerships may serve on this group along with other community leaders and interested citizens.

#### C-Leadership

The following individuals are the PCSI Board of Directors. They represent a significant range of personal expertise and community involvement.

**Glen Barton** is the retired chairman and chief executive officer of Caterpillar Inc. in Peoria, Illinois. He retired from Caterpillar on January 31, 2004. He joined the company as a college graduate trainee in 1961. He held numerous marketing and general management positions throughout the world during his 43-year career, prior to being elected Chairman and Chief Executive Officer in February 1999.

Barton, a native of Alton, Missouri, graduated from the University of Missouri-Columbia in 1961 with a bachelor's degree in civil engineering. He completed the Stanford University Executive Program in 1977. He serves on the Dean's Engineering Advisory Council, University of Missouri-Columbia. He is on the Valmont Industries and Newmont Mining Corporation Board of Directors. Barton was a member of the President's Export Council, and has served as a Global Advisor to The Conference Board, and as a trustee of the Malcolm Baldridge National Quality Award Foundation. He was also a member of The Business Council, The Business Roundtable, and the Illinois Business Roundtable. He is the past Chairman of the Peoria Civic Federation and was a founding director of Peoria NEXT.

Barton is the chairman of the PCSI Board of Directors.

**McFarland A. Bragg II** is the president and CEO of the Peoria Citizens Committee for Economic Opportunity, Inc. (PCCEO), a Community Action Agency serving Peoria County. He has been in his position for fifteen years and in his profession for thirty-three years. His role as President and CEO involves providing leadership and management to an organization that employs approximately 210 individuals. PCCEO manages twenty different contracts totaling over \$14 million dollars in federal, state, local and private funds. Through these contracts, the agency is able to provide human

and economic development services to its constituents. Mr. Bragg is responsible for carrying out the objectives of a strategic plan and delivering on the contracts his organization manages.

Community Involvement: Mr. Bragg is actively involved in the community as chair of the African American Leadership Alliance, vice president of the Illinois Association of Community Action Agencies and chair of the Illinois Community Action Development Corporation. He serves as board member of the Central Illinois Workforce Network and Peoria Area Chamber of Commerce. He is a past chair of the Boys & Girls Clubs of Peoria and member of the Alpha Phi Alpha Fraternity, Inc.

Bragg is the vice-chairman of the PCSI Board of Directors.

**Cindy Fischer** is the former Associate Superintendent for Peoria Public Schools, having served D150 as a teacher, principal, and Director of Career and Technology. She retired in 2008 following a 34 year career with the District. In her last two years as Associate Superintendent she had the opportunity to work with community leaders and educators researching choice schools and in specific, those focused on math, science and technology. She holds an Ed.D degree from Illinois State University in Educational Administration.

Dr. Fischer is an active community volunteer. She has served on boards and volunteer leadership positions for Peoria NEXT, Pediatric Resource Center, Heart of Illinois United Way, Salem Lutheran Church, Illinois Coalition for Education of Children At-Risk, Easter Seals, WTVP/47, Workforce Development and Renaissance Park Commission. Fischer is the past recipient of the Outstanding Young Educator from the Peoria Jaycees, Illinois State Board of Education Award of Excellence, National Dropout Prevention Network Truancy Prevention and Alternative Education National Award, YWCA Arts and Education Leadership Award, Paul Harris Community Service Award – Rotary Club and 25 Women in Leadership Award.

**Kyle Ham** is President/COO of Peoria Next. In that role, Ham is responsible for the overall administration and business operations for Peoria NEXT. Areas of responsibility include administration, personnel, and fiscal management. He evaluates, and coordinates all projects, policies, programs, strategies and activities for the company.

Ham previously served as Vice President for the Heartland Partnership and worked 5 years in numerous management positions with Illinois Attorney General's office. Additionally, Ham served as Mayor of Toulon, Illinois for one term and has served on several community boards. He is a graduate of Monmouth College and the University of Illinois.

Ham is the treasurer of the PCSI Board of Directors.

**Roberta Parks** is Chief Operating Officer for the Peoria Area Chamber of Commerce. She has held this position since February of 1997, but has been with the Chamber in management positions since 1988. She has responsibility for all operational aspects of the 1150+ member organization to include programs, membership services and development, public policy, personnel, volunteer and leadership development, etc. Previously she worked for the City of Peoria and the Peoria YWCA. She holds a B.S. from Bradley University.

Parks is an active community volunteer. She has served on boards and in volunteer leadership positions for the Women's Fund, the Dirksen Congressional Research Center, the Heart of Illinois United Way, Heartland Water Resources Council, Kickapoo Council Girls Scouts, Peoria YWCA and the Boys and Girls Club. She is also an Illinois Supreme Court appointee to the Hearing Panels for the Attorney Registration and Disciplinary Commission. Parks is the recipient of the Prescott E. Bloom Distinguished Service Award from the Peoria Jaycees, the Community Award for Excellence in Health Care from the Visiting Nurse Association, and the 1996 YWCA Mother M. Frances Krasse Professions Leader Luncheon Award, the 2008 ATHENA Award presented by the Peoria Area Chamber of Commerce and is among a limited number of inductees into Bradley's Centurion Society, an honor accorded those who are considered national or international leaders in their field.

Parks is the secretary of the PCSI Board of Directors.

**G. M. (Mac) Pogue** retired from IBM Corporation July 31, 2003, where over a period of nearly 20 years, he held positions of Software Deployment Manager, Consultant, and Project Manager in the global services, software sales, and marketing divisions. Prior to joining IBM, Mr. Pogue was Project Manager and Manufacturing Software Applications Developer at Caterpillar Inc. and Keystone Steel & Wire Company. During his 34 year career in Information Technology, Mr. Pogue led numerous interdisciplinary teams to implement complex systems integration projects.

Pogue, a native of Cincinnati, Ohio, graduated from Bradley University in 1967 with a bachelor's degree in mathematics and induction into Phi Kappa Phi Honor Society. He is an active volunteer with Peoria Public Schools District 150, where he has served on strategic planning action committees, community schools planning committees, the curriculum committee, and a process improvement committee. A trained facilitator for the Pacific Institute's 21 Keys and PX2 programs, Pogue has served on training teams for several District 150 schools. He is serving on mentoring teams, the new schools work study group for advanced learning talent development, and the Peoria Charter School Initiative. He is on the board of the Peoria Area World Affairs Council, where he is active in education outreach, the program committee, and is the membership chair. Pogue is on the advisory board of Two Rivers Professional Development Center, a cooperative of two regional offices of education. He serves within the W. D. Boyce Council, Boy Scouts of America, as a member of a troop committee and Eagle Scout advisor.

**Vicky Stewart** is the Vice President of Planning and Organizational Effectiveness at Illinois Central College where she has served in administrative capacities since 1998. Dr. Stewart's prior experience includes serving as Principal of Northmoor School from 1993-1998 and as Director of Special Education for Woodford County from 1973-1985. Dr. Stewart obtained her doctoral degree from University of Illinois in May 2006. She earned two degrees from Bradley University, an MA in Educational Administration in 1984 and an MA in Special Education in December 1976.

Dr. Stewart was recognized by Peoria Public Schools with the Superintendent's Award in 1996 and by the Illinois State Board of Education with the "Those Who Excel" award in 1997. Other recognition included being awarded the Community College Leadership Scholar by the University of Illinois, the Athena Award by the Peoria Area Chamber of Commerce, and the Francis M. Krasse Professions Award by the YWCA. Dr. Stewart has chaired the boards of the Human Service Center, Junior League of Peoria, Peoria Area Community Foundation, Central Illinois Chapter of the American Red Cross, the Heart of America Blood Region and First Baptist Church. She currently serves on the boards of St. Francis Hospital, the Riverplex, the Peoria Area Chamber of Commerce, and the Human Service Center.

This is the initial PCSI Board of Directors. As the program design is fine tuned and community partnerships are established it is possible there will be some changes or additions to this board.

Upon submission of the full charter application on October 1, 2009, the PCSI Board of Directors will have established specific goals for the MSTCS school that relate to student recruitment, student achievement, student retention, fiscal management, etc. The Board will be accountable to the Peoria Public School D150 Board of Edcuation for meeting those goals. The reporting timeframes, method for reporting, assessment tools, etc. will be negotiated in the authorizing process for the charter school.

#### **D- Staffing Plans**

MSTCS believes that the quality of the personnel is one of the most important factors of a successful school. Realizing that, MSTCS will focus on recruiting and screening only the best applicants. This is especially important as the PCSI Board of Directors searches for a well-qualified school leader/principal. The school leader/principal must be able to collaborate with his/her teachers, exercise grace and control under pressure, and generally motivate, inspire and support teachers and students in a respectful manner. Additionally, he/she must be highly skilled in assessment using data to drive decisions and reach school mission and outcomes. The school leader/principal will serve as both the educational and business leader of the school.

Teachers will teach within their areas of specialization and will meet regularly by grade level and by subject matter, reporting to school leadership. Teacher qualities that MSTCS will seek are:

- Minimum of a Bachelor's degree and demonstrated expertise in subject taught
- Certification in the State of Illinois (alternative and initial/transitional certificates are accepted)
- Mastery of instructional and learning methodologies identified in this design framework
- Experience and success in working with underserved and/or urban students
- Experience and success in multicultural settings
- Willingness to go beyond their job descriptions to assist students
- Experience and success in working collaboratively on teams
- Commitment to teaching
- Experience and success with working with students in extra-curricular activities
- Good communication skills
- Student centered success-driven, experiences and high quality
- Experience and success engaging parents and community in educational activities

All teaching and non-teaching staff will comply with all applicable rules and regulations. In the hiring of employees for the MSTCS, the school shall not discriminate on the basis of race, color, creed, religion, national origin, gender, marital status, socioeconomic status, membership or activity in a local commission, disability, sexual orientation or age.

The MSTCS will first recruit all management-level staff. Once these positions have been filled, these individuals will be responsible for recruiting, interviewing and hiring the staff, with final decisions being made by the principal with approval by the PCSI Board of Directors. The goal is to have all management-level staff hired by the end of April 2010, and all faculty hired by June 2010. Faculty will be recruited using various job postings, including local paper, NPO.net, Idealist.org, and Teach for America. MSTCS staff will post job descriptions with major universities/colleges for distribution through e-mail newsletters, bulletin boards and other publication sources.

MSTCS will have a merit based pay component to the salary/bonus assessment process. There will be a performance based bonus system that will allow teachers earn up to 10 % of annual salary as a bonus based on meeting identified benchmarks or objectives. In order to attract and retain high quality staff, MSTCS will provide a competitive benefits package that will include: a 9.5% contribution to the Illinois Teacher Retirement System, medical insurance, dental and vision insurance, life insurance, and short term disability insurance.

The number of teachers and other staff members at MSTCS will increase gradually as new grades and more students are added annually. The PCSI Board of Directors

believes in retaining quality staff members as much as possible as staff consistency is a component of successful schools. Staff who do not perform to clearly identified standards will be released. Data will be collected on staff retention for evaluation purposes.

#### E- Operations

MSTCS will use a set of internal financial control policies. These internal control policies will address compliance with Illinois Charter School law and Illinois School Code as it applies, conflicts of interest, signature authorities, government access to records, accounting procedures, cash management, budget development, financial reporting, property management and procurement. Below is a description of the processes, systems, and reports that will be put in place in order to manage the schools finances and hold the school fiscally responsible:

- Financial Tracking and Reporting Tools (Monthly Financial Statements)
- MSTCS will use QuickBooks accounting software to aid in preparing monthly financial reports and end-of-year audits. This system will also allow the school to generate financial reports quickly, though in practice such near-real-time reporting capability may only be in place for income and expense accounts.
- MSTCS will use traditional paper check register and bill filing systems.
- A Balance Sheet, Income Statement, and Statement of Cash Flow will be prepared for monthly board meetings. MSTCS will generate financial accounting data in the format required by Illinois Charter School law. Administrative staff will prepare these items monthly prior to the monthly board meetings. The PCSI Board of Directors will review all financial statements monthly to keep track of financial progress and fiscal stability. Financial reports will also be provided to the D150 Board of Education as identified in the charter agreement

The PCSI Board of Directors will develop a set of financial management policies that will include such things as the bidding policy, level of contract requiring board approval, check signing authority, asset acquisition, etc. Purchase orders will be generated for all products and services. PCSI will contract for services such as food service, waste management or transportation through public and private sources (the exact services that will be contracted out have not yet been finalized). The school leader/principal will conduct negotiations and will have the responsibility for soliciting bids from various vendors to make purchases when necessary.

The risk management philosophy of MSTCS is to provide a safe, orderly and secure work and educational environment; to develop and maintain highly trained personnel; and to assist personnel, parents, and the community in the development of a safe environment in and around the school. MSTCS is committed to reducing accidents in

every area of operations. Through careful risk management, MSTCS will enhance the financial protection afforded the school should unexpected loss events occur.

The PCSI Board of Directors will have a finance/audit committee. Finance/audit committee will check accuracy of reports presented to the Board of Directors, review bank statements, self-audit school policies and procedures for fraud and risk, and generally insure that the school is in compliance with all the Illinois Charter School laws and regulations as well as any Illinois School Codes that are applicable. Together with the school leader/principal the finance/audit committee will also develop the annual budget.

MSTCS will also conduct an annual audit performed by an independent audit firm. The audit firm will look at financial compliance and appropriateness. An annual audit will be done within six months from the end of the fiscal year, which will be June 30<sup>th</sup>.

#### **Community Involvement**

#### A- Community Engagement Strategies

MSTCS understands the importance of the ties between the community and the school. MSTCS will pursue opportunities for community participation in order to give students a sense of belonging to their community and to give the community a sense of responsibility toward the students and the school. Opportunities for community participation in the operation of MSTCS may include, but are not limited by, the following:

- Service on the Board or Directors, Advisory Board, or on committees formed by either of these two groups.
- Assistance with recruitment of students and/or teachers
- Mentoring
- Guest lecturers/instructors

In the planning year, MSTCS plans to work closely with community leaders to recruit students for the school and announce this new school choice to parents and community members. MSTCS Board members and key staff will have meetings with influential community leaders to promote this effort. MSTCS will continue to reach out to a wide range of organizations throughout the school development process and will evaluate the level of community involvement based on the number of contacts and partnerships established with agencies, organizations and individuals within the community. As noted in the student recruitment and parental involvement sections of the design framework, much will be done to engage these key audiences also.

MSTCS will create quarterly newsletters that include news and updates regarding the school, highlights of success, and information about the schools. Such literature will be utilized to communicate with the community and keep them involved in MSTCS.

MSTCS will also recruit volunteers from throughout the community who are qualified and dedicated to helping students obtain their academic goals. Volunteers will perform several duties, including small group tutorials, guest speaking, office assistance, mentoring and more. Examples of these partnerships could be bringing in guest instructors from the Ag Lab, the hospitals or UICOMP or technology based companies providing internships and job shadowing with their employees for both students and teachers, or initiating a middle college program with either Bradley University or Illinois Central College. The specifics will be developed and modified as partnerships grow and change. MSTCS will foster a supportive family environment inside the classroom and throughout the school and community.

#### **B- Community Partnerships and Commitment**

MSTCS will seek to partner with organizations to better serve students and parents. Partnerships may include organizing after school programs, summer camps, classes and workshops for parents, or bringing other services to MSTCS. The school will pursue partnerships with state and national corporations as well as businesses located in Peoria to provide students with opportunities that enhance the educational experience including, but not limited to, mentoring, back-to-school supply drives, guest speakers in the classroom, in-kind services to the school and volunteers at the school to name just a few.

Even before PCSI sent D150 a Letter of Intent to apply for the charter, there were two strong partnerships already developed. NetPlatform Inc. has designed and hosted the MSTCS website at <a href="https://www.peoriacharterschools.org">www.peoriacharterschools.org</a>. Larry Hicks, President and CEO of NetPlatform came forward very early and offered this assistance. Additionally, a law firm, Heyl, Royster, Voelker & Allen is providing legal services to MSTCS pro-bono through the work of Brent Gwillam. At this point that includes development of the bylaws, preparation and filing of the Articles of Incorporation, and the 501(c) 3 application to the IRS.

Three business organizations in the community -- the Peoria Area Chamber of Commerce, PeoriaNEXT, and the CEO Roundtable -- have all passed resolutions or pledged support to MSTCS. These three organizations have board members that represent over 65 area businesses and organizations — including area hospitals, colleges and universities, major manufacturers, technology start ups, and more. The PCSI Board of Directors has been very clear with these individuals that they will be back to work on specific partnership agreements with their companies.

MSTCS will organize an annual breakfast for the community leaders and business members to build a stronger relationship with the community. At this breakfast, guests will have an opportunity to meet with parents, students, and staff as well as tours of classes in session. The goal of this breakfast will be to demonstrate what an asset MSTCS will be to the community. Guests at these breakfasts will be added to the school's database so they receive future updates regarding the school. It is also anticipated that these events may lead to partnership opportunities in the future.

MSTCS will also organize another annual event called MSTCS Showcase. Students will give a variety of subject-related presentations, delivered in a theatrical format. The Annual Showcase will involve many students and will be designed to be both interactive and engaging. Community leaders, elected officials, business owners and managers, and most importantly, prospective parents will be invited to the Showcase. The Showcase is a great way to demonstrate the success and achievement of MSTCS students.

MSTCS will actively pursue affiliations with Science, Math, and Education Departments at universities such as Bradley University, Illinois State University and Illinois Central College so students benefit from opportunities available to them. Through these partnerships, for example, MSTCS students might utilize lab resources at local universities, especially for more advanced lab projects. This serves a two-fold purpose of introducing students to a university environment and giving them access to outstanding equipment. MSTCS students will also be encouraged to participate in post-secondary opportunities that are available to them such as taking college classes for credit during their junior or senior year.

#### **Finances**

#### A – Budget Narrative

PCSI has drafted a pre-operations budget, as well as a five year operations budget projection. This is a balanced budget based on what is known at this time and what can be assumed. Below are some highlighted points of interest related to the budget which is attached as Appendix A. Detailed breakdown of expenses will be submitted with the final application on October 1, 2009. Much of the information in this budget has been developed by working with other charter and MST specific schools and it is anticipated that changes will be made prior to the October 1 full submission.

#### **Pre-Operational Budget:**

This budget carries PCSI and the MSTCS from today until the start of school in the fall of 2010. Applications are being submitted for several planning grants including the Walton Family Foundation. The expenses are focused on the areas of marketing, outreach, program design and recruitment, plus six months of salary for school leader/principal and an assistant.

#### **Six Year Budget:**

#### Revenue:

- 1 The per capita revenue is based on the assumption of 90% of the D150 per capita tuition costs.
- 2 Title funds the percentage of students who are eligible for free and reduced meals is assumed at 70% which is the average for D150. Title funding is assumed at \$460 per eligible student, which is the current level of reimbursement received from the State. No Title funding is assumed in the first year since it will be an analysis year.

- No funding is assumed for special education revenue with the assumption that MSTCS will collaborate with the D150 to provide services to special education students and thus any special education revenue would go to D150.
- 4 Fundraising, Foundation Grants and In-kind Contributions: This includes the \$220,000 Charter School Grant from Walton Family Foundation and \$50,000 that is anticipated PCSI will raise.
- 5 Federal Charter School Implementation Grant:: MSTCS will be eligible for \$200,000 in its first year and another \$200,000 in its second year
- Additionally, a loan from the Illinois Finance Facility in the amount of \$250,000 may be sought to help with early stage cash flow and the purchase of equipment, if the grants are not forthcoming as anticipated. No loan proceeds or loan payments are included in the budgeted presented at this time.
- 7 MSTCS will charge a \$50 non consumable material fee to its students annually. It is assumed that this fee will be waived for 10% of the students per their request if found eligible. This fee will be raised to \$75 in the third year in operation.

#### **Expenses:**

#### **Direct Student Cost**

- There is not detailed breakdown of the assumptions for instructional equipment with this budget. These figures are calculated based on information from other MST charter schools. A detailed budget to include the cost of equipment such as LCD projectors, Smart boards, Overhead Projectors, desks, filing cabinets, staff computers, art and sports equipment will be developed. It is anticipated that additional equipment will be needed as the number of classrooms/teachers increase each year.
- 2 MSTCS will have three fully equipped computer labs. These labs will be set up in first, second and fourth years of operation. MSTCS will also have mobile computer labs that could be moved to any classroom in the building on an as needed basis.
- 3 Detailed assumption of transportation is completed. This is calculated based on the assumption that MSTCS provides transportation rather than contract with the district or outside company. It is assumed that 90% of the students will seek transportation. Three used buses will be purchased initially.
- 4 Textbooks and classroom supplies will be purchased for 3 grades in year one with additional materials purchased each year as the number of grades increases.

#### Personnel

- 1 Since school days will be longer as will school years, Teacher's salaries will start at \$45,000 per year.
- 2 Additionally, an average bonus of 10% is assumed for each employee
- 3 MSTCS will pick up 80% of the health, vision, and dental premiums and 100% of the life and long term disability. It is assumed that the cost of health benefits will increase 15% every year. It is also assumed that 60% of the MSTCS staff will have families and 40% will be singles.
- 4 9.5% of salaries will be paid into Illinois State Teachers Retirement System by MSTCS.

#### Office and Administration

- 1) Assumptions for office equipment and administration related costs are based on data provided by other charter schools.
- 2) Includes salaries, wages & benefits of administrative and support personnel and fees for a not-for-profit Charter Management Operator (CMO) even though no decision has yet been made whether or not one will be hired. Also includes insurance, legal, auditing, telecommunication usage, printing, copying, postage & shipping expenses.

#### **Facility**

- It is assumed that MSTCS will be in a D150 building and no rent payment will be required. However, it is also assumed that PMSTC will be responsible for maintenance of the building.
- 2) Maintenance/custodial staff are included in the projections.
- 3) Utility costs per sq. foot are equal to 110% of the figures provided by the D150 for the current PAHS/Adult Education Center.

#### Surplus/Deficit

This Business Plan is based on many assumptions. Efforts have been made to include estimates of expenses for all categories identified in the ISBE's Business Plan Template for Charter Schools. At this point, the Plan shows a surplus each of the six years of operation, or 5% of total expenditures. It is anticipated that this surplus will be reduced as the program design is further refined and expenses and revenues are identified and refined.

#### **Facilities**

#### A- Facility Design to Support Program Design

It is anticipated that D150 will provide the MSTCS with an appropriate school building in which the MSTCS will operate. It has been suggested that the school would likely be the PAHS/Adult Education Center building located at 839 W. Moss Avenue in Peoria however this has not be finalized at this time. D150 has designated funding through the Public Building Commission (PBC) for renovation and/or additions to a school building to serve the needs of the MSTCS. MSTCS will not be required to pay rent (or pay a nominal \$1/year) for use of this building. Representatives of PCSI Board of Directors will serve on the D150 building committee that is working with the PBC to ensure that the build out meets the school program. Architects for the project have established best practice models from other math, science and technology schools around the country and are incorporating these design features into this school building. It is anticipated that the building renovation/expansion will not be completed in time for the MSTCS to opening August of 2010. Discussions are currently underway with D150 leadership regarding an alternative site for the first year of operation.

The Peoria Math, Science and Technology Charter School

INCOME		APPENDIX		
Funding Source	ing Source Budget Amount		Description/Specific Source	
State Grants	\$	75,000	Federal Charter Planing Grant	
Other Grants	\$	20,000	Walton Family Foundation Planning Grant	
Investment Earnings				
Donations/Gifts				
Other				
TOTAL CASH IN (INCOME)	\$	95,000		
EXPENSES				
Expenditure	Budget Amount		Description: Assumptions	
Legal				
Accounting and Consulting	\$	2,500		
Community Outreach	\$	4,000		
Marketing: Including Printing and Postage	\$	14,000		
Rent: Office Space and Utilities				
Supplies	\$	4,000		
Equipment	\$	6,000		
Payroll	\$	50,000	Start-up coordinator and a secretary	
Payroll expenses	\$	6,500	Estimated benefits and payroll liabilities	
Other: Travel	\$	3,000		
TOTAL EXPENSES	\$	90,000		
CARRY OVER	\$	5,000		

# The Peoria Math, Science and Technology Charter School Budget From Pre-Operational to End of Sixth Year APPENDIX A

Pre-	First Fiscal	Second Fiscal	Third Fiscal	Fourth Fiscal	Fifth Fiscal	Ciada Firmal Varia
•						Sixth Fiscal Year
F¥2010		-				FY2016
						2015-2016
	5,6,7	5,6,7,8	5,6,7,8,9	5,6,7,8,9,10	5,6,7,8,9,10,11	5,6,7,8,9,10,11,12
	225	300	375	450	525	600
	\$8,010	\$8,010	\$8,010	\$8,010	\$8,010	\$8,010
	\$1,802,250	\$2,403,000	\$3,003,750	\$3,604,500	\$4,205,250	\$4,806,000
	\$0	\$96,600	\$120,750	\$144,900	\$169,050	\$193,200
	\$0	\$0	\$0	\$0	\$0	\$0
	\$5,220	\$6,960	\$8,700	\$10,440	\$12,180	\$13,920
	\$270,000	\$100,000	\$150,000	\$150,000	\$150,000	\$150,000
	\$0	\$0	\$0	\$0	\$0	\$0
	\$200,000	\$200,000				
	\$174,150	\$232,200	\$290,250	\$348,300	\$406,350	\$464,400
	\$10,125	\$13,500	\$25,313	\$30,375	\$35,438	\$40,500
\$0	\$2,461,745	\$3,052,260	\$3,598,763	\$4,288,515	\$4,978,268	\$5,668,020
\$0	\$649,950	\$615,130	\$630,263	\$734,016	\$807,299	\$893,027
	\$990,938	\$1,295,439	\$2,086,967	\$2,454,557	\$3,166,014	\$3,567,470
	\$523,484	\$534,252	\$556,300	\$621,950	\$638,630	\$680,932
	\$89,001	\$96,261	\$109,248	\$122,256	\$135,483	\$150,298
	\$2,253,373	\$2,541,082	\$3,382,778	\$3,932,780	\$4,747,425	\$5,291,727
\$0	\$208,372	\$511,178	\$215,985	\$355,735	\$230,842	\$376,293
	so	operational         Year           FY2010         FY2011           2010-2011         5,6,7           225         \$8,010           \$1,802,250         \$0           \$0         \$5,220           \$270,000         \$0           \$200,000         \$174,150           \$10,125         \$0           \$0         \$2,461,745           \$0         \$649,950           \$990,938         \$523,484           \$89,001         \$2,253,373	operational         Year         Year           FY2010         FY2011         FY2012           2010-2011         2011-2012           5,6,7         5,6,7,8           225         300           \$8,010         \$8,010           \$1,802,250         \$2,403,000           \$0         \$96,600           \$0         \$0           \$270,000         \$100,000           \$0         \$200,000           \$174,150         \$232,200           \$10,125         \$13,500           \$0         \$2,461,745         \$3,052,260           \$0         \$649,950         \$615,130           \$990,938         \$1,295,439           \$523,484         \$534,252           \$89,001         \$96,261           \$2,253,373         \$2,541,082	operational         Year         Year         Year           FY2010         FY2011         FY2012         FY2013           2010-2011         2011-2012         2012-2013           5,6,7         5,6,7,8         5,6,7,8,9           225         300         375           \$8,010         \$8,010         \$8,010           \$1,802,250         \$2,403,000         \$3,003,750           \$0         \$96,600         \$120,750           \$0         \$0         \$0           \$270,000         \$100,000         \$150,000           \$0         \$0         \$0           \$0         \$200,000         \$174,150         \$232,200         \$290,250           \$10,125         \$13,500         \$25,313           \$0         \$2,461,745         \$3,052,260         \$3,598,763           \$0         \$649,950         \$615,130         \$630,263           \$990,938         \$1,295,439         \$2,086,967           \$89,001         \$96,261         \$109,248           \$2,253,373         \$2,541,082         \$3,382,778	operational         Year         Year         Year         Year           FY2010         FY2011         FY2012         FY2013         FY2014           2010-2011         2011-2012         2012-2013         2013-2014           5,6,7         5,6,7,8         5,6,7,8,9         5,6,7,8,9,10           225         300         375         450           \$8,010         \$8,010         \$8,010         \$8,010           \$1,802,250         \$2,403,000         \$3,003,750         \$3,604,500           \$0         \$96,600         \$120,750         \$144,900           \$0         \$0         \$0         \$0           \$270,000         \$100,000         \$150,000         \$10,440           \$270,000         \$100,000         \$150,000         \$150,000           \$0         \$0         \$0         \$0         \$0           \$174,150         \$232,200         \$290,250         \$348,300           \$10,125         \$13,500         \$25,313         \$30,375           \$0         \$2,461,745         \$3,052,260         \$3,598,763         \$4,288,515           \$0         \$649,950         \$615,130         \$630,263         \$734,016           \$990,938         \$1,295,	operational         Year         Year         Year         Year           FY2010         FY2011         FY2012         FY2013         FY2014         FY2015           2010-2011         2011-2012         2012-2013         2013-2014         2014-2015           5,6,7         5,6,7,8         5,6,7,8,9         5,6,7,8,9,10         5,6,7,8,9,10,11           225         300         375         450         525           \$8,010         \$8,010         \$8,010         \$8,010         \$8,010           \$1,802,250         \$2,403,000         \$3,003,750         \$3,604,500         \$4,205,250           \$0         \$96,600         \$120,750         \$144,900         \$169,050           \$0         \$0         \$0         \$0         \$0           \$270,000         \$100,000         \$150,000         \$150,000         \$150,000           \$200,000         \$200,000         \$0         \$0         \$0           \$174,150         \$232,200         \$290,250         \$348,300         \$406,350           \$10,125         \$13,500         \$25,313         \$30,375         \$35,438           \$0         \$649,950         \$615,130         \$630,263         \$734,016         \$807,299

Appendix B: Middle School Curriculum Major Subjects and High School Course Load

Grade	Mathematics	Language Arts	Science	Social Studies
5	Place Value, Basic Operations with Whole Numbers and Decimals, Data and Graphs, Mean, Median, Mode, Divisibility and Prime Numbers, GCF and LCM, Basic Operations with Like and Unlike Denominators, Estimation, Measurement with Customary Units and Metric Space, Algebraic Expressions, Geometric Concepts, Perimeter and Area, Ratios, Percents	1) Doing the Right Thing 2) Adapting 3) Adventurers 4) The Unexpected	Science and Technology Earth Science Space and solar system Ecosystems Classification Atoms Physical and Chemical Properties	GEOGRAPHY OF THE U.S.  Geography of the U. S. Natural resources of the U. S. Canada and Mexico Relationship between the U. S. and Canada Comparative cultures of Canada Countries and cultures of the Western Hemisphere: Central America, West Indies, South America
6	Number Patterns and Algebra, Statistics and Graph, Basic Operations With Decimals and Fractions, Solving Equations and Basic Algebra, Ratio, Proportion and Percent, Probability, Angles and Polygons, Area and Volume, Integers, Linear Equations and Functions	1) Getting to Know Yourself 2) Mysterious Worlds 3) Overcoming Odds 4) Sense and Nonsense	Weather/Climate Cell Animals Plants Genetics Cycles in nature Gateway to Technology program	WORLD GEOGRAPHY  Countries and cultures of Africa, Latin America, Asia, Australia, the Pacific, and Europe Native American cultures Relationships among nations: customs, traditions and beliefs, and political systems United Nations Transportation & communication World trade
7	Patterns and Algebra, Analyzing Data, Fractions and Percents, with their Applications, Permutation-Combination and Probability, Circles, Areas and Volumes of 2-D and 3-D figures, Pythagorean Theorem, Measures of Central Tendency and Variation, Real Numbers, Statistics and Matrices, Inequalities, Graphing Quadratic Functions and Polynomials	1) Meeting Challenges 2) Independence and Identity 3) What Matters 4) Just for Fun	Motions Momentum Newton's rules Waves Sound waves Light Energy Human Body and Systems	U.S. HISTORY UNTIL CIVIL WAR  Exploration and discovery Growth and development of the United States Colonial life Struggle for independence U. S. Constitution and Bill of Rights Westward movement in America American Civil War
8	ALGEBRA I Order of operations, Graphs of Functions, Integers and Fractions, Equation of Graph, Slope, Solving Equations and System of Equations, Percent of Change, Transformation of Figures, Linear and Compound Inequalities, Polynomials, Factoring Polynomials, Quadratic Equations and their Graphs, Discriminant, Radical Expressions, Rational Expressions, Matrices, Mutual Events, Conditional Probability	1) Coming of Age 2) Meeting Challenges 3) From Sea to Shining Sea 4) Extraordinary Occurrences	Evolution Ecology Gateway to Technology program	U.S. HISTORY AND AMERICAN GOVERNMENT  Reconstruction U. S. as a world power Meaning of democracy American culture U. S. Political system U. S. Economic system U. S. Government

#### High School Course Load

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade 12 <sup>th</sup> Grade				
		COURSES				
Algebra I			Pre-Calculus/Calculus			
English I	English II	English III	English IV			
Writing I	Writing II	Chemistry	Physics			
Earth and Space Science	Biology	Government	College Path			
World History	American History	ACT Prep	Elective			
Computer Technology	Computer Technology	Elective	Elective			
Physical Education/Health	Art	Elective	Elective			
Elective	Elective	Elective	Elective			
		TIVES				
Project Lead the Way Course I	Project Lead the Way Course II	Project Lead the Way Course III	Project Lead the Way Course IV			
		alism				
		ech				
		al Relations				
	Trigon	ometry				
			istics			
		African American History				
	Latino Literature					
		Economics				
		Genetics				
		Zoology				
		Botany				
		Microbiology				
		Astronomy				
		Organic Chemistry				
		ACT Prep				
	Spanish I					
		Spanish II				
	AP COURSES					
			AP Calculus			
		AP English- Langua	ge and Composition			
			AP English- Literature			
		AP Biology				
		AP Ch	emistry			
			AP Physics			
		AP H	istory			