

QUALITY OF SCHOOL DESIGN

1. Mission Statement:

1A. In succinct terms, describe the core philosophy or underlying purpose of the proposed school.

The Mission of Khepera Charter School is to create world learners and leaders by closing the academic achievement gap attributed to race, gender, and economic class in a minimal amount of time. Khepera Charter School will provide an excellent basic/accelerated academic curriculum for our junior learning partners. Education at Khepera will be immersed in high expectations and a socialization process that embraces cultural inclusion in a loving, nurturing, safe, disciplined, child centered learning environment for every child. We will expect and demand the best in spite of any perceived conditions that impede the complete development of our children. Khepera Charter School's family will be effective, caring, learning partners in this holistic educational process. We will work diligently to eliminate barriers that impede the success of our junior learning partners.

“Education is our passport to the future, for tomorrow belongs to people who prepare for it today”.

1B. What is your overarching vision of the school?

Research reports that the academic achievement gap based on race is staggering. Such a disparity stifles the opportunity of thousands of children too fully attain the amenities taken for granted by people living in democratic society. Further, disaggregated data from Pennsylvania System of School Assessment (PSSA), the Stanford 9 (SAT9) and other objective indicators, report that many children in racially isolated schools in the Philadelphia School District are not learning at high standards. A comprehensive curriculum, align with the PSSA standards, that encompasses teaching and learning strong basic skills in reading, math, science, technology, and cultural inclusion will lead to critical and higher order thinking skills in areas such as problem solving and critical thinking. Mastery of these areas is essential for excellent academic achievement.

Khepera Charter School will offer a classroom based quality education that challenges and motivates each child to discover, strive for and achieve his/her full personal potential. All children deserve to learn basic skills in reading, math, science, history and technology which will lead to understanding and mastery of a comprehensive and challenging curriculum directed toward achieving PSSA and world class standards.

Educational excellence promotes the retention of cultural differences and respect for diversity. People are different. Respecting differences, and expecting the best from every child will empower each child to perform at high standards. We will meet and surpass academic and cultural standards of distinction as defined by the Pennsylvania State Department of Education and the School District of Philadelphia in a minimal amount of time. Khepera Charter School's Cultural Inclusion Curriculum, goals, and values will engender academic excellence in a holistic, child centered, standards driven educational environment.

Parental involvement is an essential aspect of the foundation of our overarching vision. We believe that family involvement and commitment is key to each child achieving his/her maximum potential.

Khepera Charter School will offer a strong curriculum, outstanding teaching, ongoing assessment of progress, total development of student potential, and will require a commitment to high standards that embraces a full learning partnership between, families, learners and the educational institution.

Current research often assumes that minority, disadvantaged, inner city, and at-risk, (whatever label is in vogue) youth will have learning disabilities. Some children are not expected to achieve at high standards. The self-fulfilling prophecy theory has been repeatedly confirmed. Often stakeholders and society refuse to acknowledge that we do not expect educational excellence from all children. Excuses based on a child's background that include economic, ethnicity or parent's marital status should never be used to prejudged and blemish students before and as they enter the classroom.

Research indicates that schools that work for all must be grounded in a value system of cooperation and relationships. Effective schools that guarantee the success of all students is characterize by an "us" environment. Formal and informal leadership is shared among staff, families, students, and community; hence, Khepera's use of the term learning partners to describe relationships in our school.

Khepera Charter School will be defined by a unity of purpose. Our mission statement will serve as the centerpiece of the decision making process in our school. Our mission will be reflected in all that we do. Our children will know that they are in a nurturing caring environment and that all adults care about them. All learning partners will know that they are responsible for the success of our children. The learning partners at Khepera believe that working with children is a calling, an art, not just a job. Our commitment stems from a moral imperative to ensure the success of all children, and a passion for social justice. Tolerance of culture inclusion is not enough. We must help our children appreciate and value themselves and the rainbow of cultures in the extended community.

2. Goals and Objectives

2A. What are the school's academic goals and objectives for student learning?

One of the primary goals of Khepera Charter School Educational Program will be to work with families to assist students in becoming self-motivated, competent, lifelong learners with a respect for self, others, and our environment. We place a high value on education, learning and the retention of culture. We will seek to serve and support families who want the best educational environment for their children. We will work together as full partners in the education of our children as they strive to master a rigorous flexible curriculum

Our educational program will focus on parental and community involvement, sharing educational techniques and strategies that will lead to proficiency and excellence in academic, social and cultural skills for our students and the larger community. The overall goals of Khepera Charter School are to provide a world-class academic and cultural education for every child. Achieving this task will require proficiency and advance knowledge and skills in the areas listed below:

- Our students will be instructed based on the standards that have been adopted by our faculty, the state and the school district of Philadelphia
- Our students will perform in the proficient and advance categories on all tests and objective indicators.

- Our students will identify their strengths, talents, and skills as well as an appreciation for those of others.
- Our students will develop the inclination, desire, academic, cultural and technological skills necessary to expand their knowledge through life long learning.
- Our students will develop a positive sense of self-esteem and confidence based on achieving standards of excellence.
- Our students will embrace knowledge, work cooperatively and independently to solve unexpected problems, think critically and creatively, and persuasively convey information and ideas. Our students will understand and utilize new technologies that will advance their learning and enable them to function successfully in the 21st century.
- Our students will be taught to infuse history and culture in every academic content area so that they can see the interconnecting influence of diversity.
- Our students will understand the skills necessary to be full participants in a global economy.

2B. Describe any non-academic goal and objectives for student performance

Khepera Charter School's non-academic goals, objectives, and standards established for our learning partners are inextricably tied to high academic achievement. These goals are immersed in values that emphasize:

- Respect - Educational excellence requires that individuals change the way they perceive themselves and their situation. Children who have not historically embraced education must be taught to love themselves. They must be taught that they are beautiful and worthy of lives that are fulfilling. Respect for self is first before respect for others can commence. Khepera will embrace a value system that changes realities.
- Expect - With respect for all people, expectations are less difficult. We must begin to see the genius and creative talents in each every child. Children are not the ones who fail in the educational system. The system fails them. Adults must accept responsibility for meeting the needs of children. Khepera's staff will accept responsibility and accountability for our learning partners.
- Success – Expectation and respect brings success. Success is necessary for positive self-esteem and empowerment. Children must experience success in order to have the power to utilize their full potential. Success brings approval, joy hope and the courage to keep trying. Our students will respect self, others, and their environment. Such expectations will engender success. These three non academic goals on based the philosophy of Sankofa Schule in Lansing Michigan

The three components above will be Khepera Charter School overarching non-academic school rules as well as goals. Adherence to our value system will enable our children to achieve their maximum potential. We will work diligently to eliminate barriers to their academic and cultural success. Their dreams should be their only limitations.

These objectives will be measured by the positive culture that permeates Khepera's school climate. There will be no fights, virtually no suspensions; disputes will be resolved amicably. Junior learning partners will love and care for each other and for all members of the extended learning family. Family learning partners will exhibit a high level of satisfaction with the educational culture and learning outcomes at Khepera Charter School.

The ideal outcome of this holistic educational process is students that will be academically competent, behaviorally confident, and socially conscious. The learning partners at Khepera are

committed to maximizing academic and cultural skills while developing community and world leaders.

3. Educational Program:

3A. Describe the educational program of the school, providing an overview of curriculum goals, objectives and content in all subject areas.

Khepera Charter School is committed to a relationship between family and teaching learning partners in order to achieve the full potential of our junior learning partners. Our curriculum includes the teaching of basic and accelerated academic skills and knowledge, life long learning, cultural inclusion, and learning social and interpersonal skills.

Khepera's initial structure will include approximately four hundred fifty (450) children and their families in a kindergarten through eighth grade setting. We will create a nurturing, disciplined, learning, teaching environment immersed in history and culture that empowers parents, teachers, and students. Khepera Charter School will educate Philadelphia area students by providing a rigorous basic broad based academic and cultural program reflecting a standards driven curriculum. We will offer excellent teaching led by master career teachers in conjunction with a full partnership with our families leading to the development of each child's full potential.

We believe that learning best occurs when junior learning partners are provided an educational program based on high standards of expectations that challenges and motivates everyone to achieve their full potential. All staff members and families will engage in curriculum research, planning, writing and staff development activities that support the growth of all learning partners. State and local standards, the Philadelphia School District's *Scope and Sequences* that are aligned with PSSA standards and the *Curriculum Frameworks*, with its benchmarks and best practices activities will serve as the foundation of our curriculum. As educators, we have implemented these documents in our classrooms and they can, if used effectively, promote standards of excellence. We do not have to reinvent the wheel

Participation in academic competitions and a myriad of cultural activities will be integral components of our educational program. Lesson plans, grade level expectation and requirements will enable our learning partners to meet and exceed the proficiency levels on the PSSA and other form of assessment adopted by the state and State Reform Commission.

Our mission, goals and objectives will be implemented with the understanding that all children can meet expectations and perform at high standards. The academic gap based on race, gender, and economic class must be eliminated. The aforementioned components of our application, and cultural inclusion material, will serve as the basis for curriculum development and the foundation for our work. Our educational program and goals are as follows:

The scope of our educational program relies heavily on the Pennsylvania State System of Assessment, (PSSA) standards, and material that are aligned with Philadelphia School District *Frameworks*, Philadelphia Scope and Sequences in Reading, English, Mathematics and Social Studies. Academic skills based on age appropriate mastery will be taught at the junior learning partner's instructional level. A summary of the content goals and objectives to be covered in each area is listed below:

- **Mathematics:** Math teachers will put arithmetic back in mathematics. Students will develop a sense of mathematical reasoning. Students will memorize algorithms and basic concepts in order to free their minds for the learning of higher-level mathematics. They will develop abilities to reason logically, to understand and apply mathematical process

and concepts, including those within arithmetic, algebra, geometry, problem solving and mathematical subjects that the learning partners, and school governing board deems appropriate.

- Language Arts: Students will demonstrate advance or proficient levels in reading, writing, listening, speaking and presentation skills in multiple forms of expression (e.g. written, oral, expressive arts, and multimedia), with communication skills appropriate to the setting and audience. They will comprehend and critically interpret multiple forms of expression, including literature from various cultures and time periods.
- Science: Students will successfully utilize the scientific method, scientific research, hands on activities, and field trips to major science museums and industries. Science instructors will use an inquiry based methodology to assist students in understanding and applying the major concepts underlying various branches of science, which may include, physics, chemistry, biology, ecology, astronomy, and earth science.
- World language: Students will gain proficiency in speaking, reading, writing and listening comprehension in at least one language other than their indigenous language. Students will gain an in-depth understanding of essential aspects of cultural inclusion, both past and present, as they comprehend the second language.

Underlying and utilized throughout each of the content areas will be multi-disciplinary skills such as:

- Critical thinking skills: i.e. problem solving, analyzing and applying knowledge.
- The ability to use technology effectively.
- Creative expression through various forms of the arts, e.g., music, visual/studio arts, drama and dance.
- Knowledge of pertinent issues of health and the development of physical fitness.

In addition to attaining specific content and grade level standards, students will also demonstrate their overall progress through their success in reaching individual objectives established by our learning partners.

In order to best meet the needs of all of our learning partners, Khepera Charter School will continually examine and refine our academic and behavioral outcomes over time to reflect the school's mission and changes in state and local standards that support our mission statement and charter.

Khepera Charter School Reading Language Arts Curriculum Overview:

The language arts curriculum for Khepera Charter School will focus on the Balanced Literacy philosophy. It will be aligned with state standards. The Balanced Literacy Framework will be implemented for K-6 grades. Grades 7, 8 will incorporate Junior Great Books, the writing workshop, Literature Circles, the 100 Book Challenge, Grammar, Spelling, Response Journals, Research Projects, Literature extending activities and Phonics when needed. Cultural inclusion material will be an overarching feature of our Balance Literacy Reading program.

The Balanced Literacy Framework enables teachers to teach the reading and writing process, including the strategies and skills necessary for students to become independent strategic readers, writers, and thinkers. A Balanced Literacy Program encourages the teaching of language arts strategies and skills in a meaningful context of reading rather than in isolation.

A Balance Literacy Program also provides teachers with a framework for organizing instruction. Within this framework, the teacher is able to present whole-class skills lesson in addition to working with students, both individually and in small groups. The following elements

are integral aspects of Khepera's Balanced Literacy Reading Program for grades K-6. These elements are:

- A. Reading Aloud – The teacher reads aloud to the whole class or small groups. A carefully selected body of children's literature is used. The collection contains a variety of genres and represents a culturally inclusive society. Favorite text selected for special features are reread many times.
 - Instructional materials rely heavily on the read aloud books and materials from the Wright group, Junior Great Books, featuring Great Books for Elementary school.
 - The Junior Great Books Program emphasizes an intense discussion methodology as a learning tool. It is designed to allow students to apply and sharpened their reading skill while learning to interpret and discuss literature in Kindergarten (where teachers will read aloud to students).
 - The language art program will include selected texts that teachers will use to guide discussions about the story's plots and themes.
- B. Shared Reading – By using an enlarged text that all children can see, the teacher involves children in reading together following a pointer. The process includes:
 - Rereading Big Books, poems, and songs,
 - Rereading and retelling selected texts
 - Rereading alternative texts
 - Reading the products on interactive reading and writing.
 - Instructional Materials – Read together Books – The Wright Group.
- C. Guided Reading – The teacher works with a small group of students who have similar reading processing skills. The teacher selects and introduces new books and supports children reading the whole text to themselves, making teaching points during and after reading.
 - Instructional material – Guided reading program by Gay Su Pinnell, kindergarten through six grades.
- D. Independent Reading – Terrance Pauls' research indicates that the quantity of trade books read is the best single predictor of test score performance and success in school. Khepera Charter School will implement Jane Hilman's 100 Book Challenge for student independent reading. When using this program, children will read independently. Each student selects the appropriate color code book at his or her "just right" level from a variety of trade books. Every night, including weekends, a student will take home a book to read. Many of these books contain cultural inclusion themes that are central to Khepera's mission
- E. Shared Writing – Teacher and children work together to compose messages and stories. The teacher supports the process as coach and scribe
- F. Instructional material – Language Arts experience Chart Paper – Blank Zaner-Blazes mini books
 - Interactive Writing – As in shared writing, the teacher and children compare messages and stories that are written using a "shared pen" technique that involves children writing. Writing will consistently include the skills necessary for addressing the opened ended questions on the PSSA. Children in the primary grades will be taught the importance of writing as a test taking skills. this strategy will support performance based on high standards.

- Instructional Material – Language Arts experience Chart Paper – Blank Zaner-Blazes mini books
- G. Guided Writing – Children engage in writing a variety of texts. There will be guides to improve strategies when writing descriptive, narrative, and informational samples. The student will develop strategies to improve one’s style; focus, content and organization, grammar and spelling will be taught in context.
- H. Writing Workshop – The student will write a variety of texts. He or she selects his own topics. The teacher guides the writing process and provides instruction through mini lessons and conferences. Students are encouraged to share their writing at the conclusion of the workshop. Each student will participate in an “Author Tea” whereby student authors share their work with peers and parents.
- I. To address the needs of the struggling reader in grades K-3, Khepera Charter School will provide the following texts and strategies:
- The Wright Group Breakthrough to Literacy software program. This interactive program will allow students to engage in phonics and word study “read books”, develop vocabulary comprehension and spelling. Primary and supplemental phonics instruction will be provided.

Grades 7th and 8th will utilize Junior Great Books for Middle Schools along with the 100 Book Challenge. Culturally inclusive texts will be an integral part of curriculum in these grades. The writing workshop will be supplemented by instruction in technical writing display, i.e. grammar and spelling skills.

For the struggling reader grades 4-8, scholastic’s *Read 180* will be the Balanced Reading Intervention program used to address this need. Teacher materials are designed to offer daily teacher interaction through whole group, small group, and one on one instruction. Interactive software supplements instruction by providing individualized adjusted instruction and support in word study, vocabulary, comprehension, and spelling. *Read 180* audio books model reading through narration of grade level literature and the guidance of a reading coach who models the thinking strategies of good readers.

To maximize student achievement in the area of language arts, Khepera Charter will strengthen literacy at home by sponsoring staff development for families. Workshops will be held throughout the year. They will include but are not limited to:

- The 100 book Challenge – Home reading/Parents as coaches
 - The Writing Workshop – Khepera’s’ teaching learning partners will share the importance of writing standards with family learning partners. We will share and develop strategies that family learning partners can at home to assist junior learning partners in improving writing skills at home.
 - Junior Great Books Workshops – This workshop will highlight the literature, provide books, and share inquiry discussion method utilized within the Junior Great Books Program.
- J. Assessment – Reading assessment will be formal and informal. The following measures will be utilized:
- Sight vocabulary/word recognition check
 - Phonics Inventory
 - Running Record
 - Jerry Johns Reading Inventory or Joetta Beaver’s Reading assessment and story retelling.

- Writing Assessment will involve the use of writing prompts that require the following types of writing: descriptive, narrative, and persuasive. Pennsylvania rubrics will be used to evaluate student writing samples in the following areas: focus; content; style; and organization. Portfolios, writing Logs, Response Journals, Oral Presentations will be utilized to evaluate writing

Grade grouping in all content areas at Khepera will be fluid. Students who need to develop skills that may not be on their grade level will be encouraged to work with teaching and junior learning partners concentrating on such skills. There will be no stigma attached to not knowing at Khepera, the emphasis will be on getting our junior learning partners to develop their full potential in every academic and non-academic area with the assistance of every adult in the building.

Khepera Charter School's reading program is based on a standards driven curriculum that encompasses our mission. The elements of this program will promote academic and cultural proficiency.

Khepera will be *a reading is fundamental school*. Khepera's partners will read daily to a reading partner. Every student and adult will have a reading friend. Once a day, we will drop everything and read aloud to our friend. While every subject is of the utmost importance to us, literacy will permeate every aspect of the instructional process. When you walk into Khepera, regardless of the discipline, you will observe our junior learning partners reading within the discipline in which they are involved.

Khepera Charter School Science Curriculum Overview:

Pennsylvania State science standards describe what students should know and be able to do by the end of fourth, seventh, tenth and twelfth grade. In addition, these standards reflect the increasing complexity and sophistication that students are expected to achieve as they progress through school.

The science standards represented in this state document "avoids repetition, making an obvious progression across grade levels less explicit. Teachers shall expect that students know and apply the concepts and skills expressed at the preceding level. Consequently, previous learning is reinforced but not retaught".

"Standards are arranged by categories, for example, 3.5 Earth Science. Under each category are standard statements that are preceded by a capital letter; for example, in 3.1 Unifying Themes, grade 10.B, "Describe concepts of models as a way to predict and understand science and technology." Following the standard statements are bulleted standard descriptors, which explain the nature and scope of the standard. Descriptors specify the nature of the standard and the level of complexity needed in meeting that standard in a proficient manner. Descriptors serve to benchmark the standard statement. Curriculum, instruction and assessment should focus on meeting the standard statement. Technology Education, computer applications and science are separate curricular areas. Meeting standards should be approached as a collaborative effort among all curricular areas.

Senior learning partners will use the aforementioned standards as the foundation of a rigorous science curriculum that spans all content areas.

Junior learning partners will use multidisciplinary hands on minds on approaches to science to facilitate the science curriculum. Interdisciplinary approaches as well the use of technology will enhance science investigations, All of the activities slated for use are approved by the National Science Foundation and are in accordance with the content standards of the

school District of Philadelphia. Inquiry based learning techniques will be used to allow students to collect data and explore new problems. Examples of the Pennsylvania State curriculum grade appropriate standards students are expected to master are included below:

UNIT MATRIX

INTEGRATED UNITS OF STUDY

Unit Title	Suggested Grade Level(s)	Standards Assessed	Unit Summary
What's Up?	K	Science & Technology Physical Science, Chemistry and Physics: 3.4.4 D Mathematics Numbers, Number Systems and Number Relationships: 2.1.3 A Statistics & Data Analysis: 2.6.3 A Reading Reading Critically in all Content Areas: 1.2.3 A	Students use a variety of activities to learn about objects found in the day and night sky. They will also learn about a number of activities that happen during the day and/or at night.
Mighty Magnets	1	Science & Technology Physical Science, Chemistry and Physics: 3.4.4 C Inquiry & Design: 3.2.4 C Reading Reading Critically in all Content Areas: 1.2.3 A Mathematics Statistics & Data Analysis: 2.6.3 A, D	Students investigate energy through problem solving centered on the concept of magnetism.

Unit Title	Suggested Grade Level(s)	Standards Assessed	Unit Summary
Better than the King's Foot	6-8	Science & Technology Technological Devices: 3.7.7 B, C; 3.7.10 B Inquiry & Design: 3.2.7 C, D Reading & Writing Learning to Read Independently: 1.1.8 C, D, E Reading Critically in all Content Areas: 1.2.8 A Types of Writing: 1.4.8 B Quality of Writing: 1.5.8 B, C Mathematics Measurement & Estimation: 2.3.5 (8) A Probability & Predictions: 2.7.8 D	"Better than the King's Foot" is designed as an interactive unit familiarizing students with the history and background of the Metric System. It gives them practice in making measurements of length, volume and mass in metric units, and practice in converting units in the Metric System. The teaching/learning unit is aimed at giving students enough background information to allow them to derive the formula for density and design a series of small activities to determine the density of solids and liquids.
It's Elementary	8	Science & Technology Physical Science, Chemistry and Physics: 3.3.10 A Technological Devices: 3.7.10 E Unifying Themes: 3.1.10 B Reading, Writing, Speaking & Listening Learning to Read Independently: 1.1.8 H Quality of Writing: 1.5.8 B Speaking & Listening: 1.6.8 C, F Mathematics Algebra & Functions: 2.8.8 G	The purpose of this unit is to provide students with an opportunity to 1) explain the purpose, value and characteristics of a good model and 2) demonstrate knowledge of basic atomic structure. In addition, they construct a three-dimensional atomic model of a given element, conduct Internet research to acquire information about the physical characteristics of this element and explain the relationships between atomic numbers and atomic radii of atoms of different elements.

Alternative assessments such as rubrics and portfolios will be used to encourage students to work together cooperatively and become responsible for their own learning. Differentiated and directed instruction, field trips, hands on and project based learning will enable mastery of scientific knowledge and skills. Appropriate strategies will be used to accommodate various learning styles in all of our science activities. Lessons prepared for teachers by the Pennsylvania State Standards committee will be taught in grades Kindergarten through eighth. Khepera's staff will also use a thematic approach when developing science lessons. All grades at Khepera will use the same science format.

Khepera Charter School Mathematics Curriculum Overview.

The overall goal of the Khepera Charter Mathematics curriculum is to actively engage students in solving problems by teaching them to think and communicate (oral and written) mathematically. Motivated students become lifelong learners and problem solvers. Students will challenge prior concepts, analyze situations and make reasonable decisions while developing higher order thinking skills.

Khepera's mathematics program will use an investigatory approach for all of its students. Grades K-5 will use the Investigations Curriculum published by Dale Seymour Publications. The curriculum has four major goals

1. to offer the students meaningful mathematical problems
2. to emphasize depth in mathematical thinking rather than superficial exposure to a series of fragmented topics
3. to communicate mathematics content and pedagogy to teachers
4. to substantially expand the pool of mathematically literate students

Investigations curriculum is a researched based math program that involves students in the exploration of major mathematical ideas. It assists students in developing flexibility and confidence in their ability to solve problems. Fluency in using mathematical skills, the tools to solve problems and proficiency in evaluating their solutions are the foundation of *Investigations*.

The following objectives of *Investigations* curriculum will ensure that Khepera's junior learning partners

- spend time exploring problems in depth
- find more than one solution to many of the problems they work on
- invent their own strategies and approaches to problem solving
- use a variety of concrete materials and appropriate technology, including calculators as a natural part of their everyday mathematical work.
- Express their mathematical thinking through writing, talking, drawing, and other appropriate strategies
- Work in a variety of groupings, as a whole class, individually, in pairs and in small groups
- Move around the class as they explore mathematics in their environment and talk with their peers.

Investigations curriculum is carefully designed to invite all students into mathematics, girls and boys, members of diverse cultural groups, ethnic, and language groups, and students with different strengths and interest. Problems are often presented in a context that calls upon students to share experiences from their family culture or community.

Middle School Students will use *Connected Mathematics*. The overarching goal of *Connected Mathematics* states, "All students will be able to reason and communicate proficiently, orally and in writing, in mathematics. This includes knowledge and skills in the use of vocabulary, forms of representative, materials, tools, techniques and intellectual methods of the discipline of mathematics, including the ability to define and solve problems with reason, inventiveness and technical proficiency."

As a complete curriculum for middle school students and teachers, Connected Mathematics:

- Develops deep understanding of key mathematical ideas
- Makes connections among the key mathematical ideas and to other disciplines.
- Develops proficiency in problem solving, reasoning, and skills
- Use interesting problems and contexts to develop understanding of concepts and skills
- Use multiple representations to communicate understanding and reasoning.
- Provides extensive homework that emphasizes practices with skills and problem solving
- Connect or extends student's understanding to other key mathematical ideas or applications
- Provides multidimensional assessment tasks.

- Uses technology effectively to develop understanding

Khepera Charter School mathematics curriculum is aligned with both the NCTM and Pennsylvania Academic Standards. It adopts the “effective programs” recommended by the Urban Systemic Program. This is a comprehensive math program designed to reach regular and special education students. Grades K-5 students will focus on *Investigations* Curriculum and grades 6-8 will implemented the *Connected Mathematics* Program. These “effective programs are specifically designed to utilize an investigative approach to learning. The mathematical educational approach focuses on a diversity of teaching strategies and methods. Some of the strategies are listed below

Cooperative Learning	small group instruction
direct instruction	learning centers
peer coaching	think/pair/share
modeling	Problem solving journals

To support instruction in grades 3, 5, and 8 Khepera will incorporate the text “*Measuring Up to PA Academic Standards and Success Strategies for PSSA*. All students will develop a strong foundation. in basic skills. Technology is embedded throughout the curriculum. Calculators and computers are a part of the daily routine and are used in the appropriate grade level. Scientific calculators will be used in grades 4-6; graphing calculators used in grades 7-8.

The “effective program” is manipulative based. Manipulation promotes deeper understanding of and assist in developing a systematic approach to learning.

A partial list of mathematical topics to be covered, at the appropriate grade level, using the programs cited is listed below:

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| <ul style="list-style-type: none"> • Whole number meaning and operations • Properties of whole number operations • Common and Decimal Fractions • Decimal Fractions • Relationship of common and decimal fractions • Properties of common and decimal fractions • Equations and Formulas • Measurement units • Estimating Computation • Estimating quantity and size • Data Representation • Percentages | <ul style="list-style-type: none"> • 2D Geometry Basis: Polygons, circles, perimeter, area and volume, coordinate geometry • Patterns relations and functions • 3D Geometry: Congruence and similarity • Construction with straight edge and compass • Proportionality concepts and problems • Negative numbers, integers • Exponents, order of operations • Exponents, roots and radicals • Number Theory • Rational and irrational numbers • Rounding • Slope and Trigonometry |
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Students are assessed using the following strategies:

Standardized test	performance tasks
Portfolios	math journals
Oral/written reports	homework
Partner quizzes	interviews
Teacher and peer Rubrics	problem solving projects
Cooperative mathematical processing	observation

Oral and written presentations teacher and text test

Khepera Mathematics Curriculum develops the skills needed to prepare students for high school and life long-long learning. Life long learning will be assed in four stages:

1. Consciousness - concrete experiences and rote memory
2. Actualization – Recognition of patterns
3. Transformation – Transference of Knowledge to reality
4. Empowerment – Use of Knowledge for life

Khepera Charter School Technology Curriculum Overview:

Khepera Charter School’s Technology curriculum is founded on standards that endorse comprehension of basic technology skills that are becoming a standard of living in the world. The school is dedicated to educating its students in all of the core content areas, and will incorporate technology as an academic focus and as a part of the curriculum.

Technology is a major part of our everyday lives, and in order for the students of Khepera to properly prepare for an established place in the world they must have exposure to technology. One of the major goals of Khepera will be to lay the foundation for curiosity that will enable students to become the leaders in the field of technology. We will bridge the technology divide.

Content Areas (Grades K-8)

Benchmarks

1. Use a computer to record, organize, chart, and present data.
2. Use a four-function calculator, computer, or other technology to solve practical problems and check answers.
3. Read, create, and represent data on charts, tables, diagrams, bar graphs, simple circle graphs, and coordinate graphs using a computer.
4. Explore and communicate how technology extends the ability of people to change the world to a greater extent than with their hands, voices, senses, and minds alone. Understand that multimedia communication devices and writing, drawing, and measuring using correct units are ways to communicate information to others.
5. Model situations by devising and carrying out experiments or simulations using technology.

Instructional Skills and Strategies

Direct Teaching (Microsoft Office Suite)

Individual Projects and Cooperative Learning

Lecture

Lecture with discussion

Slides (Use of a proxima)

Classwork, Homework, Worksheets/Surveys

Power point hands-on activities with the use of a computer per student

Guest Speakers

Resources

Afrocentric Software by Black Board International

BBI offers the Ashaware line of Educational Afrocentric Software, which includes K–12 programs in most of the major subject areas, as well as clipart and screensavers.

<http://www.ashaware.com/>

Bridges for Learning

The mission of Bridges for Learning is to provide leadership for the utilization of educational technology in the teaching and learning process. It is our goal to bring the best of consulting, staff development, technical and educational resources to help schools prepare students for a global society.

<http://www.bridgesforlearning.com>

Hyper Studio Software

Inspirations Software

Assessment

Graphic Organizers

Observations

Performance Tasks

Self/Peer Evaluations

Journals

Tests

Portfolios

Hands on assessments such as building websites, creating Cd Roms and power point presentations.

Khepera Charter School Social Studies Curriculum Overview:

The Khepera Charter School's Social Studies curriculum is based on a standards driven curriculum that promotes an awareness, understanding, and appreciation of cultural influences on both American and Global world. It is also aligned with the "Proposed Academic Standards for Civics and Government." (Pennsylvania Department of Education – 05/10/99).

A major goal of the Khepera Social Studies curriculum is to foster the development of a healthy self-concept, enabling our students to become successful human beings, and productive citizens of our world community.

In order to accomplish this objective, Khepera Charter School will develop thematic unit, at the appropriate grade level. organized around the following themes.

1. Diverse Cultures
2. Time, Continuity
3. People places and environments
4. Individual Development and Identity
5. Individuals, Groups and Institutions
6. Power, Authority, and Governance
7. Production, Distribution, and Consumption
8. Science, Technology, and society
9. Global Connection
10. Civic, Ideals and Practices.

Advances in communication and transportation have made our world "smaller", Khepera will emphasize the concepts and skills related to geography. It is Khepera's goal to instill in its students the confidence to become real-world problem solvers, in a culturally diverse society.

Scope and Sequence

These are the Social Studies Content Standards that will apply across grades K–8.

- Geography
- History
- Civics and Government
- Economics
- Culture

Within each content standard, the following areas of study will be explored.

- Time, Continuity and Change.
- Conflict and Cooperation

- Individualism and Interdependence
- Commonality and Diversity
- Interaction Within Different Environments
- Production, Distribution and Consumption
- Power, Authority and Governance

Instruction / Strategies / Skills

Khepera’s educational approach in social studies will center on the “Teacher as coordinator and the students as competent learners.” (Teacher - directs students / Students – inquires and explores) This will promote opportunity for student growth and development in their own unique way, and will enhance higher order thinking skills.

Below is a list of additional teaching strategies and methods to be used:

- Integration of social studies with other content areas
- Interactive and Cooperative Learning
- Activities involving student inquiry and problem solving
- Small group instruction
- Use of manipulatives (globes, wall and desk maps, photographs, graphs, charts, and technology,)
- Museum education, trips, interviews, and fieldwork
- Research papers where appropriate.

By using these teaching strategies, Khepera students will accomplish these basic study skills:

- Maps and Globe Skills
- Chart and Graph Skills
- Reading and Research Skills
- Critical Thinking Skills
- Build Citizenship Skills
- Develop Participation Skills

Resources

To support social studies instruction in grades K – 8, Khepera will incorporate resource materials presents a balanced picture of a global world and are culturally inclusive

Assessment:

Social studies performance will be evaluate using the following assessments:

- Informal Assessment
 1. Review questions
 2. Visual Summary
- Formal Assessment
 1. Lesson, Chapter and Unit Reviews
 2. Standard Tests
 3. Performance Tasks
 4. Individual and Group Presentations
- Student Self – Evaluation
 1. Individual End-of-Project Summary
 2. Group End-of-Project Checklist

- Concerts

Partnerships:

Partnerships with the community arts organizations and institutions will be formed to enhance the arts and Khepera Charter School.

Evaluations and Assessments:

- Students’ work will be displayed throughout the school and traveling exhibits will be displayed in area community facilities.
- Written reflection forms will be introduced at the second grade level to strengthen writing and communication skills. Acquired related vocabulary will also be used to communicate various ideas.
- Portfolio Assessments will be the primary tool for measuring a child’s growth and development. Traditional tests and quizzes will also be used as needed.

Khepera’s physical education/sports program will consist of traditional African Martial Arts, Golf, Tennis, track team, soccer, and swimming at local YMCA’S, YWCA’S and neighborhood pools.

At this point, Khepera Charter School does not plan to have basketball or football programs. We believe that we need to expose our junior learning partners to alternative life long sports such as tennis and golf. Economic partnerships are often developed in business enterprises master or at least be exposed to all the sports to which they have access. Sports programs will be beyond the conference room. If our children are to compete in the global market place, they must expand their knowledge and skills base. These sports will be held after school like the programs of private school such as Penn Charter, Germantown Friends, and Springside Academy.

Basic assumptions related to all contents areas will guide the teaching partners at Khepera Charter School. These basic assumptions are:

1. All students can excel
2. A high level of success depends upon, adult expectations, the students’ perception of their ability, and upon their hard work.
3. Students come to school to learn

Such assumptions must be internalized by caring adults, if we are to achieve educational

success. Learning partners at Khepera have discussed and internalized these assumptions.

Khepera Charter Cultural Inclusion Curriculum Overview:

Khepera Charter School Cultural Inclusion curriculum will ground students in their heritage and achievement. We develop thematic units that include the contributions and roles that they and their ancestors have played throughout history. Historical facts will be included in every content area. Parent and community voices strongly support this endeavor.

In 1994, the Philadelphia School district developed a policy that addresses cultural inclusion. The policy has never been fully implemented. Khepera will include elements of this policy in its cultural inclusion goals and objectives. The policy speaks eloquently to the needs of children in a diverse global society. It states in its definition that its purpose is to ensure equity and justice to all members of the school community, and society as a whole and to give those members the skills and knowledge they need to understand and overcome individual biases and institutional barriers to full equality. To

move toward fulfilling this creed Khepera's will implement the following aspects of the policy:

1. Pursue academic and cultural excellence for all children
2. Assist our junior learning partners to develop the necessary social and linguistic skills to communicate effectively in a multilingual, global society
3. Teach students to know and respect their own cultural heritage and to appreciate other people from their neighborhood, city, state, nation and the world.
4. Foster opportunities for learning partners to engage in cooperative decision making and problem solving that reflects a deep sensitivity to a culturally changing world.
5. Mandate that every teaching partner accept responsibility for implementing our cultural inclusion curriculum.

A partial list of Khepera Charter School Cultural Inclusion goals and objectives are as follows:

- To assist Khepera's staff in gaining the knowledge on how develop cultural inclusive thematic units.
- To help learning partners internalize the will to teach all students about their heritage and contributions
- To promote cultural standards that will enable teaching partners will come to Khepera with the belief that all cultures are valuable and must be included in all content areas.
- To encourage a belief system based on the principle that we learn better when we have knowledge of self as well as knowledge of others
- To help all learning partners develop knowledge of historical facts so that all students can learn about the part they played in the creation of knowledge.
- To accept students where they are and take them where they need to go.
- To create a culturally inclusive environment that inspires students to extend themselves in order to achieve their goals.

Rubrics and other forms of alternate and basic assessment tools will be used to assess cultural inclusion competency

In keeping with Khepera's mission, the ultimate goal of cultural inclusion is to promote academic excellence.

Examples of competencies are listed below:

- Understand the meaning of culture and how it affects language, behavior and thought.
- Understand ones own cultural heritage and experience as well as major cultural entities in the school and community
- Interpret and discuss the role and contributions different cultures have made in the development of knowledge across the disciplines.
- Identify, analyze, and critique the nature and sources of bias in all form of communication.
- Recognize how language can influence thoughts and perceptions about different societies and groups.
- Examine the economic and social consequences of current historical injustices caused by biased beliefs and actions directed toward specific groups in this country and abroad.

- Identify cultural resources, practices, and traditions that exist in their own group and how these are treated and or reflected in the cultural mainstream.
- Establish and assess progress toward reaching personal goals related to acquiring language skills, knowledge, and social skills that allow one to work effectively in diverse cultural groups and setting.

Additionally, Khepera Charter School family is firmly committed to helping each child develop a firm foundation in educational, cultural and social basics. Our overall educational program will be individualized and geared to the learning style of each child. Our educational family will use a variety of sound teaching and learning strategies to assure that our students:

- learn to read fluently
- can produce display quality writing using a number of different styles
- can problem solve in everyday life
- can think critically
- can problem solve, compute and write mathematically
- are computer literate
- are respectful of themselves, others and the environment
- are mannerly
- are loved
- possess conflict resolution skills
- are valued
- view education as a lifetime commitment
- understand the importance of good citizenship
- are free to celebrate cultural diversity
- understand the relationship between an excellent education, economic and community stability
- are prepared for the world of entrepreneurial pursuits or careers in a technological, global world

3B. What teaching methods will be used? How will this pedagogy enhance student learning?

Khepera Charter will utilize a variety of teaching methods and approaches that are research based with a focus on our school population. The instructional methods will be congruent with the values and mission of Khepera Charter School. Teaching partners will use a variety of research tested instructional strategies that will most effectively assist our learning partners in mastering the curriculum. Methods used have been proven effective with a wide range of learning styles, including learning partners performing below grade level, English language learners, and students with special needs. They will include, but are not limited to Direct Instruction, Curriculum Differentiation, Reading Recovery, Cooperative Learning, Teacher Lectures, Phonics, Memorization, Multi Disciplinary Projects, One Hundred Book Challenge, Music, Movement, and Expressive Arts, Multi-Age Groupings, Blackboard Configuration

Direct Instruction:

Long term research studies provide powerful evidence of the success of direct instruction. Siegfried Engelmann, a professor at the University of Oregon uses direct instruction to help inner city children to learn and excel. However, the technique has been proven successful with children regardless of economic level. The term “Direct Instruction” refers to a rigorously developed highly scripted method of teaching that is fast paced and provides constant interaction between student and teacher. Schools have reported significant gains on standardized tests using this approach. It provides students with remarkable success at a low cost when implemented.

Curriculum Differentiation:

Curriculum differentiation has been shown to significantly improve quantity and quality of learning for all students. All curriculums will be differentiated as need by individual students. This teaching methodology will include acceleration, depth, complexity and novelty.

- **Acceleration:** The rate at which a student progresses through curricular material is adjusted over time to reflect a need to move more quickly or a need to give more time in a particular area of study. Teachers will pretest to determine which students have already mastered the skills to be taught. Students who have mastered the concepts currently under study will have that material compacted out of their studies and they will be given more challenging material to study.
- **Depth:** Developing a thirst for knowledge in our learning partners requires nurturing an interest that may not have been previously revealed by a cursory study of a subject. The study of one or more subjects in greater depth than indicated in the basic curriculum will increase all students’ understanding and ignite in some the desire to search for even deeper understanding of the subject.
- **Complexity:** Many junior learning partners will quickly master being students. They easily learn to memorize and, to a certain extent use facts in order to pass tests. True learning and the creation of knowledge requires going beyond and making connections rarely achieved in today’s classroom. Senior learning Partners will create and foster this type of learning by adding complexity to our curriculum.
- **Novelty:** Many students come to us with a passion for learning about a particular subject. Allowing a student to pursue this passion, usually with an independent study contract, can lead to the discovery of new knowledge, for the student and society, as well as the discovery of new passions for pursuing knowledge. Student will be encouraged to find and follow a passion through an independent learning contract.

Curriculum Differentiation draws from the research of Kaplan, Reis, Tomlison, and others.

Learning partners will work together to develop prescriptive learning plans for students who are not reaching our educational objectives. Family and teaching learning partners will create and monitor individualized learning. Individualized learning plans will reflect detail curriculum that students will master during the school year, and information from the family on how teaching and learning partners can best implement such a plan. At the beginning of each school year, family partners will be asked to write a letter describing junior learning partners that outlines the dreams and aspirations that they

have for their children. This letter will be used as a mechanism to better understand and prescribe individual learning plans for our junior learning partners. With this knowledge, projects be undertaken in order to develop particular skills... Khepera's staff will work with our junior learning partners to make sure that they master the content and social skills necessary for personal and academic success. Prescriptive learning skills will be reviewed for effectiveness at least three times a year. The plan will be revised as necessary.

Multi-Age Groupings:

Khepera learning partners will also explore the feasibility of using a multi-graded classroom approach at the kindergarten through third grade level. Junior and teaching learning partners stay together for up to four years. This approach i.e. effective in addressing the developmental needs of children as well as building a strong relationship between among families and school. Some of the advantages of multi-graded classrooms are:

- The flexibility to group children by need, ability and interest.
- Strong student/teacher/family relationships are created
- The older students intellectually motivate younger children; older children grow in leadership and responsibility
- Children are able to learn at their own pace
- Children experience the opportunity to have broader social experiences.

Multiage groupings draw from the research of Jean Piaget and Albert Bandura.

Looping:

Multi age education often includes a teaching strategy known as looping. Learning partners in the middle school will have an opportunity to "loop" or move with their students. Following students through at least two grades will assist in meeting the developmental needs of middle school students and build strong sustaining partnerships with family learning partners. The research of Jean Piaget and Albert Bandura also supports the effectiveness of such an approach.

Khepera Charter School will provide staff development that will assist our teaching partners in becoming specialist in specific content areas. For example, one teacher may specialize in math and science while another may specialize in social studies and language arts. Such expertise will enable teachers provide enriched content area instruction.

In addition, Khepera Charter School will use other instructional methods as needed to the needs of our junior learning partners that are consistent with our mission.

At Khepera, we believe that it is extremely important that we have rituals that bond all learning partners. Imbedded in our instructional methodology will be the understanding that all teaching partners will be consistent, persistent, and insistent that our student learning partners accept responsibility for pursuing skills that will lead to excellence and life long learning.

Blackboard Configuration

Blackboard Configuration, a strategy used by the Frederick Douglass Academy Charter School in New York will be used in every classroom at Khepera. The three P's of Blackboard Configuration are:

1. Purpose:

- The blackboard configuration is used to get students into the room, settled down ready to learn and work
- The configuration allows students to know what they must learn in each class
- The configuration, properly used, eliminates verbal instructions at the beginning of class.
- The configuration is a visual illustration of the teacher's commitment to instruction. It reflects the teacher's plan for a lesson with a coherent beginning, middle and end.
- The configuration helps both teacher and students to organize and stay focus
- The configuration serves as a tool to pace test-taking practices.

2. Processes:

- Write configuration daily for each class
- Write configuration prior to students' arrival. Use charts if circumstances require it.
- Always write the "Aim," "Do now" and "Homework" in the same area of the blackboard.
- Create a "Do-Now" which takes students no more than 3-4 minutes to complete.
- Include in your "Do-Now" everything that you want students to do at the beginning of class. The "Do-Now" must involve real work. Below is an example of an appropriate Do-Now":
 - a. Take out your homework and place it on your desk
 - b. List three things that you learned yesterday that relates to today's aims
- List under the "aim" the steps to be taken to accomplish the lesson goal.

3. And Payoff:

- Improve school tone
- Strengthens teachers' skills in planning and pacing
- Standardizes students' expectation school wide
- Provides leaders with a management tool that makes daily observations possible and meaningful
- Provides students with an example of how to organize and plan
- Increase student achievement.

Most importantly, Khepera Charter School will create a partnership with all individuals responsible for the care of our students and broader community organizations. Such a relationship will extend beyond the school day. The interactions between learning partners will be fluid and based on mutual respect. All family members will be invited to immerse themselves in all school activities. Our relationship will be based on a *Contract of Mutual Responsibility*. See Appendix

This involvement will enable us to facilitate the learning process of our children at home and in school. Such a relationship will promote parental and community involvement, and outstanding achievement by our children. We truly envision that total commitment to this process will be viewed as a labor of love between families, staff and community.

3C. Attached the school calendar and identify hours of school operations. (See Sections

1715-A of the charter school legislation)

In the 2003-2004 school year, Khepera Charter School will adopt a calendar similar to that of the School District of Philadelphia. Such a calendar is yet to be determined. Our school will operate for seven hours and forty-five minutes. Teachers will arrive fifteen minutes before students and remain forty-five minutes after students are dismissed. The Board of Trustees will determine the precise starting time once facilities arrangements are finalized and the parental advisory board is consulted. Khepera's calendar will surpass minimum 180 day/990 hours requirements for the school year. Addition time for stall development will occur in August, preceding school opening. At a minimum, Khepera will be opened 200 days per year. If necessary, we will project a school calendar for the school year 2003-2004. We will comply with and surpass the requirements of Act 22.

3D. Describe how your school will accommodate students with special needs (The Department will issue guidelines for charter school special education).

Khepera Charter School is committed to the holistic educational and social development of every child. Our school's child centered environment will ensure that every student is valued and will experience academic and personal success. If necessary, additional accommodations will be provided for our special need students. Differences will be respected. All students at Khepera will feel that they are included.

When a child is identified as having special needs, parents will be notified of their child's rights to appropriate special education or related services. Khepera Charter School will provide the necessary student evaluation based on due process requirements under IDEA. Khepera will also comply with IDEA standards for providing students with least restrictive environment. Inclusion models will be fully implemented

The individual education plans for special needs students and second language learners will reflect appropriate academic skill, life-long learning skill and social and interpersonal skill objectives developed in compliance with applicable state and federal laws.

Some of the specific services that Khepera Charter School will provide for special needs students are listed below:

- Conduct individualized educational program meetings based on IDEA requirements
- Provide administrative support and legal service related to due process and all services required by the students IEP, such as but not limited to resource specialist services and speech therapist.

- Khepera will cooperate with the School District in its delivery of special services for students enrolled at Khepera
- To the extent possible Khepera will, mainstream special needs students.
- Professional development and specialized training for all teaching learning partners.
- Common planning time for regular and special needs teaching partners.
- Adhere to Act 22 as it pertains to special need students