EDUCATIONAL CURRICULUM

APPENDIX "A"

To the

EDUCATIONAL SPECIFICATIONS

For the

EAST HARTFORD-GLASTONBURY ELEMENTARY MAGNET SCHOOL

Revised March 25, 2009

1. Core Academic Program

The East Hartford-Glastonbury Elementary Magnet School, now in its 16th year of operation has a very rich and deep curriculum developed over many years by the teaching and CREC curriculum development experts. The current school curriculum will be used after moving to the new facility.

The EHGEMS curriculum focuses on developing and deepening students' understanding of content areas and is organized around school-wide and yearlong themes. The curriculum uses inquiry and problem-solving as the integrative core. This curricular approach focuses on relationships that exist across various disciplines while still maintaining the integrity of content drawn from the individual disciplines. Major concepts and methods from these disciplines are taught as part of the units of study and are chosen as appropriate to the learners' interest and cognitive and social development. The curriculum addresses the following areas:

- Literacy: The ultimate goal of literacy instruction is for learners to construct meaning and employ the language arts for lifelong learning, work and enjoyment. The curriculum provides that all students will read, write, speak, listen, and view to construct meaning of written, visual and oral texts. Students will learn to read with understanding and respond thoughtfully to a variety of texts from many literary periods and cultures. Students will learn to write and speak English proficiently to communicate ideas clearly and create works in visual, oral and written texts. Each grade level has specific learning objectives for literacy that have been drawn from the Connecticut Frameworks.

- Mathematics: The goal of numeracy instruction is for learners to use mathematical skills and concepts with proficiency and confidence, and appreciate the power and utility of mathematics as a discipline and as a tool for solving problems. The curriculum provides that all students receive instruction composed of a variety of inter-related components including: problem-solving, number sense, estimation, operations, ratios, proportions, percents, special relations, geometry, measurement, patterns, statistics and probability, patterns, relationships, functions, graphing and discrete mathematics. An emphasis of the math curriculum is the metacognitive process of problem-solving. Each grade level has specific learning objectives for mathematics drawn from the Connecticut Frameworks.

- Science and Technology: The goal of the science curriculum is for learners to apply scientific skills, processes and methods of inquiry to real-world settings. Life science represents a majority of a traditional elementary science

curriculum. Our curriculum, although teaching life science, will stress physical, earth and space science. The curriculum provides that all students receive instruction organized around four major areas of science: physical science, life science, earth science and space science. There is an emphasis both on the teaching of *science* – learning about the natural world, and *technology* – learning how humans solve problems as they adapt to the natural world. The science center and classrooms provide spaces and equipment to effectively nurture scientific problem-solving skills. Each grade has specific learning objectives for science drawn from state and national standards.

- Global Studies: The goal of the global studies curriculum is for learners to gain an understanding of the interaction between and among societies and cultures of the past and present world and apply that knowledge and understanding as a responsible citizen in a culturally diverse, interdependent world. All students receive instruction in the Japanese language and culture beginning in kindergarten.

- Technology: The goal of the technology curriculum is for learners to be prepared to live in their technologically interdependent world. In order to reduce economic isolation it is essential for all learners to process and manage information through the skillful use of technology. Each grade level has specific learning objectives that will enable the learners to make meaningful decisions regarding the use of technology to solve problems, enhance critical and creative thinking and use information effectively.

- The Arts: The goal of the arts curriculum is to develop skills in visual art and music and an appreciation of the importance of the arts in expressing human experience. The ultimate goal of these curricula is for the learner to apply their skills and understandings throughout their lifetime. Each grade level has specific learning objectives based on the Connecticut Framework.

- Physical Education: The ultimate goals of the physical education curriculum is for the learner to realize the importance of, and choose to participate regularly in, the physical activities designated to maintain and enhance healthy lifestyles. The connection between the science of the human body and physical well being is emphasized. The curriculum provides that all students receive instruction in physical fitness and the fundamentals of movement.

2. Unique Content Focus

The East Hartford-Glastonbury Elementary Magnet School focuses on science, technology, and global education. Science is taught and learned through the

constructivist approach. We believe that students learn best by "doing" science. Students participate in many field study trips and actively investigate scientific principals in the schools two dedicated science labs. Technology is integrated into classroom life. Student projects typically have a technology focus and by the end of their elementary career all students will have created newsletters, Power Point slide shows, web pages, and podcasts to show their work. Students begin learning Japanese in kindergarten. They develop Japanese language skills and increase their understanding of other cultures and ways of thinking. Utilizing a thematic interdisciplinary curriculum, students gain the ability to perceive the relationships among societal, scientific, and technological issues.

3. Teaching Methods

The school uses a variety of teaching methods and instructional strategies which emphasize thematic, inquiry-based, and discovery learning. Constructivist teaching strategies are used, taking into account the learners' experiences, achievement levels, and interests. In addition, curriculum differentiation is used to increase achievement by addressing differences in students' prior knowledge, motivation, learning styles, product preferences, and interests. Teachers also use curriculum modification strategies to analyze, evaluate, and improve existing curriculum in order to improve student achievement.

4. Partnerships

The East Hartford-Glastonbury Elementary Magnet School's philosophy of community involvement and integrated learning makes the establishment of learning partnerships vital to the quality, uniqueness, and excitement of the school's program. There are various levels of partnerships enjoyed by the staff, parents, and students of our school.

The first level of partnership agreements is with the participating districts for required special services. The school staff works closely with each town's special education department to provide all students with equal opportunities to achieve and accomplish the goals of the school's curriculum. Associations with curriculum specialists from the towns are developed whenever possible. Also, resources from CREC are used to help develop the curriculum and teaching of the school.

In addition to the local districts and CREC, the school has several ongoing partners that provide a wide variety of services to the school. Partnerships include:

- Parents
- Institutions of higher education, represented by Central Connecticut State University, Eastern Connecticut State University, and the University of Connecticut.
- Specialized resource centers for science, technology, and global education, represented by the Connecticut Science Center, the New England Air Museum, and the Connecticut Audubon Society.
- NASA, since becoming a NASA Explorer School in 2007
- Business and Industry including Pratt and Whitney, Hamilton Sunstrand, and the Connecticut Center for Advanced Technology.
- Partner schools, particularly CREC's other science and technology magnet schools: Two Rivers Magnet Middle School, and the Greater Hartford Academy of Math and Science.

5. Multicultural Education

The school is a learning organization composed of a community of learners. The learning community is a microcosm of today's culturally diverse society, the future, unity, and inclusion are central to the curriculum. Multicultural education is infused into the curriculum in many ways, as a multicultural/ global education perspective permeates the entire school program. Diversity is one of the primary values upon which the school is founded and helps students realize the interdependence of our world. The content of the curriculum includes integration of the disciplines with global education as a content focus.

In line with the aim of equipping students with global knowledge and skills, each student learns Japanese language and customs. The study of different languages and customs furthers the perspective of diversity for students by bringing into sharper focus cultures other than their own.

Students also gain an increased appreciation of diversity through their study of the arts. The curriculum is designed to enable students to gain a wealth of cultural understanding through the study of art forms of a variety of cultures (e.g. musical instruments from around the world, and constructing ceremonial masks).

6. Student Assessment

a. Method of Assessment

Assessment is intricately linked to the daily instruction and curriculum of the students at the East Hartford-Glastonbury Elementary Magnet School.

- **Classroom based formative assessments**, including pre- and post-tests, relate to particular lesson objectives and units, and provide teachers with information to guide student learning, as well as to determine the general effectiveness of the lessons and decide which students are ready to move forward and which require additional assistance in mastering particular material.
- **CREC Common Assessments** are given in the fall, winter and spring of each year to track student progress and inform instruction. The students are assessed in reading, writing, and mathematics and the assessments vary by grade level.
- **Student Progress Reports** are provided to parents three times per year. The school uses standardized report cards and combined with the parent-teacher conferences they provide a developmental overview of the students' progress toward the identified curriculum objectives.
- **Connecticut Mastery Tests** are given in grades 3-5 in March of each year.

b. Assessment of Academic Achievement

The school's themes of science, technology, and global education are often taught using an interdisciplinary approach. Theme specialists review with the teachers the goals and objectives for the regular subject areas, and infuse them into their special lessons whenever possible.

While it is felt that the use of our special themes will provide vehicles for authentic learning and increase student motivation to learn, direct skill instruction is also used to promote high academic achievement on the Connecticut Mastery Tests (CMT). Areas and objectives on the CMT that pose difficulty for students are identified, and instruction is tailored to address these needs. Overall students have achieved at high levels on the CMT as compared to the participating districts and state averages.