

**SECTION d**  
**Curriculum**

## **SECTION D: CURRICULUM**

### **A. CURRICULUM AND CURRICULAR OBJECTIVES**

The Academy's curriculum shall be based on the standards as set forth by the Commonwealth Community Development Elementary Academy. Specifically, the curriculum will provide for instruction in the following subject areas:

#### **LANGUAGE ARTS**

- Reading
- Speaking, Listening – and Viewing
- Writing
- Spanish

#### **HISTORY, GEOGRAPHY, CIVICS AND ECONOMIC ARTS**

- Music
- Visual Arts
- Drama
- Dance

#### **MATHEMATICS AND SCIENCE**

#### **CHARACTER AND ETHICS**

#### **PHYSICAL FITNESS AND HEALTH**

#### **PRACTIVAL ARTS AND SKILLS**

Up to 25% of the Academy's curriculum will reflect local curriculum choices and preferences, to be determined at a future date.

Note: A more detailed description of the Commonwealth Community Development Elementary Academy curriculum and instructional strategies by subject area is contained in Attachment I (*Student Standards for the Primary Academy*) and Attachment 2 (*Student Statistics for the Elementary Academy*).

The Commonwealth Community Development Elementary Academy offers a challenging, innovative, and flexible curriculum that provides teachers and students with a program of distinction. This section describes the K-5 curriculum in detail, including curriculum objectives, curriculum standards and instructional design within each subject area.

In order to account for the full range of knowledge and skills that students will acquire, the

curriculum is described according to commonly accepted divisions, in practice, however, teachers will frequently integrate the subject areas. Commonwealth Community Development Elementary Academy never forces curriculum integration for its own sake, but frequent integrated experiences capitalize on students' strong need to make connections and help them better understand the important ideas encountered in the Primary (K-2) and Elementary (3-5) Academies.

## **K-5 READING AND LANGUAGE ARTS**

The Commonwealth Community development Elementary Academy's reading and language arts curriculum aims to foster high levels of literacy in the areas of reading, writing, speaking, listening, and viewing. The first step is ensuring, that all students have strong reading and writing skills by the end of the second grade.

With the goal in mind, the Commonwealth Community Development Elementary Academy program in the Primary Academy stresses multiple teaching strategies, with emphasis on such proven methods as cooperative learning and one-to-one tutoring. Phonics, word-attack, comprehension, and study skills are explicitly taught through a literature-based approach that features classic contemporary stories, fables, fairy tales, and folk tales, in addition to expository texts. The writing program involves the use of daily journals and writing, portfolios. The early goal is to promote enthusiasm for writing. As students become more adept at writing both fiction and nonfiction, they focus on spelling, grammar, and punctuation as well as content.

In the Elementary Academy, students solidify their grasp of the essential tools of English. They gain strong skills in reading, writing, and speaking in all disciplines and deepen their understanding of more sophisticated literature and nonfiction works. They read poems, plays, speeches, and biographies, as well as novels and short stories. They memorize passages from great works for intellectual discipline and for a grounding in cultural literacy. Students also focus more attention on the rules and structure of proper English, vocabulary growth, oral fluency, and public speaking. By the end of this academy, they complete their first multimedia project.

### **Curriculum Objectives**

#### **Primary Academy (K-2)**

##### ***Reading***

- Foster a love of reading

- Motivate students to read for pleasure and for information
- Fill with print and electronic books
- Emphasize skills in the context of reading
- Teach the strategies that good readers use
- Feature great works of classic and contemporary literature
- Value reference materials and periodicals
- Use technology to reach reading
- Promote vocabulary development

### ***Speaking, Listening and Viewing***

- Promote extemporaneous speaking
- Teach students to give and receive feedback
- Encourage respect and appreciation for storytelling and the oral tradition
- Develop informed, intelligent viewers
- Help students analyze information from a variety of sources

### ***Writing***

- Encourage real writing for real purposes
- Promote correct spelling and usage
- Develop basic editorial skills
- Teach students to give and receive feedback
- Communicate the power of the written word

### ***Elementary Academy (3-5)***

#### ***English and Language Arts***

- Open doors and minds to further learning
- Stress speaking, listening, and viewing
- Build on basic skills
- Bring the world to the classroom with new technologies
- Foster a love of reading

### **Standards**

#### **Primary Academy (K-2)**

#### ***Reading***

- Read a variety of self-selected and assigned books and expository texts from the primary reading list with fluency, independent, and accuracy
- Identify the value and purposes of reading, for their own lives
- Relate and apply content to their own lives
- Comprehend literary works or expository texts
- Identify and react to key ideas, issues, and concepts, heard or read, by talking, writing, dramatizing, or creating art in response to the text
- Make and validate predictions, determine purposes for reading, self-question while reading, and draw conclusions based on text

- Increase vocabulary understanding and usage by maintaining an ever-expanding collection of meaningful words
- Select materials that are appropriate for ability, interests, and conceptual level
- Read aloud with expression from appropriate materials. Read silently with comprehension from appropriate materials for increasing periods of time
- Develop a variety of strategies to figure out unfamiliar words and ideas in print, such as phonetic and structural analysis or visual and semantic cueing
- Recognize and compare unique elements and devices of literary works – plot, characters, setting, problems and solution; rhyme, rhythm, and predictability; alliteration, figurative language, and humor
- Recognize and read a variety of genres, including fiction (stories, poems, plays) and expository text (newspapers, magazines, and reference materials)
- Select appropriate reference sources to find information, answers, and word meanings
- Choose to read on their own and share their reading, enjoyment with others

### ***Speaking, Listening, and Viewing***

- Give and receive directions and communicate simple messages
- Memorize and recite with expression a poem or speech of at least ten lines
- Speak extemporaneously on a familiar subject for at least two minutes with coherence and liveliness
- Listen to a book being read that is on the reading list for the next academy and demonstrate understanding of it by retelling the significant elements
- Summarize a news report, movie, or television program orally and in writing
- Explain the difference between factual and fictional video programming
- Distinguish between programming commercials

### ***Writing***

- Write journal entries, stories, letters, and poems with clarity and correct mechanics
- Write a detailed description of a familiar person, place or object
- Writing a simple report of at least two pages on a subject of special interest
- Revise a piece of writing by improving sequence, providing more descriptive detail, or adding more variety of sentence types
- Offer editorial suggestions to classmates
- Spell frequently used words correctly
- Use capitals, appropriate punctuation at the end of a sentence, commas in a series of words, and correct verb tenses and plurals

### **Elementary Academy (3-5)**

### ***Reading***

- Read a variety of self-selected and assigned materials from the elementary reading list with fluency independence, and accuracy
- Select, read, and identify elements from a wide variety of genres (classics in literature, contemporary fiction, nonfiction, poetry, drama, biography)
- Expand their repertoire of reading strategies to include alternative means of decoding, constructing meaning, and adapting, to types of material encountered (fiction, expository text, functional print)
- Demonstrate critical reading skills by identifying elements of author style, point of view, propaganda, fact versus fiction, problem –solution, and cause and effect
- Use prior knowledge to comprehend a variety of reading materials
- Analyze elements of magazines, newspapers, schedules, brochures, and other types of expository and functional print
- Conduct research by identifying, selecting, summarizing and synthesizing information from a variety of appropriate primary and secondary resource materials, and accessing and using information from electronic sources
- Explore the dynamics of language by investigating the origin of words, word meanings and usage, and the ever-changing nature of our lexicon. Expand vocabulary by using, context cues, dictionaries, thesauruses, and electronic word banks
- Maintain an annotated personal log or record of material read

### ***Listening and Viewing***

- Engage in a wide variety of listening experiences such as the reading aloud of literature, reports, audio and video broadcasts, demonstrations, and panel presentations
- Engage in a wide variety of viewing experiences such as news programming, video productions of books read, and films related to areas of study
- Understand the various roles and responses as a member of a listening and viewing audience (to react, respond, praise, and question)
- Demonstrate listening and viewing comprehension by paraphrasing, questioning, commenting on, and reacting to material heard
- Demonstrate the ability to focus and attend, to ignore distracting stimuli, and to fit the message into existing cognitive structures
- Establish pre-listening and viewing purpose and questions
- Take notes during presentations to reinforce comprehension
- Discuss the application of listening strategies before, during, and after the experience
- Listen and view critically for errors and false claims
- Produce a videotape and identify the steps involved, from preparing a script to editing the final tape

### ***Speaking***

- Engage in a variety of oral language activities ranging from informal conversations and discussions to oral presentation, including speeches, panel presentations, inter-views and reader's theater
- Organize thought and language in order to present material with clarity and cohesion
- Develop effective presentation skills, such as stance, use of voice, use of visual aids, style, and body language

- Memorize and recite passages from poems and at least one substantial poetry selection
- Retell familiar stories with coherence and liveliness
- Tell original stories
- Present dramatic renditions
- Engage in role-playing

### ***Writing***

- Write in a variety of forms, including autobiographical, informational, and cause and effect, for many purposes
- Adjust writing to the intended audience
- Write a five-page report on a curriculum-related topic, demonstrating the ability to access information, take notes, prepare an outline, and organize materials
- Develop the ability to create excitement in writing a research report, a letter, or a story
- Identify parts of speech
- Demonstrate ability to use rules, conventions, and correct spelling
- Revise a piece of writing to improve coherence, clarity, and correctness, using feedback from others and self-review

### **Core Teaching Materials**

*Success for All*, a research-based program developed at Johns Hopkins University, is Commonwealth Community Development Elementary Academy's core program for teaching reading in the Primary Academy. This program was selected for the following reasons:

- It is consistent with Commonwealth Community Development Elementary Academy's standards and objectives for reading, and language arts.
  - It relies on prevention and immediate intensive intervention to ensure that all students develop reading skills.
  - It is research-based and proven effective in developing reading, skills.
  - It supports one-to-one tutoring, an essential element of Commonwealth Community Development Elementary Academy's school design in the Primary Academy.
  - It develops literature appreciation as well as early reading, skills (using HBJ's *Treasury of Literature*, described below)
  - It emphasizes repeated oral reading to ensure success.
  - It emphasizes writing, as a means of improving reading and thinking, even at the earliest grades.
  - In grades 1 and 2, it uses a cooperative learning method to build vocabulary, decoding skills, summarization, predicting, and story-related writing
  - It supports grouping and regrouping of children to focus teaching efforts and maximize skill progress.
- *Treasury of Literature*, from Harcourt Brace Jovanovich, is the core program for teaching reading in the Elementary Academy and supports *Success For All* in the Primary

Academy. We selected this program because:

- It contains authentic literature that sets the foundation for a lifelong love of reading.
- It is based on unit themes that align well with the rest of the Commonwealth Community Development Elementary Academy curriculum.
- It integrates listening, speaking, reading, writing, spelling, and thinking.
- It supports a wide range of instructional activities that provide for different learning styles and language proficiencies.
- It supports the infusion of multicultural literature and activities throughout the curriculum.
- It provides assessment that is an ongoing, natural part of the reading and language process.

## **Program Components**

*Success for All* for the Primary Academy consists of the following components:

*STAR (Story Telling and Retelling)*: Involves students in listening to, retelling, and dramatizing children's literature.

*Peabody Language Development Kit*: Provides additional models for language use and expression, as well as development of specific vocabulary skills. It contains lessons on such concepts as shapes, colors, classification, neighborhoods, foods, and clothing, and such language concepts as over/under and before/after.

*Beginning Reading*: A series of phonetically regular but meaningful and interesting mini books, that emphasizes repeated oral reading to partners as well as to the teacher.

*Cooperative Integrated Reading and Composition (CIRC)*: Uses cooperative learning activities built around story structure, prediction, summarization, vocabulary building, decoding practice, and story-related writing. Story-related writing is also shared within teams.

*Theme-based Literature Anthologies*: HBJ's Treasury of Literature and correlated trade books provide the print foundation for direct instruction and skill development.

*Tutors*: Work one-on-one with children who are having the most difficulty learning to read. Tutors focus on the same skills and use the same materials as those used in the regular reading program.

*HBJ's Treasury of Literature* for the Elementary Academy consists of the following components:

*Student Anthologies:* A collection of trade books under one cover, featuring authentic children's literature and illustrations.

*Big Books:* Feature large, easy-to-see pages.

*Big Books Literature Cassette Collections:* Recordings of Big Book stories.

*Literature Cassettes:* Recorded literature selections from the student anthologies.

*Treasures to Share:* An BBJ library of children's trade books related to unit themes and authors.

*Teacher's Editions:* Integrated lesson plans that provide teaching strategies, activities, and practical suggestions for all types of learners and needs.

*Additional Teacher Materials:* Picture cards that build visual literacy; vocabulary and letter cards; activities for reinforcing, reviewing, and re-teaching phonics objectives; wall charts and transparencies; and innovative videotapes of professional workshops.

*Student Support Materials:* Writer's journal for literature responses; practice book that strengthens and enhances skills; integrated spelling book including, activities and assessments; and project cards for independent and integrated project activities.

*Family Materials:* Take-home books made by students for reading at home, and family involvement activities for extending each unit theme.

## **Sample Themes**

Here are just some of the themes students will explore through the reading and language arts curriculum:

- Friendships
- Celebrations
- Animal Tales
- Discoveries
- Challenges
- Flights

## **K-5 HISTORY-SOCIAL SCIENCE**

The goal of the history and social sciences curriculum in Commonwealth Community Development Elementary Academy Primary and Elementary Academies is to awaken in the minds and imaginations of children an understanding of and appreciation for the subject of history and its related disciplines. To accomplish this goal, the Commonwealth Community Development Elementary Academy has designed a learning environment that involves children as active learners. Instruction is project-based and features meaningful activities that apply key process skills to investigations of important content. Students work individually and in cooperative learning, groups on projects that are often cross-curricular. A multicultural perspective and respect for diversity pervades the curriculum, which is standards-based and uses authentic assessment to evaluate student performance and guide instruction.

In the Primary Academy, students encounter a wide variety of interesting people, places, cultures, and ideas. They begin to grasp the inherent drama of history through stories, especially those about people who have made a difference, and by exploring their own family histories. They learn to use maps and globes to identify places and to understand the impact of place on how people live. They are introduced to the institutions and symbols of American political processes and culture. And, they learn basic economic concepts in the context of learning about how people lived in the past, how they live in the present, and how they are likely to live in the future.

In the Elementary Academy, the curriculum is organized into a three-year sequential study called “Dinosaurs to Discovery,” with a special emphasis on the idea of place. We titled this theme carefully to convey learning from a distant place, as symbolized by the dinosaurs, to the future, as symbolized by the space shuttle Discovery. This study engages students in the exciting panorama of the history of the natural world and its people. As they learn about the long ago and far away in this academy, students also gain knowledge about the here and now.

### **Curriculum Objectives**

#### **Primary (K-2) and Elementary (3-5) Academies**

- Introduce children to the institutions and symbols of American political processes and history
- Take a near-to-far approach
- Connect principles to students’ everyday experiences
- Bring the world to the classroom with new technologies

- Encourage students to look beyond their immediate world
- Develop multicultural understanding and historical imagination

## **Standards**

### **Primary Academy (K-2)**

#### *History*

- Discuss stories, legends, and fables from a variety of historical and cultural sources
- Construct a time line from the 1920's to the 1990's showing, historical figures from stories they have read
- Identify key historical figures and their contributions
- Prepare an oral history of someone who has lived in the time that is being studied
- Retell a story about an historical figures in chronological order
- Summarize a simple news story with attention to time

#### *Geography*

- Locate places on a map
- Identify sites in the community
- Identify land form and bodies of water on maps and globes
- Provide a simple illustration of the impact of the physical environment on people and places being studied
- Construct a man from materials such as papier-mâché
- Summarize a news event with attention to place

#### *Civics*

- Identify national symbols such as the flag
- Explain in simple terms the basic roles of the executive, legislative, and judicial branches of the government
- Make appropriate class decisions relating to school life by orderly discussion and majority rule
- Recite and sing, with appropriate understanding, "America, the Beautiful", "The Star-Spangled Banner," "Lift Every Voice and Sign," parts of "Paul Revere's Ride," and Dr. Martin Luther King, Jr.'s speech "I Have A Dream"

#### *Economics*

- Identify the natural resources in places being studied

- Explain consumers and the flexible nature of material wants in terms of everyday desires, as in visits to a candy store or toy store
- Explain how producers create goods and services in response to consumer interests through activities, such as setting up a lemonade stand on a hot day
- Identify costs, income, and profit in the context of activities such as the class market
- Prepare a budget for a class project

### **Elementary Academy (3-5)**

#### ***History***

- Construct a time line that depicts key people, discoveries, inventions, and so on for a period being studied
- Explain how we know what we know about history
- Describe basic ways that human societies have changed over time, such as how technological innovations changed agriculture, education, and communication
- Compare common features of human societies, such as families, religion, education, government, and economic activity
- Identify people, events, places, and technological developments that had a major impact on U.S. history and state history
- Describe how their community, state, and country compare with other communities, cultures, and nations studied
- Construct simple narratives showing relationships between two strands of historical development, such as the relationship between the railroads and westward migration
- Contrast differing accounts of events in U.S. history, using a variety of firsthand accounts, myths, and historical narratives
- Demonstrate emerging analytic skills in relation to historical topics studied, including such skills as distinguishing fact from opinion analyzing cause and effect, describing continuity and change, and formulating critical questions
- Discuss differing historical interpretations on the basis of evidence and show willingness to revise opinions in light of new evidence or logical arguments

#### ***Geography***

- Locate and describe places on Earth, using the basic features of common globes and flat maps, such as latitude and longitude
- Construct maps describing their everyday environment and local places of interest accurately and to scale
- Describe major natural changes in Earth and its surface, including the formation of the planet as part of the solar system, climate changes and the Ice Ages, and continental drift
- Demonstrate basic knowledge of major physical and political features on Earth, such as continents, climate variations, major rivers, national boundaries, and capitals
- Explain simple human and natural distribution patterns on Earth's surface, such as the location of mountain ranges and why people have tended to settle near water

- Describe the relationships between location and human activities such as education, religion, and work

Describe how people and goods interact between and among places in the U.S., such as the relationship among transportation, trade, and communication

### ***Civics***

- Explain the importance of national symbols and ideas in their historical context, such as how the Statue of Liberty relates to Ellis Island and immigration  
Explain concepts in the Constitution and Bill of Rights and the Declaration of Independence, including individual rights, separation of powers, and majority rule
- Discuss concepts such as justice and compromise in the context of historical developments
- Describe how Americans participate in the political process, including voting, campaigning, public debate, and community organizing
- Discuss the historical diversity of the American people and how we have come together as one nation

### ***Economics***

- Explain basic Economic concepts such as markets, money, specialization, and trade using straight forward examples from the experience as well as state or U.S. history
- Discuss how key features of the economy, such as business and banks, work
- Use economic concepts such as supply and demand and trade in interpreting developments in their community, state, and nation
- Discuss historical developments in the context of key economic concepts and features of the economy, such as trade, banks, and taxes
- Discuss economic issues in accounts of events reported in the news and in their own personal experiences

### **Core Teaching Materials**

The Commonwealth Community Development Elementary Academy recommends an activity-based K-2 social studies skills program, such as Nystrom's *Primary Social Studies Skills or Silver Burdett's Primary Place*.

In addition to such a program, emphasis is placed on a board-based, multicultural classroom library of children's trade books, including folk tales, myths, legends, poetry, songbooks, biographies, and historical fiction and nonfiction. In the Elementary Academy, the core materials vary according to needs at each grade level. Grade three features units built around identified core trade books; grade four relies on local state history books for its foundation; and grade five focuses on Joy Hakim's History of U.S. series. All three years in the Elementary Academy will feature a broad-based, multicultural, multi-genre classroom library of trade books.

The Commonwealth Community Development Elementary Academy chose this eclectic approach to core teaching materials in the Primary and Elementary Academies because:

- It allows greater flexibility in structuring creative learning activities.
- It allows for local adaptation, especially in the Primary Academy and in grade four.
- It emphasizes the use of authentic literature in social studies instruction.
- It affords more opportunities for cross-curricular projects and activities.
- It supports Commonwealth Community Development Elementary Academy's belief in project-based learning.
- It allows teachers greater freedom to tailor instruction to their students' unique needs and interests.

### **Sample Topics**

- Here are the main themes students will explore in the Primary and Elementary Academies:
  - People to Know
  - Places to Go
  - Watch us Grow
  - A Distant Place
  - My Place
  - Our Place

### **K-5 MATHEMATICS**

- The Commonwealth Community Development Elementary Academy's mathematics curriculum is designed to prepare children to solve problems flexibly, to carry out tasks encountered in everyday life, to foster number and spatial sense, to develop positive attitudes toward mathematics, and to stimulate mathematical thinking. To achieve these goals, the curriculum stresses not only computation, but the full range of mathematics including data collection and analysis, probability and statistics, geometry, and algebra.
- In the Primary Academy, students learn useful math facts and how to compute with speed and accuracy. But they also learn to apply addition, subtraction, multiplication, and division to real life problems and situations. Through hands-on activities, such as planning the school garden, and projects that involve the use of computers and manipulatives, students apply and test their discoveries, develop mental math skills, explore relationships, and strengthen their thinking. This introduction ensures that they go through life confident in mathematics and capable of applying it to their daily lives.

- In the Elementary Academy, the mathematics curriculum continues to balance concept instruction with meaningful application. Students apply their more advanced mathematical tools and techniques to a rich variety of cross-curricular projects and activities. They explore concepts such as decimals and percentages; mean, median, and mode; ratio and proportion; and factors. They participate in wide-ranging discussions about math, engage in a variety of cooperative learning, projects, explore simulations, and make increasingly more sophisticated mathematical observations.
- Calculators and computers play important roles in both the Primary and the Elementary Academy math programs because they greatly expand the range of problems and calculations that students can perform. Of course, students still use pencil and paper to complete some algorithms. But the math program emphasizes choosing from a range of problem-solving methods and tools, including mental arithmetic. And students are often asked to explain why their calculated or computed answers are reasonable, thereby calling on their understanding of operations and strengthening their ability to judge the validity of answers.

## **Curriculum Objectives**

### **Primary Academy (K-2)**

- Value student's mathematical thinking
- Promote problem solving
- Use manipulatives and other hands-on materials
- Encourage talking and writing about math
- Expect fluency with numbers and operations

### **Elementary Academy (3-5)**

- Promote problem solving and reasoning
- Value mathematical thinking
- Use mistakes as learning opportunities
- Encourage the use of many problem-solving strategies
- Connect math to real life
- Provide opportunities for students to communicate mathematically
- Support cooperative learning and group problem solving
- Appreciate the beauty of mathematics

## **Standards**

## **Primary Academy (K-2)**

### ***Mathematics***

- Demonstrate number sense, or intuition, about numbers large and small
- Understand the numeration system to 1,000 by relating counting, ordering, grouping, and place-value
- Perform addition and subtraction using numbers through the 100's and apply the concepts of addition (joining) and subtraction (taking apart)
- Perform multiplication through  $5 \times 5$ , applying multiplication concepts (repeated addition)
- Recognize numbers equally divisible by 2, 5, and 10
- Demonstrate recall of addition and subtraction facts to 18
- Count forward and backward by 2's, 5's, and 10's
- Write and solve story problems that involve simple fractions (halves, thirds, and fourths)
- Recognize, describe, and extend a variety of patterns; use patterns and relationships to explain and analyze mathematical situations
- Communicate and clarify thinking about mathematical ideas using bar graph, charts, writing, and everyday language
- Recognize, describe, model, and classify simple plane and solid shapes and models; describe meanings of side, angle, perimeter, and area
- Use measurement to solve problems and in every day situations to determine length, capacity, weight, volume, time, and temperature
- Estimate probability of outcomes in simple coin-toss game
- Collect and organize data, represent the data collected, and make predictions using the data
- Count and recognize mixed coins and paper currency; give and check correct change; use decimal notation for recording money
- Use estimation in working with quantities, measurement, computation, and problem solving; judge the reasonableness of solutions
- Use a variety of strategies to solve real-world problems
- Explain orally and in writing, sometimes working in groups, how a problem was solved and justify the answer

## **Elementary Academy (3-5)**

### ***Mathematics***

- Demonstrate Number sense about the value of large and small whole numbers, decimals, and fractions
- Demonstrate understanding of the numeration system to 1,000,000 by relating place-value concepts and using benchmarks to understand large quantities

- Demonstrate understanding of the concepts of the four operations, recall of the basic facts, and the ability to apply an operation to a situation wherever necessary using whole numbers, fractions and decimals
- Perform the operations of addition, subtraction, multiplication, and division through the 1,000's, using written computation, estimation, mental math, or calculators
- Apply algorithms proficiently to solve 2 and 3 digit problems involving addition, subtraction, multiplication, and division
- Explain ratio and proportion and apply them to daily situations
- Estimate, round, use mental math, or compute exactly to solve a variety of problems as appropriate and explain the reasonableness of answers and how they were derived
- Identify and explain multiples and factors
- Read and solve one and two step word problems
- Use appropriate graphs, pictures, charts, writings, and spreadsheets to communicate mathematical ideas
- Collect, organize, and describe data, construct and interpret tables and graphs, and infer and support opinion using data
- Apply knowledge of mean, media, and mode
- Use simple percentages, such as 10%, 20%, 50%, 75%, 100%, and 200%, to determine tips, discounts and other practical applications
- Recognize and describe attributes of quadrilaterals, triangles, and various three-dimensional shapes
- Describe, create, extend, and analyze a wide variety of patterns, displays, tales, and graph to show a beginning understanding of functions and the ability to represent relationships symbolically
- Recognize simple algebraic variables such as placeholders ( $2x + 35 = 65$ )
- Use estimation in working with quantities, measurement, computation, and problem solving and explain the reasonableness of answers and how they were derived
- Measure perimeter, area, volume, angle, capacity, weight, and mass, knowing when to estimate, which measure to use, and when an accurate answer is required
- Estimate probability of an occurrence in simple cases, such as the probability of rain, and use various models to make predictions

### **Core Teaching Materials**

The core program for teaching mathematics in K-5 partnership schools is the University of Chicago School Mathematics Project (UCSM). The Commonwealth Community Development Elementary Academy selected UCSINU for the following reasons:

- It is consistent with Commonwealth Community Development Elementary Academy's student standards for mathematics.
- It is research-based and proven to raise students' achievement levels.
- It provides all students with challenging experiences in computation, as well as in data collection and analysis, probability and statistics, geometry, and pre-algebra.

- It stresses the role of practice in mastering skills.
- It presents students with real-world problems that allow them to apply math in meaningful ways.
- It provides rich, long-term projects that support Commonwealth Community Development Elementary Academy's emphasis on project based learning.
- It helps teachers connect concepts within the field of mathematics and across other subject areas, thereby making learning more meaningful for students.
- It supports appropriate use of calculators and computers.

## **Program**

## **Components**

The UCSMP program for the Primary and Elementary Academies includes the following:

*Teachers' Manual:* Contains lesson guides and appendices with background information on each unit, came directions, descriptions of explorations and projects, and answer keys for selected portions of student work.

*Teacher's Masters:* Contains reproducible masters organized by unit, review activities, and home links to promote follow-up, review, and enrichment at home.

*Teacher's Masters:* Contains reproducible masters organized by unit, review activities, and home links to promote follow-up, review, and enrichment at home.

*Minute Math:* Book contains brief activities for spare moments throughout the day.

*Scope and Sequence Chart:* Organized by content strands.

*Student Journal:* For recording results of activities and explorations.

*Activity Book:* Contains activity sheets and review materials for each unit.

*Project Book:* For keeping track of long-term projects.

## **Sample Topics**

The following are just some of the topics students will explore using UCSMP:

- Everyday Use of Numbers
- Thermometers, Linear Measures, and Clocks
- 3-D and 2D shapes
- Mental Arithmetic: Addition and Subtraction
- Patterns and Rules
- Using, Numbers and Organizing Data
- Fractions and Their Uses

## **K-F SCIENCE**

Commonwealth Community Development Elementary Academy's ambitious science curriculum aims to develop in students scientific literacy the knowledge that citizens should have in order to understand the meaning and importance of new scientific findings, improving technology, and science-related issues that face society. This is a vibrant and vital literacy that sparks students' interest in, enjoyment of, and interaction with the natural world and promotes the confidence that comes with understanding. In the Academy, imaginative and effective science teaching begins in kindergarten, where teachers nourish and fulfill student's innate curiosity about the world its wildlife, plants, and natural systems. Commonwealth Community Development Elementary Academy's science curriculum provides a wealth of compelling project ideas and field trips that make learning effective and enjoyable. Even the youngest students adopt the methods of seasoned scientists as they analyze, explore, inquire, catalog, and test by means of engaging, hands-on experiences.

In the Primary Academy, students spend their time as scientists do exploring, discovering, inventing, analyzing, and testing through hands-on experiences and investigations. Their explorations reflect the interests of children of this age and span the fields of science, as they discover chemistry in the kitchen, physics in the gymnasium, biology in the garden, and earth science in their local weather and climate.

In the Elementary Academy, the science curriculum balances hands-on experiences and interactive investigations with learning activities that increase students' storehouse of empirical knowledge. In addition, we emphasize regular use of some of the equipment that scientists use: computers, hand lenses, thermometers, probes, and other instruments. During this academy, each student also participates in at least three in-depth case studies in each scientific discipline: He, earth, and physical science.

## **Curriculum Objectives**

### **Primary Academy (K-2)**

- Build on and reflect the interests of primary students
- Center on hands-on experiences and investigations
- Emphasize science process skills and data collection
- Take full advantage of new technologies and equipment

### **Elementary Academy (3-5)**

- Foster the enjoyment, excitement, and experience of science
- Provide opportunities to learn, invent, experiment, and discover
- Support the acquisition of important scientific knowledge
- Develop sophisticated science process skills
- Emphasize habits of research and discovery
- Encourage individual and group activity

## **Standards**

### **Primary Academy (K2)**

#### *Science*

- Acquire and use appropriate knowledge to make sense of the natural and human-made world, such as using knowledge of the characteristics of life to distinguish living and nonliving things
- Recognize and describe simple patterns and generalizations about aspects of the natural world, such as that living things grow and change
- Propose possible explanations of natural phenomena or technological developments, such as why rain puddles disappear
- Perform simple hands-on investigations, such as observing and recording the temperature outside at the same time every day apply science process skills, such as observing, sorting, measuring, predicting, and communicating results, in their thinking and exploring
- Apply scientific facts and ways of thinking to solve everyday problems, such as how to keep weeds from growing in the garden
- Apply appropriate arithmetic operations, such as counting, measuring adding, and subtracting, in conducting their investigations

- Demonstrate the beginning of scientific attitudes, appreciation's and dispositions in seeking knowledge about the natural world (genuine scientific curiosity, appreciation of the natural world, and cooperation in answering questions)

### **Elementary Academy (3-5)**

#### *Science*

- Respond to questions and problems, such as describe the structures and functions of the major human body systems, in order to demonstrate the growing scientific knowledge about important aspects of the natural and human-made world (as described in the lists of life, earth, and physical science concepts that follow)
- Recognize, explain, cite examples, of, and use appropriate science concepts and generalizations, such as: all objects occupy space and have mass; green plants make their own food; and the motion of an object can be described as change in position over time and can be graphed as such
- Provide plausible explanations for natural phenomena or technological developments, such as why the dinosaurs disappeared and how water changes state in nature
- Perform laboratory and simulated investigations, properly using appropriate materials and equipment, proposing and testing hypotheses, accurately recording data, carrying out simple calculations, displaying data in simple graphical formats, drawing appropriate conclusions, and communicating these conclusions clearly and with understanding
- Using increasingly sophisticated science process skills in their thinking, and exploring, such as classifying in a variety of ways, comparing and relating, hypothesizing, and controlling variables
- Recognize community or school problems that have a scientific component and, if appropriate, formulate a scientifically sound plan of action for addressing those problems
- Use mathematical knowledge to solve scientific problems

- Exhibit scientific attitudes, appreciation's, and dispositions in their lives, such as a desire to understand why phenomena occur, excitement in making discoveries or inventions, a healthy skepticism toward assertions of scientific fact that are unsupported by data or reasonable explanations, and collaboration in scientific explorations

### **Core Teaching Materials**

The core program for teaching science in the Primary and Elementary Academy is Science Place from Scholastic, Inc. We chose this program for the following reasons:

- It is consistent with Commonwealth Community Development Elementary Academy's student standards for science.
- It emphasizes active, hands-on explorations that help students build their understanding of key concepts.
- It helps students apply what they learn to their own lives.
- It contains individual lessons that build to an understanding of the big ideas tht explain our world.
- It supports Commonwealth Community Development Elementary Academy's philosophy of project-based learning.
- It emphasizes science literacy for all students, starting in the earliest grades.
- It helps teachers connect concepts with the field of science and across other subject areas.

### **Program Components**

*Science Place'* for the Primary and Elementary Academies contains the following:

*Equipment:* Consumable and non-consumable items needed for each unit.

*Science Trade Books:* Nonfiction or fiction books that expand student's knowledge and interest in each unit theme.

*Student Books:* Exploratory hand-on lessons that develop each unit's key concept.

*Video:* Adventure featuring real students to introduce each unit theme.

### **K-5 ARTS**

The Commonwealth Community Development Elementary Academy curriculum offers an ambitious program of instruction in music, visual arts, drama and dance. Music and visual arts are taught by specialist, who devotes equal attention to history, performance, appreciation and practice. Dance and drama are integrated with the rest of the curriculum notably in physical education, language arts, and social sciences. Whether integrated with other subjects in curriculum or taught on their own, the arts provide innovative ways to enhance learning and creativity.

In the Primary Academy, students begin formal studies in music, through singing, playing simple instruments, and listening to opera, chamber, folk ethnic, and band music. They develop their skills in using a variety of art tools and materials and they learn how to use different media to express different ideas. They begin to recognize the basic elements of drama and have many opportunities to express their imaginations through dramatic play, puppetry and storytelling. They are introduced to the elements of dance and learn to recognize those elements in performances they view.

In the Elementary Academy, students create and perform a wide range of artistic works across the curriculum. They gain a wide understanding of various musical forms and styles, such as classical, jazz, blues and rap. They increase their knowledge of artistic principles, elements and terminology and translate their observations into original artwork, often using multimedia and other audiovisual materials. They “do and “view” drama and role-play a variety of characters from literature and history. In addition, they learn to enjoy and participate in free-form, unstructured dancing, as well as traditional forms, such as ballet, jazz, tap, ballroom, and pantomime.

### **Curriculum Objectives:**

#### **Primary/Elementary Academy (K-5) and (6-8) Middle Academies:**

- Include daily experiences in music, visual art, drama and dance
- Stress viewing, listening and doing
- Feature a signature singing program
- Integrate the arts across the curriculum
- Promote appreciation of different cultures
- Take full advantage of new technologies
- Permeate the life of the school

### **Standards**

### **Primary/Elementary Academy (K-5)**

- Sing by heart and by using books, folk songs from many cultures, patriotic songs and seasonal songs.
- Demonstrate rhythm through movement, speaking, singing and using different instruments
- Take and repeat rhythmic dictation
- Perform simple rhythmic patterns on non-pitched instruments such as drums, triangles, and maracas
- Read and play simple melodic and harmonic patterns on pitched instruments such as xylophone, glockenspiel and bells
- Differentiate between high and low, loud and soft, fast and slow by moving, speaking, singing, and using instruments
- Identify by sound different types of music, instrumental and vocal
- Categorize by sound the major instruments in the orchestra
- Classify musical components: whole note, full note, quarter note, and rests
- Recognize and identify music from cultures and historical periods being studied

### ***Visual Arts***

- Use a variety of tools and materials such as paint, pliable wire, and paper to create a work of visual art
- Use computers, cameras and video cameras to create visual images
- Use appropriate vocabulary to describe artwork and their reactions to it
- Explain the use of points, lines and colors in a painting
- Describe how and which elements of art used in their own painting
- Identify basic Geometric shapes in buildings and structures
- Recognize and identify visual art from cultures and historical periods being studied

### ***Drama***

- Use voice, gesture, and movement to convey simple characters
- Use creative movements to express thoughts and to represent characters
- Improvise dramatic play using selected props
- Participate in the production of a play
- Identify different ways to create drama, such as through video, storytelling and puppetry
- Explain why a program viewed is real or not real
- Respond orally and in writing of dramatic performances
- Recognize and identify drama from cultures and historical periods being studied

## *Dance*

- Use movement to demonstrate awareness of beat, tempo and mood
- Follow adult's movements to copy different dance steps, such as the five main ballet positions
- Use creative movements to express thoughts and character types
- Recognize different types of dance such as ballet, tap, folk and modern
- Familiarize with and identify dances from cultures and historical periods being studied

## **Middle School Academy 6-8**

### *Music:*

- Sing a varied repertoire of songs, with attention to temp, pitch and matching dynamic levels with others.
- Perform simple melodies, rhythms and chord patterns on a recorder or other appropriate instrument
- Create and improvise simple songs, melodies, variations or instrumental pieces to accompany readings or dramatizations using voice, instruments, computers and nontraditional sounds
- Demonstrate basic ability to read and note music such as notes in 2/4, 3/4, and 4/4 meter signatures, simple pitch notation, and symbols for dynamics and tempo
- Listen, note and discuss with peers personal responses to music from various styles including different composers, genres and periods.
- Recognize the sounds of most orchestra and band instruments
- Identify examples of common music purposes and methods from diverse cultures such as patriotic celebration or using percussive instruments to keep a beat
- Identify connections between music and other disciplines such as the use of music in dance and drama or the mathematical nature of meter

### *Visual Arts*

- Represent through a variety of methods (drawing, painting, sculptures, collage, photograph and print making) images based on inanimate objects, human faces or figures and imagination.
- Create works using nontraditional materials or methods (such as wire, found objects, mixed media, video and computers)
- Model works after important examples of art
- Present and discuss works with peers, including strategy and choices made

- Explore how artistic choices such as medium,, color , texture, contrast and form are used for aesthetic purposes and how line and form create the illusion of space in two – dimensional works
- Identify classic genres such as portraiture, still-life, landscape and examples of abstract and nonrepresentational art
- Examine works featuring various styles of drawing, painting, photography sculpture architecture from periods and places being studied
- Relate the basic elements of visual arts to other artistic disciplines such as theatrical sets, design product packaging and fashion

***Drama:***

- Represent through drama ideas base on literature, history, imagination, personal experiences, or other artistic disciplines
- Perform short dramatic scripts based on a particular theme exploring techniques such as improvisation, monologue, impersonation, and characterization
- Represent familiar feelings through dramatic action such as happiness, fear or confusion
- Perform various roles and responsibilities relevant to creating drama in different media from direction, set design and writing dialogue to video shooting and costuming
- Observe dramatic performances, record personal response and preferences and discuss with peers using appropriate vocabulary. Compare the use of different media in presenting dramatic performances including theater, film and television
- Recognize aspects of drama in contemporary life
- Analyze how dramatic literary interpretations differ from the original work

***Dance:***

- Experience and identify a range of dance styles such as foe tap, ballet, modern, ballroom and partnering, demonstrating skills in at least one
- Create and perform dances based on imagination, their own experiences or concepts from other sources such as history, literature and other arts
- Demonstrate competences in basic movement skills such as skipping in a curve, forming shapes, leading & following a partner and moving to a musical beat
- Improvise to discover or invest dance movements to solve movement problems and create dance performances
- Perform an interpretation of a short dance, discuss their dance with peers and teach it to classmates
- Observe a professional dance performance, record thoughts and reactions using appropriate technology and discuss with peers
- Discuss examples of common dance functions and practices in diverse cultures such as sin ceremonies and drama

### **Core Teaching Material:**

Learning to Look at and create: The SPECTRA Program from Dale Seymour Publications is Commonwealth Community Development Elementary Academy's core program for teaching the visual arts. This program was selected because:

- The sequentially organized lessons fully support Commonwealth Community Development Academy's standards and objectives
- The lessons are cross-curricular and support a multicultural approach to teaching the arts
- The lessons involve students in exploring a variety of media techniques such as painting drawing a collage, textiles and mixed media
- The program is project-based and encourages students to use the elements of design to solve problems creatively
- The program is cost-effective, practical and manageable

Please note: The music program for the Elementary and Middle school academies does not rely on a commercial product; rather it is being developed exclusively for Commonwealth Community Development Academy by a nationally renowned music educator. It consists of the signature singing program, instrumental instructions and compositions.

### **Program Components:**

The SPECTRA Program contains the following components:

Slides: Eighty slides of methods, student work, and reproduction of significant artwork throughout history.

Teacher Materials: At each level, the program provides a full scope and sequence, teaching notes and strategies, assessments and evaluation ideas and a bibliography of related works.

### ***Sample Topics:***

Below are some of the topics students will study through the Commonwealth Community Development Elementary Academy curriculum:

- Getting to know me
- The building blocks of art
- Art and the natural world

## **K-8 World Languages: Spanish**

Commonwealth Community Development Academy's world languages program is designed to prepare young people to live and work to deepen their understanding of language itself and bring into sharper focus cultures other than their own.

This Spanish program, which is enhanced by the presence of a foreign-language teacher, emphasis conversation and culture, and students use their second-language skills in many real world situations as they move toward the long-term goal of being able to communicate effectively with fluent speakers of Spanish. Students learn about parts of the world where Spanish is spoken and come to appreciate the joys of exploring a new culture through its language.

There is a general agreement that children should learn more than one language. The Commonwealth Community Development Academies approach lies to rest the debate on second languages because our students will learn two languages. Furthermore, all children will have the competence in English that's necessary to meet the student's standards. Children for whom Spanish is the primary language maintain their language heritage and expand their language abilities when they learn English. Children whose primary language is other than Spanish or English will receive spherical instruction in a setting determined by the local needs.

### **Curriculum Objectives:**

#### **Elementary Academy (K-5):**

- Support student's natural love of languages
- Emphasize confirmations, culture, and real-world applications
- Promote multicultural awareness
- Include special instruction for English as a second language for some students

#### **Middle Academy (6-8)**

- Stress interaction with native speaker and appreciation of other cultures
- Include special instruction for English as a second language students gain
- Encourage students curiosity and pursuit of learning languages

## **Standards**

### **Elementary Academy (K-5):**

- Count to 100 and say the alphabet
- Recognize orally and in writing many of the basic nouns, verbs and adjectives that they know in English
- Use basic conversational phrases, questions and commands
- Listen to and read familiar stories
- Recognize the elements that make the Spanish language unique
- Identify cultural similarities and differences among speakers of Spanish and English here and in other parts of the world.

### **Middle Academy (6-8)**

- Speak in increasingly sophisticated sentences, demonstrating the pronunciation and intonation of native speakers
- Use Spanish words for frequently used English words
- Count as high in Spanish as they do in English
- Write simple sentences and short paragraphs in Spanish as well as they can speak them
- Interact comfortably with teacher and peers in Spanish on well-structured topics
- Ask and answer questions spontaneously in Spanish
- Listen to and read more sophisticated stories, songs and poems in Spanish
- Listen to and understand videos and television programs designed for children in Spanish
- Provide background information on people and places in the Spanish speaking world

## **Core Teaching Materials**

Amigos-Spanish as a Second Language from Real America Inc., is the core program for teaching Spanish in the Elementary and Middle Academies.

This program was chosen because:

- It supports Commonwealth Community Development Academy's standards and objectives for Spanish
- It follows a natural, whole-language approach to language acquisition
- It includes a strong technology component
- It promotes active learning through meaningful activities
- It supports the integration of Spanish language and culture with other curriculum areas
- It is teacher and student friendly
- It stress conversation and culture

## **Program Components**

*Amigos-Spanish as a Second Language* contains the following components:

*Teacher's Guide:* detailed, easy-to-follow lesson plans give step-by-step suggestions

*Student Textbook:* Engaging graphical stories, lessons and activities.

*Student Workbook:* Activities, puzzles and games

*Trade books:* A small library of child-sized volumes enhance and connect each unit them to outstanding Spanish literature

*Anthologies:* Songs, music, poetry and games

*Reference Materials:* Developmentally appropriate dictionaries, idioms and greetings, references and atlas

*Picture Cards:* 24 full color 8 1/2 x 11' cards support a graphic basis for unit related situations and key vocabulary objects

*Flash Cards:* 189 color cards graphically represent the key focus vocabulary

*Teacher Resource Materials:* The Whole Earth Holiday Book supports a multicultural study of shared holidays, food art, dance and songs.

*Technology:* Software, videotapes, audiotapes and more.

## **K-8 CHARACTER AND ETHICS**

### *Curriculum Objectives*

#### **Elementary (K-5) & Middle (6-8) Academies**

- Respect parents primary role
- Promote courage and confidence
- Teach the rights and responsibilities of citizenship

### *Standards*

#### **Elementary Academy (K-5)**

### *Character and Ethics*

- Show respect for others by listening to their ideas and using respectful language, proper manners and other appropriate behaviors
- Explain the moral of a story
- Report orally or in writing a real-life hero
- Work with others in a way that is fair and honest
- Accomplish tasks and assignments with diligence
- Carry out their responsibilities to the class and school community, especially assisting in keeping the areas clean and tending the garden
- Demonstrate self-reliance in taking care of personal belongings and staying organized
- Observe rules in activities and games

### **Middle Academy (6-8)**

#### *Character and Ethics*

- Explain the characteristics of friendship that go beyond having fun, including loyalty; bringing out each other's best qualities.
- Identify examples of integrity in everyday life
- Clarify the meaning and value of self-respect including when to value the opinions of peers and when to resist them
- Evaluate their own behavior, identifying times when they have behaved admirably and times when they have behaved poorly
- Demonstrate commitment and skill in helping peers prevent conflicts and resolve disagreements fairly
- Explain the value of a sense of humor in everyday life
- Demonstrate diligence and attention to craft in carrying out responsibilities and in projects or hobbies
- Fulfill responsibilities toward the school community and other students in a reliable manner
- Identify expressions of democratic ideals in the text of the Constitution and Declaration of Independence as equality before the law.
- Describe actions by individual citizens and the U.S that have lived up the democratic ideals and actions that have clearly violated those ideals

## **K-5 PHYSICAL FITNESS & HEALTH**

### **Curriculum Objectives**

#### **Elementary Academy (K-5):**

- Promote physical activity and healthful habits for a lifetime
- Emphasize motor skills and aerobic capacity
- Teach healthful food choices
- Offer strategies for staying safe in school, at home, and on the streets
- Stress proper hygiene

#### ***Standards:***

##### **Primary (K-2):**

- Demonstrate competence in games and activities that involve locomotion (skipping, hopping, chasing, fleeing), non-locomotion (balancing, forward and backward somersaults) and object manipulation (throwing, kicking, catching or paddling with a ball)
- Prepare a personal fitness plan that includes adequate time for practicing healthful habits and provides examples of exercise they can do on their own
- Identify changes in the body as a result of physical activity (increased heart rate and pulse) and provide a basic explanation of how the cardiovascular system works using illustrations or models
- Understand and apply the principles of street safety and follow basic safety procedures while biking, skating, swimming and using sporting and fitness equipment and apparatus
- Plan a week of healthful menus and snacks that demonstrate understanding of diet and nutrition
- Demonstrate appropriate skills for resisting drugs, alcohol and tobacco

##### **Elementary (3-5)**

###### ***Physical fitness & Health***

- Play modified games such as mini-soccer, short court basketball or volleyball with a lowered net using motor skills with speed and accuracy
- Manipulate objects such as balls, bats and rackets with speed and accuracy

- Exhibit developmentally appropriate and individualized objectives for speed, flexibility strength and endurance through regular participation in activities such as jogging, cycling, stretching exercises and calisthenics
- Design and perform competently gymnastic routines, movements exercises, and dances for classmates to learn and enjoy
- Design and maintain a Personal Fitness Plan that includes healthful nutrition, aerobic activity and strength and endurance conditioning appropriate to age and fitness levels.
- Explain orally and in writing what is meant by different stages of development, describe what people need to be healthy at different stages of life and list healthful choices and strategies most appropriate to their age group
- Explain the changes experienced as they move into puberty and describe the parts and functions of the human reproductive system.
- Explain orally and in writing the amount and balance of foods in the diet influenced by growth, energy and health
- Describe and apply ways of responding to pressure from others to engage in risky behaviors involving drugs, alcohol and tobacco
- Demonstrate self-defense skills, fire safety procedures at home and at school as well as competences in basic swimming strokes (where pools are available)

## **K-8 PRACTICAL ARTS AND SKILLS**

### **Curriculum Objectives**

Primary (K-2); Elementary (3-5) and Middle (6-8)

- Promote real-life skills
- Connect to every subject area
- Pave the way for readiness for work
- Emphasize design and technology skills

### **Standards**

#### **Primary Academy (K-2)**

##### ***Practical Arts and Skills***

- List and test ideas for solving a problem, such as how to organize the classroom so everyone can see the presentation or station
- Use a variety of print and media resources to access information, write a brief report, and complete a project

- Turn computer on and off, load and run software, use menus, and demonstrate basic keyboarding, mouse, and word processing skills
- Write a short work plan for completing a project and choose appropriate materials for completing it
- Print or write clearly in a style of choice
- Tell time and maintain personal calendars and schedules
- Demonstrate an understanding of systems, by explaining, for example, how the parts of a skateboard work
- Use appropriate manners when working, playing, and eating
- Prepare soil, plant seeds, weed and fertilize growing plants, cut flowers, and harvest vegetables from the school Garden

### **Elementary Academy and Middle Academies (3-8)**

#### ***Practical Arts and Skills***

- Apply the Commonwealth Community Development Academy KID program to sketch a new and improved classroom worktable; present the sketch to peers, teachers, parents, or outside professionals; and use their criticisms to improve the design
- Produce at least three stories for the school or class newspaper, including photographs and layouts
- Identify and describe the functions of different parts of a system, such as the local transportation system, and list ideas for improving its efficiency
- Apply library research skills and use the computer to acquire and interpret the information needed to complete a group or individual project
- Apply public speaking skills to research, prepare, and present an oral report on a subject of personal interest
- Maintain print and electronic portfolios containing work samples, photographs, and drawings
- Describe orally and in writing the activities and responsibilities associated with three different careers
- Write clearly and legibly in a handwriting style of choice
- Use appropriate manners when working, playing and eating
- Apply standard letter writing form to compose and send friendly or business letters to favorite authors, family members, sports figures, or civic or business leaders
- Maintain checkbooks or savings passbooks for use in the classroom “bank”
- Load, run, and use computer spreadsheets, data bases, networks, graphics programs, and drawing programs
- Demonstrate competence in keyboarding by touch typing a 100-word document with no more than three errors
- Complete a simple video using a camcorder

## **B. INSTRUCTIONAL STRATEGIES**

Effective learning is active learning; therefore, Commonwealth Community Development Academy has adapted several broad instructional strategies. Recognizing that students learn in different ways, Commonwealth Community Development Academy's instructional program is designed to address varied learning styles. The following strategies shall be used:

- Project-Based Learning
- Cooperative Learning
- English as a Second Language
- Technology as a Second Language
- Tutors for one-on-one instruction
- Special Education Instruction and Professional Development for Staff

### **Project-Based Learning**

What is most distinctive about Commonwealth Community Development Academy's instructional program is its emphasis on learning by doing. Commonwealth Community Development Academy believes in giving students realistic problems to solve through the meaningful application of concepts and content from many subject areas. Students grapple with problems suited to their ages and prior learning, and build their own bridges between the theoretical and the practical. Such activities help students gain confidence with academic material, work creatively, and team to think for themselves.

Projects achieve results because students not only learn by reading, writing, and calculating but also by building, experimenting, and designing. Projects engage all of the senses and give full expression to the creativity in each student. Those students who are not as adept at expressing their ideas on paper, for example, can communicate through other media, including electronic forms.

Projects also are excellent preparation for the world or work and home, where people do not face problems or tasks that have been carefully crafted in textbooks. Some types of projects employed – science experiments, for example – are found in any good school. Others are new to the classroom and unusual because they mirror the real work of scientists, engineers, architects, designers, reporters, and others.

### **Planning “Intensives” and Other Projects**

The flexible school day and year provide many opportunities for project work. Block scheduling enables teachers to weave projects into the ongoing curriculum. No project need be rejected because it won't fit into a 45-minute period or an already tight academic quarter. Particularly important for accommodating the important work of projects are the one-to-three-week intervals reserved at the end of every quarter for “intensives.” At these times, students undertake

ambitious projects, analyze complex problems, and pursue specialized avenues of inquiry that are beyond the scope of the regular daily schedule. The intensive help students develop practical skills to apply to all other sophisticated problems presented throughout the curriculum.

Because projects require a greater investment in time than other types of learning, they must focus on the most important concepts and skills in the curriculum. Engaging as a project may be, it is not wise to devote several weeks to learning objectives that are of limited importance. To assist schools in making the best use of project-based instruction, Commonwealth Community Development Academy has launched a program to provide principals and teachers with project plans that have clear curriculum objective and proven success.

### The Importance of Integration

Commonwealth Community Development Academy's integrated curriculum – wherein traditional subject lines are crossed to promote deeper intellectual understanding – helps students make connections between subject knowledge and ideas and see how what they learn in school applies to real life. It gives students the chance to work with problems that have no pre-formulated solutions. Teachers bring several disciplines to bear on one practical problem, as when students make an environmental study of their town, drawing on and expanding their knowledge of geography, history, science, mathematics, literature, and politics, and then develop a proposal to create a nature sanctuary on public land. In working out the concept and a plan based on it, students see vividly how different areas of academic content apply to real life. And when areas of knowledge are connected, learning has more chance to “stick.”

Sometimes only two disciplines are brought together, as when science and math are used in the design and implementation of an experiment. Once the scientific experimentation is complete, math skills come into play in the analysis and presentation of the results. When these areas of knowledge are applied and connected, learning in both becomes more concrete.

Integrated teaching also is an enjoyable way to learn and to teach. It often involves 9 hands-on activities, such as taking soil samples, which engage and excites children. And it frequently blends art or music into a project, allowing artistically talented students to shine.

### **Direct Instruction**

When practiced creatively and purposefully, direct instruction is a powerful method. It involves a teacher guiding students through prepared presentations and discussions. Each lesson is circumscribed and constructed to develop a particular concept. A good lesson must have a clear beginning, middle, and end. It must follow a logical intellectual sequence. A series of lessons must be assembled systematically.

### **Encouraging Active Listening and Learning**

Successful direct instruction engages students as active listeners and participants. Teachers frame questions not simply to elicit answers but to get students to think, whether responding directly or listening, to a classmate's response. In the process, students learn to ask good questions, too.

Watchful teachers also recognize that the errors students commonly make provide great instructional opportunities. Skillful teachers know that students need immediate opportunities to apply and practice ideas presented in a lesson. Effective teachers appreciate the crucial role of swift and constructive feedback, which enables students to learn from their errors. Good teachers know the difference between memorization and knowledge.

### **Supporting Teachers to Enhance Instruction**

To help teachers perfect their skills in direct instruction, Commonwealth Community Development Academy employs cooperative learning in many ways in its program, with special attention to the approaches developed by Robert Slavin at Johns Hopkins University. Research shows that the achievement of all students, in rural, urban, or other settings, is improved through the use of Slavin's methods. As Slavin puts it, cooperative learning helps ensure "success for all."

However, like other types of instruction, cooperative learning's value is limited if it is not employed carefully and creatively. Students do not automatically learn more by working together. Cooperative learning in Commonwealth Community Development Academy's instructional program is marked by these characteristics.

- It usually is preceded by a well-crafted lesson. Cooperative learning is a complement to other instructional activities.
- It provides an engaged opportunity for students to reinforce or cement skills and concepts the teacher has introduced.
- It builds in a means of determining each student's degree of mastery of the skills and content presented in the lesson.

The last point is critical, for without it cooperative learning may not benefit all students. Without a means of ensuring individual accountability, a few students in a group can do all the work and derive all the advantages, while the rest of the group claims little.

### **When Helping is Not "Cheating"**

When properly applied, cooperative learning benefits all learners. Teaching others is a powerful means of reinforcing one's own learning. By helping their slower peers master the skills or concepts needed to complete a task, more able students strengthen their own understanding. In turn, slower students gain from the individual attention and reinforcement that peer tutoring provides and from receiving the same challenging curriculum as other students.

Cooperative learning also puts peer pressure to positive use. It becomes "cool" for students to help others learn. Cooperative learning offers students more reasons to work hard and more ways to succeed.

## **English as a Second Language and Special Education**

The Commonwealth Community Development Academy serves all students, whatever their needs. Because Commonwealth's program builds in many opportunities for individualized learning and ensures that students get plenty of personal attention, it is well suited to students with most kinds of learning or physical disabilities. The emphasis on multilingual proficiency encourages students whose first language is other than English to value their heritage while they also learn English. Naturally, whether Commonwealth academy's program is the right one for a particular child is best determined by his or her family.

## **Assessing to Determine Special Needs**

Based on current national figures, Commonwealth Community Development Academy estimates that roughly nine percent of students in partnership schools will have some form of disability. All students are elevated – with or without identified disabilities – as part of a process of drafting a Quarterly Learning Contract for each student. If the evaluation indicates that a student may be a candidate for special education ( as defined by federal and state criteria), a formal assessment, conducted in cooperation with a student's family and local education authorities, is done. If those results so indicate, Commonwealth Community Development Academy prepares an Individualized Learning Plan and accepts responsibility for the student's success.

## **Language Diversity**

Commonwealth Community Development Academy appreciates the value of students from a plurality of backgrounds in creating a rich language environment for learning. Language diversity is an opportunity as well as a challenge. As mentioned in the curriculum chapter, all Commonwealth Community Development Academy participate in second-language learning. At the same time that all students with limited English proficiency are learning English, all non-Spanish speaking students are learning Spanish as a second language at least through the eighth grade.

Students begin second language study in the Primary Academy, the optimal time to begin learning a new language. Students whose native language is Spanish maintain their native-language skills while they learn English. Spanish instruction emphasizes conversation and culture in the primary years, encouraging ease of use and natural interaction in everyday activities. As students progress through the Academy, reading, and writing are gradually mastered in addition to continued improvement in conversation. As a result, Spanish-speaking students, typically the largest group of non-English-speaking students, feel comfortable in their interactions with other students from the very start. All students learning English as a second language do so in a supportive environment customized to address local needs and interests.

## **Technological Support**

Commonwealth Community Development Academy believes in an inclusive approach to special education and ESL instruction. Commonwealth Community Development Academy's technology system includes devices to provide access to virtually all curriculum materials for students who have difficulty reading, visual or auditory impairments, or physical limitations.

### **Special Education**

- Students who struggle to see or read can have text read to them by computers equipped with synthesized speech.
- Students without use of their arms or legs can operate a computer with a switch controlled by chin movements.
- Students with perceptual problems can enlarge the words on a screen or change the color of letters or the screen background.
- Students who have trouble writing can use multimedia visual packages.

In addition to innovative technology, Commonwealth Community Development Elementary Academy offers an instructional program that recognizes students' assessment system recognizes many forms of expression, giving students a variety of ways to demonstrate knowledge and accomplishments.

### **ESL Instruction**

- Students use software in their native languages.
- Students can communicate with speakers of their languages in other countries through electronic networks.
- Students are helped by software that translates into their native languages.
- Technology extends English learning time and individualizes instruction.

### **Professional Development in Special Education for All Teachers**

Teachers receive regular training in special education as part of their ongoing professional development. All teachers are involved in reading; therefore teachers also are trained as diagnosticians of learning disabilities and as skilled providers of specialized programs. In addition, schools have the services of speech therapists, psychologists, and other specialists.

## **INSTRUCTION THROUGH TECHNOLOGY**

Commonwealth Community Development Elementary Academy students will be introduced to technology concepts on the Kindergarten level. Students will progress from becoming familiar with parts and functions of the computer to utilizing each tool within the computer and its software functions.

These skills will enhance students capabilities to produce documents in a professional and accurate manner. The necessity of these skills will be required to enable students to integrate technology into their learning procedures.

### **ACCOMPLISHED SKILLS WILL INCLUDE:**

- Recognition of computer equipment
- Learning various computer tools
- Decide which tool to use to manipulate data
- Learn how to manipulate data within each tool
- Input/Output techniques
- Complete research via electronic information resources and internet services

Technology is a rapid changing area with introductions of equipment, software, and procedures occurring daily. Students will need to be able to compete in the educational arena and eventually in the workforce. Technology skills will be essential to becoming competitive and successful.

*Technology:* Science Journal software for the Primary Academy and a telecommunications link for the Elementary Academy.

*Teacher's Map to Exploration:* Includes content background, hands-on support and assessment options.

*Home Connection Collection:* Take-home letters to families that provide a snapshot of each unit's explorations and concepts.

*Science Mats:* Reach to use sheets that extend lesson concepts or facilitate lesson explorations.

### **Sample Topics**

The following are just some of the topics students will explore using Scholastic's *Science Place*.

- Your Senses
- Air, Sun, Water
- Staying Well
- The Solar System
- Organisms and Environments
- Motion
- Change Over Time

### **K – 5 ARTS**

The Commonwealth Community Development Elementary Academy curriculum offers an ambitious program of instruction in music, visual arts, drama, and dance. Music and visual arts

are taught by specialists, who devote equal attention to history, performance, appreciation, and practice. Dance and drama are integrated with the rest of the curriculum notably in physical education, language arts, and social sciences. Whether integrated with other subjects in the curriculum or taught on their own, the arts provide innovative ways to enhance learning and creativity.

In the Primary Academy, students begin formal studies in music, through singing, playing simple instruments, and listening to opera, chamber, folk ethnic, and band music. They develop their skills in using a variety of art tools and materials and they learn how to use different media to express different ideas. They begin to recognize the basic elements of drama and have many opportunities to express their imaginations through dramatic play, puppetry, and storytelling. They are introduced to the elements of dance as well as learn to recognize those elements in the performances they view.

In the Elementary Academy, students create and perform a wide range of artistic works across the curriculum. They gain a wide understanding of various musical forms and styles, such as classical, jazz, blues, and rap. Students increase their knowledge of artistic principles, elements, and terminology and translate their observations into original artwork, often using, multimedia and other audiovisual materials. They “do” and “view” drama and role-play a variety of characters from literature and history. Students learn to enjoy and participate in free-form, unstructured dancing, as well as traditional forms, such as ballet, jazz, tap, ballroom, and pantomime.

## **Curriculum Objectives**

### Primary Academy (K-2)

#### Music

- Sing by heart and by using books, folk songs from many cultures, patriotic songs, and seasonal songs
- Demonstrate rhythm through movement, speaking, singing, and using different instruments
- Take and repeat rhythmic dictation
- Perform simple rhythmic patterns on non-pitched instruments such as drums, triangles, and maracas
- Read and play simple melodic and harmonic patterns on pitched instruments, such as xylophone, glockenspiel, or bells
- Differentiate between high and low, loud and soft, fast and slow by moving speaking, singing, and using instruments
- Identify by sound different types of music, instrumental and vocal
- Identify by sound the major instruments in an orchestra

- Identify musical components: whole note, full note, quarter note, and rests
- Recognize and identify music from cultures and historical periods being studied

**I.**  
**SIXTH GRADE**  
**ENGLISH/LANGUAGE ARTS**  
**OUTCOMES**

**A. LISTENING/SPEAKING**

**LISTENING -** The listening process begins with the perceptual process of hearing and the ability to engage in both auditory and visual discrimination among sounds and visual images. The effective listener will progress from the recognition of meaningful language sounds to the ability to discriminate emotional language and feeling in paralinguistic sounds.

**SPEAKING -** Messages are the ideas that a communicator seeks to impart to his or her audience. The intended verbal message will be affected by nonverbal elements. In developing the content for a message, a communicator must analyze the audience, apply ethical standards, consider various elements of evidence and reasoning, and frame the ideas in appropriate language.

**Meaning and Communication:**

- Determine and demonstrate appropriate listening behaviors in a variety of situations (e.g., visualization, model and role play, as questions to clarify information/messages).
- Extend inductive and deductive reasoning by analyzing features, similarities and differences.
- Demonstrate communication skills to report, persuade, explain and inform.
- Adjust one's message and/or speaking techniques to a particular audience and situation.
- Select appropriate language and speaking techniques for a part, etc.

### **Genre and Craft of Language:**

- Practice the mechanics of speech employing appropriate tone, volume, pauses, gestures, facial expressions and movements that aid in conveying/understanding messages.
- Use a varied vocabulary in expressing feelings, thoughts, describing experiences and responding to others (e.g., summarizing, reciting/retelling, collaborating on original stories).
- Apply the mechanics of speech employing appropriate tone, volume, pauses, gestures, facial expressions and movements that aid in conveying/understanding messages.
- Compare/contrast various media and genre to identify similarities and differences in form, content, purpose (e.g. informational text, poetry, drama, historical fiction, mystery, fantasy).

### **Diversity and Culture:**

- Acknowledge messages by employing appropriate verbal and nonverbal responses (e.g., eye contact, body language, call-and-response).
- Respond to messages by employing appropriate verbal and nonverbal responses (e.g., use body language to indicate approval/disapproval, agreement/disagreement) to provide constructive feedback.

### **Critical Standards:**

- Speak in complete sentences using standard English (e.g., relate events using an increasing number of details and descriptions, tell original stories, contribute to group discussions).
- Adapt one's language to a variety of situations (standard, slang).
- Meaning and Communication:
- Construct meaning by using multiple resources and one's prior knowledge.
- Demonstrate understanding of story elements by identifying major/minor characters; climax by showing sequences of events before and after for support; general setting and understanding shifts in setting; problems, resolution.

- Integrate textual information:
  - from selections and from a variety of texts combined with one's own knowledge (e.g., predicting, generating questions, examining picture cues, organizing).

### **Meaning and Communication: Decoding:**

- Use a combination of strategies when encountering vocabulary while constructing meaning (e.g., using context, word analysis, verbal strategies, word origins, sentence structure, dictionary, thesaurus).

### **Meaning and Communication: Vocabulary:**

- Develop extensive vocabulary knowledge by relating a new word to other words and concepts through semantic mapping, clustering and webbing, analogies.

### **Diversity and Culture:**

- Demonstrate an interest in a variety of authors from diverse sections and cultures (e.g., Walter Dean Myers, Beverly Naidoo, Tolowa Mollel, Virginia Hamilton, Gail Sakurai, Black Elk) as reflected in a personal reading record/portfolio.

### **Self -Regulation and Reflection:**

- Utilize met cognitive strategies to monitor construction of meaning with narrative, informational and functional text (e.g., using adjunct aids, scanning, organizational patterns).
- Take responsibility for increasing one's learning by reading progressively longer passages/selections.

## **B. READING/LITERATURE**

**READING** – Reading is a process used to acquire information from print. The purpose of these reading outcomes is to prepare students to meet the demands related to constructing meaning from text materials:

- under instructional conditions.
- for all possible purposes
- in all subject areas.

Both the developmental and remedial programs should reflect the nature of the demands, the conditions, and the purposes for reading.

**LITERATURE** – Literature is the artful use of language to depict selected aspects of the human experience. It is the expression of thoughts and feelings embodying imagination and reflecting diverse cultural systems. Literature may be experienced in an oral, written, or visual mode and may be enjoyed on many levels. Studying literature enables students to enlarge their world by:

- Experiencing vicariously other times, places and events.
- Acquiring new information.
- Gaining insights about themselves, others, and the world in which they live.

**Depth of Understanding:**

- Compare/contrast literature to one’s own experiences and apply to one’s life (e.g., rights and responsibilities, relationships with others, conflict and cooperation).

**Ideas in Action:**

- Interpret and respond to practical life skills’ situations (e.g., understanding advertising techniques, following directions, completing forms and applications).

**Inquiry and Research:**

- Identify and use extensive resources to investigate questions/topics (e.g., table of contents, index, glossaries, library catalog, guest speakers, interviews, surveys, ERIC, ProQuest).

**Critical Standards:**

- Select and read a variety of materials for enjoyment to extend one’s knowledge for pleasure, to acquire information and to perform tasks.

**C. WRITING**

**WRITING** – Writing is both a way of thinking and communicating, as well as a mode for learning in all curricular areas. It can be a means of self-discovery, and of finding out what we believe and know. Writing serves both the public and personal needs of students.

Writing should be taught within the framework of the writing process: prewriting, drafting, revising, proofreading, and publishing. Students should maintain their writing portfolios in some type of collection for the purpose of reporting to parts, “conferencing” with teachers, and determining growth in writing.

**Meaning and Communication:**

- Use process writing in composing text employing elements and characteristics of poetry and narrative text and organizational patterns of informational text (e.g., science fiction, book reports, fantasy, historical fiction, letters friendly notes, summaries, research papers).
- Utilize writing as a tool to organize, summarize and respond to information (e.g., journal entries, logs, note taking, reports and international pen pals).

### **Genre and Craft of Language:**

- Demonstrate a varied vocabulary in expressing feelings, thoughts, describing experiences and responding to others (e.g., summarizing, reciting/retelling, collaborating on original stories).
- Formulate and express ideas using aspects of writer's craft such as flashback, imagery and humorous/persuasive techniques.
- Use writing mechanics that clarify meaning (appropriate punctuation, grammatical constructions, conventional spelling, variety in sentence structure and paragraphing).

### **Depth and Understanding:**

Compare/contrast selections with a common theme (e.g., coming of age, rites of passage, life/death) that reflect diverse points of view.

### **Inquiry and Research:**

- Use various technological/non-technological tools and inclusive resources to compose text in a variety of formats.
- Create charts, learning logs, graphs and write reports to record the results of scientific investigations and research projects.

### **Critical Standards:**

- Self-select/maintain pieces of writing for a portfolio based upon established criteria.

## II. SIXTH GRADE MATHEMATICS OUTCOMES

The advances of technology have profoundly influenced society. The world today increasingly depends on information processing to solve problems. This revolution in technology will create professions requiring abilities and skills in mathematics and in decision making to meet these needs, schools should provide a comprehensive mathematics curriculum that reaches the fundamentals of mathematics, develops critical thinking skills, and nurtures logical reasoning.

A mathematically literate person is one who:

- Values mathematics.
- Has confidence in his/her ability to do mathematics demonstrating conceptual understanding as well as proficiency in operations skills.
- Applies conceptual understanding, operational skills, and technological tools to problem solving.
- Communicates mathematical ideas orally and in writing.
- Reasons mathematically.

The following topics of study are recommended:

**Whole Numbers and Numeration:** Model, identify and describe number properties: prime number and prime factorization; add, subtract, multiply and divide whole numbers.

**Fractions, Decimals, Ratio, and Percent:** Model, estimate and find sums, differences and products of fractions and relate algorithms; model, estimate and find products and quotients of decimals and relate algorithms; model and describe meaning of ratios and percents and use in solving practical problems. Demonstrate a meaning of percent.

**Measurement:** Measure length, area, volume and angles. Measure liquid capacity, mass, time, temperature, and monetary values using metric units. Derive and use formulas for finding the perimeter and area of selected polygon; estimate and measure the volume of a space figure made with cubes.

**Geometry:** Model, identify and describe the properties of a circle (i.e., diameter, radius, center); identify and apply transformations of reflection (flip), translation (slide) and rotation (turn); identify and apply the property of symmetry to plane and solid figures, including turn symmetry.

**Statistics and Probability:** Construct, read, describe and interpret lines graphs; describe,

determine and use median, range and frequency.

**Algebraic Ideas:** Use models and familiar situations to interpret and compare integers; model, estimate and determine square roots; represent and describe a function with a table of values or a graph.

**Problem Solving and Logical Reasoning:** Extrapolate by developing a formula rule for a pattern; determine steps to solve a problem and evaluate the solution; select and apply appropriate problem-solving strategies; use logical reasoning to solve a problem.

**Technology:** Use the scientific calculator to solve problems involving fractions, [M+] [M-] [MR] [MC]

**Multicultural/Attitudinal:**

- Demonstrate an awareness of various perspectives in the development of mathematics through examples of folklore, customs, symbols and practices related to mathematics;
- Demonstrate a historically accurate perspective of the development of mathematics;
- Demonstrate an understanding and respect for the contributions of one's own cultural/ethnic heritage as well as the contribution of other cultural/ethnic groups to the development of mathematics;
- Demonstrate a respect and understanding for a variety of viewpoints in problem situations and make judgments and decisions on the basis of evidence;
- Demonstrate a confidence in and a positive attitude towards one's own ability to do mathematics;
- Demonstrate an understanding that the study of mathematics is relevant to one's own development and related to other content areas;
- Demonstrate a responsibility for one's own learning and the willingness to assist and work with others in solving problems.

### **III. SIXTH GRADE SCIENCE OUTCOMES**

Scientific Literacy is the outcome of an effective science program that encourages reflection on the nature of science and the construction of new knowledge while the student learns and applies the principles and concepts of life, physical, earth and space science in many different real-world situations. The scientifically literate individual is one who:

- Uses scientific knowledge in a variety of real-world situations.
- Reflects on the nature of scientific knowledge.
- Constructs new personal knowledge from science.

**Constructing New Scientific Knowledge:** Scientifically literate students are effective learners as well as knowers of science. They can use new information, inquiry skills, and scientific habits of mind to build on and change their ideas about how the world works. The skills and habits of mind that follow are not, however, generic abilities to be taught separately from specific subject matter knowledge. They must be considered as outcomes only in the context of learning or constructing new scientific knowledge. The intended outcome for the sixth grade student in this area will be to:

- Construct charts and graphs and prepare summaries of observations.
- Generate scientific questions about the world based on observation.
- Design and conduct simple investigations.
- Investigate toys/simple appliances and explain how they work, using instructions and appropriate safety.
- Use measurement devices to provide consistency in an investigation.
- Use sources of information to help solve problems.
- Write and follow procedures in the form of step-by-step instructions, recipes, formulas, flow diagrams and sketches.

**Reflecting on Scientific Knowledge:** Scientifically literate students have an understanding of the nature of science and the scientific enterprise that allows them to analyze and reflect their own knowledge and on scientific knowledge in general, and to understand the impact of science and technology on society. The intended outcome for the sixth grade student in this area will be to:

- Evaluate the strengths and weaknesses of claims, arguments, or data.
- Describe limitations in personal knowledge.
- Show how common themes of science, mathematics, and technology apply in selected real world contexts.
- Describe the benefits and risks of new technologies on patterns of human activity.
- Recognize the contributions made in science by cultures and individuals of diverse backgrounds.

**Life Science: Cells:**

- Describe similarities/differences between single-celled and multi-cellular organisms.
- Explain why specialized cells are needed by plants and animals.

**Life Science: Organization of Living Things:**

- Compare and classify organisms into major groups on the basis of their structure.
- Describe the life cycle of the flowering plant.
- Describe evidence that plants make and store food.
- Explain how selected systems and processes work together in plants and animals.

**Life Science: Heredity:**

- Describe how the characteristics of living things are passed through generations.
- Describe how heredity and environment may influence/determine characteristics of an organism.

**Life Science: Ecosystems:**

- Describe common patterns of relationships among populations.
- Predict the effects of changes in one population in a food web on other populations.
- Describe the likely succession of a given ecosystem over time.
- Identify some common materials that cycle through the environment.
- Describe ways in which humans alter the environment.
- Explain how humans use and benefit from plant and animal materials.

**Physical Science: Matter and Energy**

- Classify substances as elements, compounds, or mixtures.
- Describe matter as consisting of extremely small particles (atoms) which bond to form molecules.
- Describe energy and the many common forms it takes (mechanical, heat, light, sound, electrical).
- Describe how common forms of energy can be converted, one to another.
- Describe electron flow in simple electrical circuits.

**Physical Science: Changes in Matter:**

- Describe common chemical changes in terms of properties of reactants and products.
- Distinguish between physical and chemical changes in natural and technological systems.

**Physical Science: Waves and Vibrations:**

- Explain how sound travels through different media.
- Explain how echoes occur and how they are used.
- Explain how light helps us to see.
- Explain how objects or media reflect, refract, transmit, or absorb light.
- Explain how waves transmit energy.

### **Earth and Space Science: Geosphere:**

- Explain how rocks and minerals are formed.
- Explain how rocks and fossils are used to determine the age and geological history of the earth.
- Explain how rocks are broken down, how soil is formed, and how surface features change.

### **Earth and Space Science: Hydrosphere:**

- Describe various forms that water takes on the earth's surface and conditions under which they exist.
- Describe how rain water in Michigan reaches the oceans.
- Describe the origins of pollution in the hydrosphere.

### **Earth and Space Science: Atmosphere and Weather:**

- Describe the composition and characteristics of the atmosphere.
- Describe patterns of changing weather and how they are measured.
- Explain the water cycle and its relationship to weather patterns.
- Describe health effects of polluted air.

### **Earth and Space Science: Solar System, Galaxy and Universe:**

- Compare the earth to the other planets in terms of supporting life.
- Describe, compare, and explain the motions of planets, moons, and comets in the solar system.
- Explain how the solar system formed.

**IV.  
SIXTH GRADE  
SOCIAL STUDIES OUTCOMES**

**SURVEY OF THE SOCIAL SCIENCES**

**Time, Continuity and Change:** Understanding the role of history in understanding the past and building the future.

- Analyze historical events using time lines, primary and secondary sources, perspective and critical thinking.

**Space and Place:** Understand geographic concepts related to location, place, human/environment relations, movement and regions.

- Analyze geographic concepts through the use of map and globe skills and use of statistics.

**Production, Distribution and Consumption:** Understand the six fundamental concepts of economics: scarcity; opportunity cost; productivity; economic systems; economic institutions and incentives; exchange, money and interdependence.

- Analyze economic concepts by using and interpreting charts and graph, supply and demand schedules, and stock market tables.
- Explain how societies organize themselves for economic decision making.

**Power, Authority and Governance:** Understand the development of the various forms of government and law.

- Understand how cities are governed, using the Detroit City Charter as an example.
- Describe the political process at the local level and the role of citizen groups.

**Technology and Society:** Understand how technology and media affect society.

- Give examples of the impact of technology and the media on society.

**Global Connections/Multicultural Education:** Understand different cultural groups in the world community.

- Analyze current events, making global connections.

**Civic Participation:** Develop and implement a plan for school/community improvement.

**Skills:** Understand expository text as related to the comprehension of social studies, emphasizing the following:

- the use of chapter and section headings.
- use of topics and summary sentences.
- interpretations of charts and graphs.
- selection of main and subordinate ideas.

- Develop and apply conflict resolution skills in daily living.
- Evaluate current events in local newspapers.
- Identify themes and main ideas of expository text.
- Follow principles of discussion and debate on important issues.

**Values:** Recognize the dignity of self and others.

**V.**  
**SIXTH GRADE**  
**TECHNOLOGY OUTCOMES**

Technology is the application of knowledge, materials (tools) and skills to solve practical problems and extend human capabilities. Technological systems/tools can be used in all curricular areas. Most frequently, it is the information technologies that are used to support curricular goals; they are used for communication, creative expression, knowledge and skill acquisition, problem solving, and information management.

When technology outcomes are effectively integrated across curricular areas, the result is a technologically literate individual. The technologically literate person is one who:

- Understands the role and impact of technology upon society, and the related issues such as information access and manipulation.
- Accepts the responsibilities associated with living in the technological oriented Information Age.
- Uses technology as a tool for obtaining, organizing and manipulating information and for communication and creative expression.

The following topics of study are recommended for the sixth grade level:

**PROBLEM SOLVING**

- Develop skills and aptitudes for the efficient and safe use of technological systems.
- Explain the purpose and need for monitoring technological systems.
- Recognize that new technologies, may result in the development of new industries and/or reallocation of resources within industries.

**KNOWLEDGE and PRACTICAL EXPERIENCE**

- Describe the history and advancements in technology, summarize their impact upon society, and prepare for the future.
- Recognize that new technologies often evolve as a result of existing technologies.
- Investigate future technological advancements that are to be marketed in the near and distant future.
- Practical experience (hands-on approach) to learning common everyday technological systems (e.g., telephone, cellular telephone, facsimile machine, calculator, computer,

computer online services, retrieving messages from answering machines, xerox copy machines, dictaphone, word processor, electric typewriter, programming a VCR, videodiscs, video recorder, microwave oven, and the use of other small electrical appliances, etc.).

- Articulate that computers are tools for information processing, communication, expression, decision making, problem solving, and control of other devices.

## **SOCIAL AND ETHICAL ISSUES**

- Describe the impact of technology on the home, school, community, and workplace.
- Explain world interdependence on technology and the need to share resources and technical expertise.
- Describe how technology impacts information access, analysis, organization, and utilization.

- **APPLICATIONS**

- Use technology media (computer, laser disc technology, video, telecommunication) to effectively search, collect, process and store information.
- Use more advanced features of computer applications software (word processing, database, graphics, telecomputing) within learning activities and introduce the use of spreadsheets to answer “what if” questions.

- **COMPUTER TECHNOLOGY**  
(Data Processing, Database, and Spreadsheet)

- Demonstrate keyboard skills.
- Recognize that computers are tools used for information processing, communication, and control.
- Use more advanced features of computer applications software (word processing, database, graphics, telecomputing) within learning activities.
- Use computer programs as a tool for research and as an aid for other curricular areas (mathematics, writing, reading, art, etc.).

**VI.**  
**SIXTH GRADE**  
**ARTS OUTCOMES**

The arts outcomes have been designed to be appropriate and relevant for all students at all levels. The outcomes include knowledge, skills, attitudes, and values, as well as creating and performing arts.

An effective arts program fosters the development of an individual who applies knowledge and skills in art to their personal performance and production of art. This individual is one who:

- Compares and contrasts the roles of visual art, music, drama/theater and dance within a variety of cultures and throughout history.
- Demonstrates techniques to create and perform in the arts.
- Has a personal philosophy of the arts.
- Analyzes and makes judgments about art forms.
- Values his/her own and others creative products and performances as a way of creating meaning and expressing ideas.

**Knowledge and Understanding about Different Historical, Cultural, and Societal Contexts for the Arts:**

- Know examples from each of the arts that were created during different historical periods.
- Be aware that the arts and artists have a function in our society to inform, define, and cause us to question and reflect.

**Applying Knowledge about Different Contexts for the Arts using Perceptual, Intellectual and Physical Skills:**

- Identify and analyze attributes of art forms from different historical periods.

**Knowledge and Understanding about Creating, producing, and Performing in the Arts:**

- Recognize increasingly sophisticated terms in the arts.
- Know some reasons why the arts are created or performed.

**Applying Knowledge about Critically Analyzing the Arts using Perceptual, Intellectual and Physical Skills:**

- Observe, describe and analyze art forms using increasingly richer descriptive language.

**Knowledge and Understanding about an Aesthetic Philosophy in the Arts**

- Know that how we react to artistic forms is a result of perceptions based upon current and past experiences.

**VII.**  
**SIXTH GRADE**  
**AESTHETIC AND CULTURAL**  
**AWARENESS OUTCOMES**

Cultural and aesthetic awareness outcomes acknowledge, address, and are sensitive to the human being in all of us. They help to develop tolerance for diversity, creativity, innovation, imagination, and the ability to become an increasingly discerning person who makes decisions based on high standards of quality. A core curriculum which effectively integrates these outcomes across curricular areas will help develop a person attuned to sensor stimuli and who uses that awareness to make better judgments and choices. This individual is one who:

- Shows appreciation of natural and human-created environment by exhibiting habits of conversation, recycling, maintenance, and environmental improvement.
- Values quality in the performance of products of one's own and other's work.
- Values the creative contributions of all cultures and ethnic groups.
- Makes use of the cultural and aesthetic opportunities available in the community.
- Communicates effectively using verbal and nonverbal communication.
- Exercises individual freedom while exhibiting social responsibility.

**Recognize, Appreciate and Demonstrate the Characteristics of Quality Found Within the Work Done:**

- Exhibit care and planning in producing works of quality.
- Appreciate and enjoy works of others that show quality.
- Demonstrate a respect and support for works of quality by all cultures and people, past and present.

**Recognize and Appreciate the Natural and Human Created Environment as a Source for Aesthetic Impressions and Self-Expression:**

- Recognize and respect the similarities and differences between aesthetic qualities found in the natural and human-created environments of different cultures.
- Demonstrate continued efforts of conservation, recycling, maintenance, and improvement of aesthetic features of the natural and human-created environments.

### **Appreciate the Aesthetic Dimensions of Different Cultures, Past and Present:**

- Appreciate the diversity and differences of aesthetic expression exhibited by different cultures.

### **Be Aware of Aesthetic and Cultural Opportunities in Leisure Time:**

- Demonstrate the ability to critically assess leisure time activities and consider participation in those that offer aesthetic opportunities.
- Explore and experience aesthetic opportunities available through the home, school and community.

### **Create, Appreciate and Critically Evaluate Verbal and Non Verbal Communication:**

- Create forms of verbal and nonverbal communication that successfully convey on the appropriate level of maturity and development, ideas, information and aesthetic expression.

### **Appreciate and Understand the Relationship Between Individual Freedom and Social Responsibility:**

- Recognize, appreciate, and exercise their right of freedom of expression while demonstrating the ability to perceive and successfully respond to social and moral tenets.
- Demonstrate both the development of personal ethics and morals, as well as a consideration of those principles, throughout the process of creative expression.

**VIII.**  
**SIXTH GRADE**  
**HEALTH OUTCOMES**

The outcome of an effective health program is an individual who knows and understands how to maximize his/her own personal health. This person is a person who:

- Accepts responsibility for personal health decisions and practices.
- Is a discriminating consumer of health information, services, and products.
- Works with others to maintain an ecological balance between human beings and the environment.

The following topics of study are recommended:

**DISEASE PREVENTION & CONTROL**

- Identify and describe the characteristics of disease.
- Relate disease prevention and control to their lives.
- Identify risk factors associated with disease.

**PERSONAL HEALTH PRACTICES**

- Evaluate the benefits of incorporating a program of physical activity into one's lifestyle.
- Describe personal responsibility for personal health practices.

**NUTRITION**

- Assess and evaluate personal eating habits in relationship to reducing health risks.
- Describe the effect of eating disorders on health status.
- Describe the relationship among eating habits, nutrition, and physical performance.

**GROWTH & DEVELOPMENT**

- Describe the physical and emotional changes occurring during adolescence.
- Describe the range of differences in normal maturation rates of adolescents.
- Identify the role of sexuality in human growth and development.
- Identify abstinence from sexual intercourse as responsible behavior.

## **FAMILY HEALTH**

- Explain the desirability of a mentally healthy lifestyle.
- Accept the normalcy of changes in emotions, feelings, and moods.
- Demonstrate a variety of positive coping behaviors.
- Analyze and evaluate the influence of peer and other social pressures in personal decision-making.
- Demonstrate peer refusal skills in a variety of situations.
- Express needs, wants and feelings appropriately.

## **SUBSTANCE ABUSE PREVENTION**

- Evaluate personal risk for chemical dependency based upon personal, family and environmental factors.
- Apply self-protection, resistance, and peer refusal skills in substance abuse situations.
- Identify community resources for help in substance abuse situations.
- Understand the legal/societal penalties for use of illicit substances.

## **CONSUMER HEALTH**

- Describe agencies within the community that provide health information and health services.
- Identify the effects of advertising on health products choices.

## **SAFETY AND FIRST AID**

- Identify basic first aid techniques for common emergency conditions.
- Evaluate their own safety practices (e.g., transportation, recreation).

## **COMMUNITY HEALTH**

- Identify health problems common to their community.
- Identify the factors that influence community health.

- Examine ways that individuals, communities, and state and federal governments cooperate to promote environmental health.

**IX.**  
**SIXTH GRADE**  
**PHYSICAL EDUCATION OUTCOMES**

The outcome of an effective physical education program is an individual with an optimal fitness level for work and leisure. This person is one who:

- Realizes his/her personal capabilities and optimal potential.
- Has a positive and accurate self-image.
- Have the skills, understanding and motivation to maintain optimal fitness for work and leisure.

Optimal fitness can be attained with the following recommended core curriculum, which provides general outcomes in six areas.

**COGNITIVE CONCEPTS**

- Explain the concepts of physical education as they relate to making wise lifestyle choices in the areas of: cardiovascular endurance, body composition, strength and endurance, posture, flexibility, weight control, and the beneficial effects of activity.

**PHYSICAL FITNESS**

- Maintain healthy levels of cardiovascular endurance.
- Maintain healthy levels of strength and endurance of selected muscular groups.
- Maintain healthy levels of flexibility about selected joints of the body.

**BODY CONTROL SKILLS**

- Demonstrate competence on selected twisting and turning skills.
- Demonstrate competence on selected inverted balance skills.
- Demonstrate competence on selected lifting and lowering skills.

## **SPORTS & LEISURE SKILLS**

- Demonstrate competence on selected objectives that enable participation at a recreational level in at least three leisure sports (e.g., swimming, racquet sport, volleyball).
- Apply appropriate rules, strategies, and etiquette in at least three leisure sports.

## **EFFECTIVE PERSONAL/SOCIAL SKILLS**

- Demonstrate the appropriate behavior related to personal character traits (e.g., best effort, following directions, responsibility, and self control) in selected activities.
- Demonstrate appropriate behavior related to social characteristics (e.g., leadership, cooperation, fair play, winning, and losing) in selected activities.

**X.**  
**SIXTH GRADE**  
**LIFE AND PERSONAL**  
**MANAGEMENT OUTCOMES**

Curricular outcomes in Life and Personal Management foster the development of a responsible person who:

- Analyzes priorities and responsibilities in the home, family, and community and successfully manages life roles, including those of nurturer, caregiver and parent.
- Is a responsible producer and consumer within the family structure.
- Makes ethical and successful decisions for individual and family life styles taking into consideration the impact of societal and technological changes, and the physical, social, intellectual, and emotional needs of individuals and family members.
- Values the cultural and ethnic diversity of the community, nation, and world.
- Exercises legal rights and responsibilities as related to the family.

To attain this educational result, the following categories of outcomes are recommended for the sixth grade level:

**The Relationship Between Life Roles and Management Skills for Individual and Family Members:**

- Recognize personal priorities for home, school, and community.

**The Relationship Between a Responsible Producer and Consumer Within The Family Structure:**

- Define the relationship between a responsible producer and consumer.
- Determine how personal priorities and achievement goals effect consumer decisions.

**Ethical and Successful Decision-Making for Individual and Family Life Styles:**

- Comprehend the relationship between personal priorities and ethical decisions.

**Societal and Technological Changes that Influence Personal and Family Needs:**

- Analyze societal and technological changes and their effects on personal and family environment.

- Identify ways in which individuals and families respond, adapt, and initiate change.

**Safe Environmental Procedures for Personal and Family Well-Being:**

- Recognize personal and governmental roles and responsibilities in the establishment of a safe environment.

**Physical, Social, Intellectual and Emotional Needs of Individuals and Family Members:**

- Comprehend the relationship of life style to needs, wants, and personal priorities.

**The Cultural and Ethnic Variety of Social Contributions of Individuals and Families:**

- Examine family heritage and its relationship to personal priorities.
- Identify a variety of cultural and ethnic backgrounds.
- Explore ways in which culture and ethnic heritage influence life style.

**XI.**  
**SIXTH GRADE**  
**CAREER AND EMPLOYABILITY**  
**OUTCOMES**

When career and employability outcomes are effectively integrated into all curricular areas individuals will acquire knowledge and skills to prepare them to move into the world of work or further education. This individual is one who:

- Uses the basic skills of language (reading, writing, listening, speaking), mathematics, science, and social studies in work-related situations.
- Has a career plan of action and the skills/strategies to implement it.
- Is an effective team member.
- Demonstrates honesty, integrity, and respect for others.

The following outcomes are recommended:

**Basic Knowledge and Skills Necessary for Successful Employment and/or Further Education:**

- Describe the characteristics of effective communication in the workplace.
- Recognizes the dignity of all work.

**Personal and Employability Skills for Successful Transition from School to Work and/or Advanced Education:**

- Investigate career opportunities including those nontraditional for their sex.
- Describe one's personal traits, interest, priorities, strengths, and weaknesses.
- Demonstrate grooming, dress and personal hygiene appropriate to the classroom and explain how these skills will translate into workplace behaviors.
- Meet or exceed standards for class work and attendance and explain the importance of regular attendance and quality work for continuing education or for the workplace.
- Demonstrate honesty, integrity, and respect for others and explain the importance of these characteristics for future school and/or work experiences.

**Awareness of Entrepreneurship:**

- Describe various economic systems and their impact in the world economy.
- Analyze the monetary value of occupations as it relates to the world economy.
- Investigate business ownership as a career option.
- Identify personal characteristics of entrepreneurs.

**Occupational Skills and Knowledge to Obtain and Sustain Employment and/or Advanced Education:**

- Investigate technological applications and their effect on various occupations.
- Demonstrate proper use of technical tools, machines, materials, and processes.
- Describe one's personal traits, interests, priorities, strengths, and weaknesses.
- Demonstrate grooming, dress and personal hygiene appropriate to the classroom and explain how these skills will translate into workplace behaviors.
- Meet or exceed standards for class work and attendance and explain the importance of regular attendance and quality work for continuing education or for the workplace.
- Demonstrate honesty, integrity, and respect for others and explain the importance of these characteristics for future school and/or work experiences.

**Awareness of Entrepreneurship:**

- Describe various economic systems and their impact in the world economy.
- Analyze the monetary value of occupations as it relates to the world economy.
- Investigate business ownership as a career option.
- Identify personal characteristics of entrepreneurs.

**Occupational Skills and Knowledge to Obtain and Sustain Employment and/or Advanced Education:**

- Investigate technological applications and their effect on various occupations.
- Demonstrate proper use of technical tools, machines, materials, and processes.
- Employ safety practices in using technical equipment and materials in the classroom/laboratory.

**Teamwork:**

- Describe how the unique traits, interests, values, strengths, and weaknesses of self and others contribute to the completion of projects.
- Demonstrate openness and adaptability in a variety of learning situations.
- Apply constructive criticism with team members in order to move toward accomplishment of team goals.

**I.**  
**SEVENTH GRADE**  
**ENGLISH/LANGUAGE ARTS**  
**OUTCOMES**

**LISTENING/SPEAKING**

**LISTENING** – The listening process begins with the perceptual process of hearing and the ability to engage in both auditory and visual discrimination among sounds and visual images. The effective listener will progress from the recognition of meaningful language sounds to the ability to discriminate emotional language and feeling in paralinguistic sounds.

**SPEAKING** – Messages are the ideas that a communicator seeks to impart to his or her audience. The intended verbal message will be affected by nonverbal elements. In developing the content for a message, a communicator must analyze the audience, apply ethical standards, consider various elements of evidence and reasoning, and frame the ideas in appropriate language.

**Meaning and Communication:**

- Display attentive listening behaviors in a variety of situations (e.g., visualization, ask questions to clarify messages and extend meaning, respond appropriately to questions).
- Apply inductive and deductive reasoning by analyzing features, similarities and differences.
- Demonstrate knowledge of formal/informal communication (e.g., presentations with visual aids, speeches to persuade, explain, inform, entertain, debate, radio/TV scripts, storytelling).
- Assess and adjust one's messages and/or speaking techniques to a particular audience and situation.

**Genre and Craft of Language:**

- Use a varied vocabulary in expressing feeling, thoughts, describing experiences and responding to others (e.g., summarizing, reciting/retelling, collaborating on original stories).
- Apply the mechanics of speech employing appropriate tone, volume, pauses, gestures, facial expressions and movements that aid in conveying/understanding messages.
- Compare/contrast various media and genre to identify similarities and differences in form, content, purpose (e.g., informational text, poetry, dram, historical fiction, mystery,

fantasy).

### **Diversity and Culture:**

- Respond to messages by employing appropriate verbal and nonverbal responses (e.g., use body language to indicate approval/disapproval, agreement/disagreement) to provide constructive feedback.

### **Critical Standards:**

- Speak using a variety of standard English sentence structures.
- Modify one's language to a variety of situations (standard, colloquial, slang).

### **Meaning and Communication:**

- Construct meaning, concepts, themes, and major ideas from multiple texts (e.g., poetic, narrative, technical).
- Demonstrate understanding of story elements by identifying characters, setting, plot/theme, mood, author's purpose.
- Integrate textual information from a variety of texts combined with one's own knowledge (e.g., generating questions, analyzing mood, tone, recognizing how authors combine information from different sources and determine form and content).

### **Meaning and Communication: Decoding:**

- Use a combination of strategies when encountering vocabulary while constructing meaning (e.g., using context, word analysis, verbal strategies, word origins, sentence structure, dictionary, thesaurus).

### **Meaning and Communication: Vocabulary:**

- Increase vocabulary knowledge by using a variety of strategies such as semantic analysis, feature analysis, and wide reading and self-initiated writing.

### **Diversity and Culture:**

- Compare and contrast the literary styles and perspectives of authors from diverse societies and cultures (e.g., Maya Angelou, Langston Hughes, Piri Thomas, Rodolfo Gonzales, Jeanne Wakatsuki Huston) in book reviews/reports/critiques/presentation.

### **Self Regulation and Reflection:**

- Utilize metacognitive strategies to monitor construction of meaning with narrative, informational and functional text (e.g., using adjunct aids, scanning, organizational patterns).
- Take responsibility for increasing one's learning by reading progressively longer passages/selections.

## **B. READING/LITERATURE**

READING – Reading is a process used to acquire information from print. The purpose of these reading outcomes is to prepare students to meet the demands related to constructing meaning from text materials:

- under instructional conditions.
- for all possible purposes.
- in all subject areas.
- Both the developmental and remedial programs should reflect the nature of the demands, the conditions, and the purposes for reading.

LITERATURE - Literature is the artful use of language to depict selected aspects of the human experience. It is the expression of thoughts and feelings embodying imagination and reflecting diverse cultural systems. Literature may be experienced in an oral, written, or visual mode and may be enjoyed on many levels. Studying literature enables students to enlarge their world by:

- Experiencing vicariously other times, places and events.
- Acquiring new information.
- Gaining insights about themselves, others, and the world in which they live.

### **Depth of Understanding:**

- Compare/contrast literature to one's own experiences and apply to one's life (e.g., rights and responsibilities, relationships with others, conflict and cooperation).

**Ideas in Action:**

- Interpret and respond to practical life skills' situations (e.g., understanding advertising techniques, following directions, completing forms and applications).

**Inquiry and Research:**

- Identify and use extensive resources to investigate questions/topics (e.g., table of contents, index, glossaries, library catalog, quest speakers, interviews, surveys, ERIC, ProQuest).

**Critical Standards:**

- Select and read a variety of materials for enjoyment to extend one's knowledge for pleasure, to acquire information and to perform tasks.

**C. WRITING**

WRITING – Writing is both a way of thinking and communicating, as well as a mode for learning in all curricular areas. It can be a means of self-discovery, and of finding out what we believe and know. Writing serves both the public and personal needs of students.

Writing should be taught within the framework of the writing process: prewriting, drafting, revising, proofreading, and publishing. Students should maintain their writing portfolios in some type of collection for the purposes of reporting to parents, “conferencing” with teachers, and determining growth in writing.

**Meaning and Communication:**

- Demonstrate competency in keyboarding skills (e.g., typewriters, word processors, computers).
- Employ process writing in composing text employing elements and characteristics of poetry and narrative text and organizational patterns of informational text (e.g., advertising copy, character sketches, scripts, short stories, class notes, news reports, editorials, reviews, multiparagraph themes).
- Utilize writing as a tool to organize and summarize information from multiple texts (e.g., journal writing, graphic organizers and essays, international pen pals).

**Genre and Craft of Language:**

- Demonstrate a varied vocabulary in expressing feelings, thoughts, describing experiences and responding to others (e.g., summarizing, reciting/retelling, collaborating on original stories).
- Formulate and express ideas using aspects of writer's craft such as flashback, imagery and humorous/persuasive techniques.
- Use writing mechanics that clarify meaning (appropriate punctuation, grammatical constructions, conventional spelling, variety in sentence structure and paragraphing ).

#### **Depth and Understanding:**

- Compare/contrast selections with a common theme (e.g., coming of age, rites of passage, life/death) that reflect diverse point of view.

#### **Inquiry and Research:**

- Create charts, learning logs, graphs and write abstracts to record the results of scientific investigations and research projects.

#### **Critical Standards:**

- Self-select/maintain pieces of writing for a portfolio based upon establish criteria.

## II. SEVENTH GRADE MATHEMATICS OUTCOMES

The advances of technology have profoundly influenced society. The world today increasingly depends on information processing to solve problems. This revolution in technology will create professions requiring abilities and skills in mathematics and in decision making. To meet these needs, schools should provide a comprehensive mathematics curriculum that teaches the fundamentals of mathematics, develops critical thinking skills, and nurtures logical reasoning.

A mathematically literate person is one who:

- Values mathematics.
- Has confidence in his/her ability to do mathematics demonstrating conceptual understanding as well as proficiency in operations skills.
- Applies conceptual understanding, operational skills, and technological tools to problem solving.
- Communicates mathematical ideas orally and in writing.
- Reasons mathematically.

The following topics of study are recommended:

**Whole Numbers and Numeration:** Use number properties to solve problems; represent whole numbers in scientific notation and conversely. Use multiples and factors. Estimate and mentally compute selected whole numbers.

- **Fractions, Decimals, Ratio, And Percent:** Compute with fractions/decimals. Model, estimate and find quotients of fractions and relate to algorithms; model, represent and mentally find equivalent expressions of fractions, decimals and percents. Use a calculator to compare and order fractions using decimal equivalents. Find a percent of a number.
- **Measurement:** Model and describe the properties and relationships of circular figures; measure and construct angles. Apply knowledge of the relationships among the basic metric units to solve multi-step problems.
- **Geometry:** Model, identify and describe the properties of angles; specify and estimate locations and distances in a formal coordinate plane.

- **Statistics and Probability:** Construct, read, describe and interpret circle graph; determine patterns, see trends, predict outcomes, make choices; determine probability of simple events. Generate tales using calculators and computers, including use of spreadsheets.
- **Algebraic Ideas:** Solve linear equations using concrete and informal methods; model and find sums and differences of integers and relate to algorithms; use patterns and functions to represent and solve problems; construct and identify a graph, given a table of values for an equation, and conversely. Solve problems represented physically, symbolically, or verbally. Use variables to write and solve open sentences.
- **Problem Solving and Logical Reasoning:** Determine and apply necessary steps to solve a problem, evaluate the solution and formulate an extension to a problem; select and apply appropriate problem-solving strategies; use logical reasoning to solve a problem and to draw valid conclusions from given information.

**Technology:** Use the scientific calculator and computer to solve problems. Describe certain common limitations to calculators and interpret calculator-displayed symbols.

**Multicultural/Attitudinal:**

- Demonstrate an awareness of various perspectives in the development of mathematics through examples of folklore, customs, symbols and practices related to mathematics;
- Demonstrate a historically accurate perspective of the development of mathematics;
- Demonstrate an understanding and respect for the contributions of one's own cultural/ethnic heritage as well as the contribution of other cultural/ethnic groups to the development of mathematics.
- Demonstrate a respect and understanding for a variety of viewpoints in problem situations and make judgments and decisions on the basis of evidence;
- Demonstrate a confidence in and a positive attitude toward one's own ability to do mathematics;
- Demonstrate an understanding that the study of mathematics is relevant to one's own development and related to other content areas;
- Demonstrate a responsibility for one's own learning and the willingness to assist and work with others in solving problems.

**III.  
SEVENTH GRADE  
SCIENCE OUTCOMES**

Scientific literacy is the outcome of an effective science program that encourages reflection on the nature of science and the construction of new knowledge while the student learns and applies the principles and concepts of life, physical, earth and space science in many different real-world situations. The scientifically literate individual is one who:

- Uses scientific knowledge in a variety of real-world situations.
- Reflects on the nature of scientific knowledge.
- Constructs new personal knowledge from science.

**Constructing New Scientific Knowledge:** Scientifically literate students are effective learners as well as knowers of science. They can use new information, inquiry skills, and scientific habits of mind to build on and change their ideas about how the world works. The skills and habits of mind that follow are not, however, generic abilities to be taught separately from specific subject matter knowledge. They must be considered as outcomes only in the context of learning or constructing new scientific knowledge. The intended outcome for the seventh grade student will be to:

- Generate scientific questions about the world based on observation.
- Design and conduct simple investigations.
- Investigate toys/simple appliances and explain how they work, using instructions and appropriate safety.
- Use measurement devices to provide consistency in an investigation.
- Use sources of information to help solve problems.
- Write and follow procedures in the form of step-by-step instructions, recipes, formulas, flow diagrams and sketches.

**Reflecting on Scientific Knowledge:** Scientifically literate students have an understanding of the nature of science and the scientific enterprise that allows them to analyze and reflect their own knowledge and on scientific knowledge in general, and to understand the impact of science and technology on society. The intended outcome for the seventh grade student will be to:

- Evaluate the strengths and weaknesses of claims, arguments, or data.
- Describe limitations in personal knowledge.

- Show how common themes of science, mathematics, and technology apply in selected real world contexts.
- Describe the benefits and risks of new technologies.
- Recognize the contributions made in science by cultures and individuals of diverse backgrounds.

**Life Science: Cells:**

- Describe similarities/differences between single-celled and multicellular organisms.
- Explain why specialized cells are needed by plants and animals.
- Explain how cells use food as a source of energy.

**Life Science: Heredity:**

- Describe how the characteristics of living things are passed through generations.
- Describe how heredity and environment may influence/determine characteristics of an organism.

**Life Science: Organization on Living Things:**

- Compare and classify organisms into major groups on the basis of their structure.
- Describe the life cycle of the flowering plant.
- Explain how selected systems and processes work together in plants and animals.

**Life Science: Evolution:**

- Describe how biologists might trace possible evolutionary relationships among present and past life forms.

**Life Science: Ecosystems:**

- Describe common patterns of relationships among populations.
- Predict the effects of changes in one population in a food web on other populations.
- Describe how all organisms in an ecosystem acquire energy directly or indirectly from light.
- Describe the likely succession of a given ecosystem over time.
- Identify some common materials that cycle through the environment.
- Describe ways in which humans alter the environment.
- Explain how humans use and benefit from plant and animal materials.

**Physical Science: Changes in Matter:**

- Describe common physical changes in materials: evaporation, condensation, thermal expansion, and contraction.
- Describe common chemical changes in terms of properties of reactants and products.
- Distinguish between physical and chemical changes in natural and technological systems.
- Describe how waste products accumulating from natural and technological activity create pollution.

**Physical Science: Matter and Energy:**

- Measure physical properties of objects or substances (mass, weight, temperature, dimensions, areas, volume).
- Describe when length, mass, weight, area or volume are appropriate to describe the size of an object.
- Classify substances as elements, compounds, or mixtures.
- Describe matter as consisting of extremely small particles (atoms) which bond to form molecules.
- Describe the arrangement and motion of molecules in solids, liquids, and gases.

- Describe energy and the many common forms it take (mechanical, heat, light, sound, electrical).
- Describe how common forms of energy can be converted, one to another.
- Describe electron flow in simple electrical circuits.
- Use electric circuits to create magnetic fields.

**Physical Science: Motion of Objects:**

- Qualitatively describe and compare motions in three dimensions.
- Relate changes in speed or direction to unbalanced forces in two dimensions.
- Describe the forces exerted by magnets, electrically charged objects, and gravity.
- Design strategies for moving objects by application of forces, including the use of simple machines.

**Physical Science: Waves and Vibrations:**

- Explain how sound travels through different media.
- Explain how echoes occur and how they are used.
- Explain how light helps us to see.
- Explain how objects or media reflect, refract, transmit, or absorb light.
- Describe the motion of pendulums or vibrating objects (frequency, amplitude).

**Earth and Space Science: Geosphere:**

- Describe and identify surface features using maps.
- Explain how rocks and minerals are formed.
- Explain how rocks and fossils are used to determine the age and geological history of the earth.
- Explain how rocks are broken down, how soil is formed, and how surface features change.

- Explain how technology changes the surface of the earth.

**Earth and Space Science: Hydrosphere:**

- Describe various forms that water takes on the earth's surface and conditions under which they exist.
- Describe how rain water in Michigan reaches the oceans.
- Describe the origins of pollution in the hydrosphere.

**Earth and Space Science: Atmosphere and Weather:**

- Describe the composition and characteristics of the atmosphere.
- Describe patterns of changing weather and how they are measured.
- Explain the water cycle and its relationship to weather patterns.
- Describe health effects of polluted air.

**Earth and Space Science: Solar System, Galaxy and Universe:**

- Compare the earth to the other planets in terms of supporting life.
- Describe, compare, and explain the motions of planets, moons, and comets in the solar system.
- Describe and explain common observations of the day and night skies.
- Explain how the solar system formed.

**IV.  
SEVENTH GRADE  
SOCIAL STUDIES OUTCOMES**

**WORLD GEOGRAPHY**

**Time, Continuity and Change:** Understand how world regions have adapted to change.

- Discuss how indigenous peoples of the world adapted to change.
- Analyze population patterns of world areas.

**Space and Place:** Understand how geography affects the social, economic and political development of cultural groups across the world.

- Recognize and analyze differences caused by adaption to different physical environments.

**Production, Distribution and Consumption:** Demonstrate knowledge of the role of natural resources in the development of a region's economy.

- Illustrate how natural resources have impacted the economy of various regions.

**Power, Authority and Governance:** Demonstrate knowledge of regional governments.

- Compare various types of governments in various world regions.

**Technology and Society:** Understand how technology is used to change the environment.

- Examine how people in various regions use technology to change their environments to improve their ways of life.
- Examine how technology has been used to overcome geographic barriers that separate people.

**Global Connections/Multicultural Education:** Understand how geography affects the development of cultures.

- Define and illustrate culture, giving examples of how components of one culture are borrowed by another culture.

**Civic Participation:** Participation in a school beautification project.

**Skills:** Use various types of maps, charts and graphs to obtain information from expository text. Understand expository text as it relates to the comprehension of social studies, emphasizing the following:

- the use of chapter and section headings.
  - use of topics and summary sentences.
  - the interpretation of charts and graphs.
  - selection of main and subordinate ideas.
- 
- Compare and contrast geographical features of different regions.

**Values:** Recognize the responsibility to preserve the earth and its resources.

**V.**  
**SEVENTH GRADE**  
**TECHNOLOGY OUTCOMES**

Technology is the application of knowledge, materials (tools) and skills to solve practical problems and extend human capabilities. Technological systems/tools can be used in all curricular areas. Most frequently, it is the information technologies that are used to support curricular goals; they are used for communication, creative expression, knowledge and skill acquisition, problem solving, and information management.

When technology outcomes are effectively integrated across curricular areas, the results is a technologically literate individual. The technologically literate person is one who:

- Understands the role and impact of technology upon society, and the related issues such as information access and manipulation.
- Accepts the responsibilities associated with living in the technological oriented Information Age.
- Identifies when to use technology to solve a problem or accomplish a task and then selects and utilizes the appropriate technological system.
- Uses technology as a tool for obtaining, organizing and manipulating information and for communication and creative expression.

The following topics of study are recommended for the seventh grade level:

**PROBLEM SOLVING**

- Selection of the best combination of resources to operate the most appropriate technological system for the problem to be solved.
- Explain the purpose and need for monitoring technological systems.
- Recognize that new technologies, may result in the development of new industries and/or reallocation of resources within industries.
- Develop skills and aptitudes for the efficient and safe use of a technological system.

## **KNOWLEDGE and PRACTICAL EXPERIENCE**

- Describe technology-related careers.
- Describe the history and advancements in technology, summarize their impact upon society, and prepare for the future.
- Recognize the history and advancements in technology, summarize their impact upon society, and prepare for the future.
- Recognize that new technologies often evolve as a result of existing technologies.
- Investigate future technological advancements that are to be marketed in the near and distant future.
- Practical experience (hands-on-approach) to learning common every day technological systems (e.g., telephone, cellular telephone, facsimile machine, calculator, computer, computer on-line services, retrieving messages from answering machines, xerox copy machines, dictaphone, word processors, electric typewriter, programming a VCR, videodiscs, video recorder, microwave oven, and the use of other small electrical appliances, etc.).
- Understand the need to develop flexible attitudes and transferable skills.
- Articulate that computers are tools for information processing, communication, expression, decision making, problem solving, and control of other devices.
- Describe available information technologies, their functions and capabilities.

## **SOCIAL AND ETHICAL ISSUES**

- Describe the impact of technology on the home, school, community, and workplace.
- Explain world interdependence on technology and the need to share resources and technical expertise.
- Describe how technology impacts information access, analysis, organization, and utilization.

## **APPLICATIONS**

- Demonstrate the use of system commands on a computer program to control a technological system.
- Use technology media (computer, laser disc technology, video, telecommunication) to effectively search, collect, process and store information.
- Use more advanced features of computer applications software (word processing, database, graphics, telecomputing) within learning activities and introduce the use of spreadsheets to answer “what if” questions.
- Use information technologies as tools for creative expression and communication of ideas.

## **COMPUTER TECHNOLOGY (Data Processing, Database, and Spreadsheet)**

- Demonstrate keyboard skills.
- Recognize that computers are tools used for information processing, communication, and control.
- Use computers to assist in solving technological problems.
- Use more advanced features of computer applications software (word processing, database, graphics, telecomputing) within learning activities.
- Use computer programs as a tool for researching and as an aid for other curricular areas (mathematics, writing, reading, etc.).

## VI.

### SEVENTH GRADE

### ARTS OUTCOMES

**The arts outcomes have been designed to be appropriate and relevant for all students at all levels. The outcomes include knowledge, skills, attitudes, and values, as well as creating and performing art.**

An effective arts program fosters the development of an individual who applies knowledge and skills in art to their personal performance and production of art. This individual is one who:

- Compares and contrasts the roles of visual art, music, drama/theater and dance within a variety of cultures and throughout history.
- Demonstrates techniques to create and perform in the arts.
- Has a personal philosophy of the arts.
- Analyzes and makes judgments about art forms.
- Values his/her own and others creative products and performances as a way of creating meaning and expressing ideas.
- 

Knowledge and Understanding about Different  
**Historical, Cultural, and Societal Contexts for the Arts:**

- Know examples from each of the arts that were created during different historical periods.
- Be aware that the arts and artists have a function in our society to inform, define, and cause us to question and reflect.

Applying Knowledge about Different Contexts for the  
**Arts using Perceptual, Intellectual and Physical Skills:**

- Identify and analyze attributes of art forms from different historical periods.
- Identify and analyze attributes of art forms from different cultures.

**Knowledge and Understanding about Creating,**

**Producing, and Performing in the Arts:**

- Recognize increasingly sophisticated terms in the arts.
- Know additional expressive media used in the creation or performance of art forms.
- Know some reasons why the arts are created or performed.

Applying Knowledge about Critically Analyzing the  
**Arts using Perceptual, Intellectual and Physical Skills:**

- Observe, describe and analyze art forms using increasingly richer descriptive language.

Knowledge and Understanding about  
**An Aesthetic Philosophy in the Arts:**

- Know that how we react to artistic forms is a result of perceptions based upon current and past experiences.
- Know that aesthetics is an attempt to explain why some experiences are valued and cherished for their own sake rather than as a means to a particular end.

VII.  
SEVENTH GRADE  
AESTHETIC AND CULTURAL  
AWARENESS OUTCOMES

**Cultural and aesthetic awareness outcomes acknowledge, address, and are sensitive to the human being in all of us. They help to develop tolerance for diversity, creativity, innovation, imagination, and the ability to become an increasingly discerning person who makes decisions based on high standards of quality. A core curriculum which effectively integrates these outcomes across curricular areas will help develop a person attuned to sensor stimuli and who uses that awareness to make better judgments and choices. This individual is one who:**

- **Shows appreciation of natural and human-created environment by exhibiting habits of conversation, recycling, maintenance, and environmental improvement.**
- **Values quality in the performance of products of one's own and other's work.**
- **Values the creative contributions of all cultures and ethnic groups.**
- **Makes use of the cultural and aesthetic opportunities available in the community.**
- **Communicates effectively using verbal and nonverbal communication.**
- **Exercises individual freedom while exhibiting social responsibility.**

Recognize, Appreciate and Demonstrate the Characteristics of Quality Found Within the Work Done:

- **Exhibit care and planning in producing works of quality.**
- **Appreciate and enjoy works of others that show quality.**
- **Demonstrate a respect and support for works of quality by all cultures and people, past and present.**

Recognize and Appreciate the Natural and Human Created Environment as a Source for Aesthetic Impressions and Self-Expression:

- **Recognize and respect the similarities and differences between aesthetic qualities found in the natural and human-created environments of different cultures.**
- **Demonstrate continued efforts of conservation, recycling, maintenance, and improvement of aesthetic features of the natural and human-created environments.**

- **Recognize those aspects of the natural and human-created environments that evoke an aesthetic impression and provide inspiration for self-expression.**

Appreciate the Aesthetic Dimensions of Different Cultures, Past and Present:

- **Appreciate the diversity and differences of aesthetic expression exhibited by different cultures.**

Be Aware of Aesthetic and Cultural Opportunities in Leisure Time:

- **Demonstrate the ability to critically assess leisure time activities and consider participation in those that offer aesthetic opportunities.**
- **Explore and experience aesthetic opportunities available through the home, school and community.**
- **Participate as both an originator and an audience member as they explore a variety of mediums of aesthetic expression.**

Create, Appreciate and Critically Evaluate Verbal and Non Verbal Communication:

- **Create forms of verbal and nonverbal communication that successfully convey on the appropriate level of maturity and development, ideas, information and aesthetic expression.**

Appreciate and Understand the Relationship Between Individual Freedom and Social Responsibility:

- **Recognize, appreciate, and exercise their right of freedom of expression while demonstrating the ability to perceive and successfully respond to social and moral tenets.**
- **Demonstrate both the development of personal ethics and morals, as well as a consideration of those principles, throughout the process of creative expression.**

VIII.  
SEVENTH GRADE  
HEALTH OUTCOMES

The outcome of an effective health program is an individual who knows and understands how to maximize his/her own personal health. This person is a person who:

- Accepts responsibility for personal health decisions and practices.
- Is a discrimination consumer of health information, services, and products.
- Works with others to maintain an ecological balance between human beings and the environment.

The following topics of study are recommended, with specific outcomes delineated for the middle/junior high school level.

DISEASE PREVENTION & CONTROL

- Identify and describe the characteristics of disease.
- Related disease prevention and control to their lives.
- Identify risk factors associated with disease.

PERSONAL HEALTH PRACTICES

- Evaluate the benefits of incorporating a program of physical activity into one's lifestyle.
- Describe personal responsibility for personal health practices.

NUTRITION

- Assess and evaluate personal eating habits in relationship to reducing health risks
- Describe the effect of eating disorders on health status.
- Describe the relationship among eating habits, nutrition, and physical performance.

GROWTH & DEVELOPMENT

- Describe the physical and emotional changes occurring during adolescence.
- Describe the range of differences in normal maturation rates of adolescents.

- **Identify the role of sexuality in human growth and development.**
- **Identify abstinence from sexual intercourse as responsible behavior.**

#### FAMILY HEALTH

- **Explain the desirability of a mentally healthy lifestyle.**
- **Accept the normalcy of changes in emotions, feelings, and moods.**
- **Demonstrate a variety of positive coping behaviors.**
- **Analyze and evaluate the influence of peer and other social pressures in personal decision-making.**
- **Demonstrate peer refusal skills in a variety of situations.**
- **Express needs, wants, and feelings appropriately.**

#### SUBSTANCE ABUSE PREVENTION

- **Evaluate personal risk for chemical dependency based upon personal, family and environmental factors.**
- **Apply self-protection, resistance, and peer refusal skills in substance abuse situations.**
- **Identify community resources for help in substance abuse situations.**
- **Understand the legal/societal penalties for use of illicit substances.**

#### CONSUMER HEALTH

- **Describe agencies within the community that provide health information and health services.**
- **Identify the effects of advertising on health product choices.**

#### SAFETY AND FIRST AID

- **Identify basic first aid techniques for common emergency conditions.**
- **Evaluate their own safety practice (e.g., transportation, recreation).**

## COMMUNITY HEALTH

- **Identify health problems common to their community.**
- **Identify the factors that influence community health.**
- **Examine ways that individuals, communities, and state and federal governments cooperate to promote environmental health.**

**IX**  
**SEVENTH GRADE**  
**PHYSICAL EDUCATION OUTCOMES**

The outcome of an effective physical education program is an individual with an optimal fitness level for work and leisure. This person is one who:

- Realizes his/her personal capabilities and optimal potential.
- Has a positive and accurate self-image.
- Has the skills, understanding and motivation to maintain optimal fitness for work and leisure.

Optimal fitness can be attained with the following recommended core curriculum, which provides general outcomes in six areas.

**COGNITIVE CONCEPTS**

- Explain the concepts of physical education as they relate to making wise lifestyle choices in the areas of: cardiovascular endurance, body composition, strength and endurance, posture, flexibility, weight control, and the beneficial effects of activity.

**PHYSICAL FITNESS**

- Maintain healthy levels of cardiovascular endurance.
- Maintain healthy levels of strength and endurance of selected muscular groups.
- Maintain healthy levels of flexibility about selected joints of the body.

**BODY CONTROL SKILL**

- Demonstrate competence on selected twisting and turning skills.
- Demonstrate competence on selected inverted balance skills,
- Demonstrate competence on selected lifting and lowering skills.

**SPORTS & LEISURE SKILLS**

- Demonstrate competence on selected objectives that enable participation at a recreational level in at least three leisure sports (e.g., swimming, racquet sports, volleyball).

- **Apply appropriate rules, strategies, and etiquette in at least three leisure sports.**

#### EFFECTIVE PERSONAL/SOCIAL SKILLS

- **Demonstrate the appropriate behavior related to personal character traits (e.g., best effort, following directions, responsibility, and self control) in selected activities.**
- **Demonstrate appropriate behavior related to social characteristics (e.g., leadership, cooperation, fair play, winning, and losing) in selected activities.**

X.  
SEVENTH GRADE  
LIFE AND PERSONAL  
MANAGEMENT OUTCOMES

Curricular outcomes in Life and Personal Management foster the development of a responsible person who:

- Analyzes priorities and responsibilities in the home, family, and community and successfully manages life roles, including those of nurturer, caregiver and parent.
- Is a responsible producer and consumer within the family structure.
- Makes ethical and successful decisions for individual and family life styles taking into consideration the impact of societal and technological changes, and the physical, social, intellectual, and emotional needs of individuals and family members.
- Values the cultural and ethnic diversity of the community, nation, and world.
- Exercises legal rights and responsibilities as related to the family.

To attain this educational result, the following categories of outcomes are recommended for the seventh grade level:

The Relationship Between Life Roles and Management Skills for Individual and Family Members:

- Recognize personal priorities for home, school, and community.

The Relationship Between a Responsible Producer and Consumer Within The Family Structure:

- Explore the relationships between personal work attitudes and responsible performance in the workplace.
- Define the relationship between a responsible producer and consumer.
- Determine how personal priorities and achievement goals affect consumer decisions.

Ethical and Successful Decision-Making for Individual and Family Life Styles:

- Comprehend the relationship between personal priorities and ethical decisions.

Societal and Technological Changes that Influence Personal and Family Needs:

- **Analyze societal and technological changes and their effects on personal and family environment.**
- **Identify ways in which individuals and families respond, adapt, and initiate change.**

Safe Environmental Procedures for Personal and Family Well-Being:

- **Recognize personal and governmental roles and responsibilities in the establishment of a safe environment.**

Physical, Social, Intellectual and Emotional Needs of Individuals and Family Members:

- **Comprehend the relationship of life style to needs, wants, and personal priorities.**
- **Explore factors that relate to an individual and/or family member's personal, physical, intellectual and emotional needs.**

The Cultural and Ethnic Variety of Social Contributions of Individuals and Families:

- **Examine family heritage and its relationship to personal priorities.**
- **Identify a variety of cultural and ethnic backgrounds.**
- **Explore ways in which culture and ethnic heritage influence life style.**

XI.  
SEVENTH GRADE  
CAREER AND EMPLOYABILITY  
OUTCOMES

When career and employability outcomes are effectively integrated into all curricular areas individuals will acquire knowledge and skills to prepare them to move into the world of work or further education. This individual is one who:

- Uses the basic skills of language (reading, writing, listening, speaking), mathematics, science, and social studies in work-related situations.
- Has a career plan of action and the skills/strategies to implement it.
- Is an effective team member.
- Demonstrates honesty, integrity, and respect for others.

The following outcomes are recommended:

Basic Knowledge and Skills Necessary for Successful Employment and/or Further Education:

- Describe the characteristics of effective communication in the workplace.
- Read and interpret occupationally-oriented graphs, charts, and displays.
- Describe the relationships of life, physical, and earth sciences to the workplace.

Personal and Employability Skills for Successful Transition from School to Work and/or Advanced Education:

- Investigate career opportunities including those nontraditional for their sex.
- Describe one's personal traits, interests, priorities, strengths, and weaknesses.
- Describe job seeking skills.
- Contribute new ideas and alternative strategies for solving problems.
- Demonstrate positive leadership behaviors.
- Develop with parent(s) or guardian(s) and school personnel, and educational and career plan of action.

- **Describe the effects of employee productivity, loyalty, and competence.**
- **Demonstrate honesty, integrity, and respect for others and explain the importance of these characteristics for future school and/or work experiences.**
- **Demonstrate grooming, dress and personal hygiene appropriate to the classroom and explain how these skills will translate into workplace behaviors.**
- **Translate knowledge of labor market information and training opportunities into a career decision.**

Awareness of Entrepreneurship:

- **Describe various economic systems and their impact in the world economy.**
- **Analyze the monetary value of occupations as it relates to the world economy.**
- **Investigate business ownership as a career option.**
- **Identify personal characteristics of entrepreneurs.**

Occupational Skills and Knowledge to Obtain and Sustain Employment and/or Advanced Education:

- **Investigate technological applications and their effect on various occupations.**
- **Demonstrate proper use of technical tools, machines, materials, and processes.**
- **Employ safety practices in using technical equipment and materials in the classroom/laboratory.**

I.  
EIGHTH GRADE  
ENGLISH/LANGUAGE ARTS OUTCOMES

A.LISTENING/SPEAKING

**LISTENING-** The listening process begins with the perceptual process of hearing and the ability to engage in both auditory and visual discrimination among sounds and visual images. The effective listener will progress from the recognition of meaningful languages sounds to the ability to discriminate emotional language and feeling in paralinguistic sounds.

**SPEAKING-** Messages are the ideas that a communicator seeks to impart to his or her audience. The intended verbal message will be affected by nonverbal elements. In developing the content for a message, a communicator must analyze the audience, apply ethical standards, consider various elements of evidence and reasoning, and frame the ideas in appropriate language.

**Meaning and Communication:**

- Display attentive listening behaviors in a variety of situations (e.g., visualization, ask questions to clarify messages and extend meaning, respond appropriately to questions).
- Apply inductive and deductive reasoning by analyzing features, similarities and differences.
- Demonstrate knowledge of formal/informal communication (e.g., presentations with visual aids, speeches to persuade, explain, inform, entertain, debate, radio/TV scripts, storytelling).
- Assess and adjust one's messages and/or speaking techniques to a particular audience and situation.

**Genre and Craft of Language:**

- Use a varied vocabulary in expressing feelings, thoughts, describing experiences and responding to others (e.g., summarizing, reciting/retelling, collaborating on original stories).
- Apply the mechanics of speech employing appropriate tone, volume, pauses, gestures, facial expressions and movements that aid in conveying/understanding messages.
- Analyze various media and genre in terms of form, content, purpose (e.g., informational text, short stories, novels, science fiction).

### **Diversity and Culture:**

- Respond to messages by employing appropriate verbal and nonverbal responses (e.g., use body language to indicate approval/disapproval, agreement/disagreement) to provide constructive feedback.

### **Critical Standards:**

- Speak using a variety of standard English sentence structures.
- Modify one's language to a variety of situations (standard, colloquial, slang).

### **Meaning and Communication:**

- Construct meaning, concepts, themes, and major ideas from multiple texts (e.g., poetic, narrative, technical).
- Demonstrate understanding of story elements by identifying characters, setting, plot/theme, mood, author's purpose.

- Integrate textual information from a variety of texts combined with one's own knowledge (e.g., generating questions, analyzing mood, tone, recognizing how authors combine information from different sources and determine form and content).

### **Meaning and Communication: Decoding:**

- Use a combination of strategies when encountering vocabulary while constructing meaning (e.g., using context, word analysis, verbal strategies, word origins, sentence structure, dictionary, thesaurus).

### **Meaning and Communication: Vocabulary:**

- Increase vocabulary knowledge by using a variety of strategies such as semantic analysis, feature analysis, and wide reading and self-initiated writing.

### **Diversity and Culture:**

- Compare and contrast the literary styles and perspectives of authors from diverse societies and cultures (e.g., Maya Angelou, Langston Hughes, Piri Thomas, Rodolfo Gonzales, Jeanne Wakatsuki Huston) in book reviews/reports/critiques/presentations.

### **Self Regulation and Reflection:**

- Utilize metacognitive strategies to monitor construction of meaning with narrative, informational and functional text (e.g., using adjunct aids, scanning, organizational patterns).
- Take responsibility for increasing one's learning by reading progressively longer passages/selections.

## **B. READING/LITERATURE**

**READING-** Reading is a process used to acquire information from print. The purpose of these reading outcomes is to prepare students to meet the demands related to constructing meaning from text materials:

- Under instructional conditions.
- for all possible purposes.
- In all subject areas.

Both the developmental and remedial programs should reflect the nature of the demands, the conditions, and the purposes for reading.

**LITERATURE-** Literature is the artful use of language to depict selected aspects of the human experience. It is the expression of thoughts and feelings embodying imagination and reflecting diverse cultural systems. Literature may be experienced in an oral, written, or visual mode and may be enjoyed on many levels. Studying literature enables students to enlarge their world by:

- Experiencing vicariously other times, places and events.
- Acquiring new information.
- Gaining insights about themselves, others, and the world in which they live.

**Depth of Understanding:**

- Compare/contrast literature to one's own experiences and apply to one's life (e.g., rights and responsibilities, relationships with others, conflict and cooperation).

### **Ideas in Action:**

- Interpret and respond to practical life skills' situations (e.g., understanding advertising techniques, following directions, completing forms and applications).

### **Inquiry and Research:**

- Identify and use extensive resources to investigate questions/topics (e.g., table of contents, index, glossaries, library catalog, guest speakers, interviews, surveys, ERIC, ProQuest).

### **Critical Standards:**

- Select and read a variety of materials for enjoyment to extend one's knowledge for pleasure, to acquire information and to perform tasks.

### **Knowledge About Reading:**

- Explain why reading is construction of meaning.
- Describe how reading is communication with the author.
- Identify reader characteristics, text factors which influence reading.

## C. WRITING

**WRITING-** Writing is both a way of thinking and communication, as well as a mode for learning in all curricular areas. It can be a means of self-discovery, and of finding out what we believe and know. Writing serves both the public and personal needs of students.

**Writing should be taught within the framework of the writing process: prewriting, drafting, revising, proofreading, and publishing. Students should maintain their writing portfolios in some type of collection for the purposes of reporting to parents, “conferencing” with teachers, and determining growth in writing.**

Meaning and Communication:

- **Demonstrate competency in keyboarding skills (e.g., typewriters, word processors, computers).**
- **Employ process writing in composing text employing elements and characteristics of poetry and narrative text and organizational patterns of informational text (e.g., advertising copy, character sketches, scripts, short stories, class notes, news reports, editorials, reviews, multi-paragraph themes).**
- **Utilize writing as a tool to organize and summarize information from multiple texts (e.g., journal writing, graphic organizers and essays, international pen pals).**

Genre and Craft of Language:

- **Demonstrate a varied vocabulary in expressing feelings, thoughts, describing experiences and responding to others (e.g., summarizing, reciting/retelling, collaborating on original stories).**
- **Formulate and express ideas using aspects of writer’s craft such as flashback, imagery and humorous/persuasive techniques.**
- **Use writing mechanics that clarify meaning (appropriate punctuation, grammatical constructions, conventional spelling, variety in sentence structure and paragraphing).**

Depth and Understanding:

- **Compare/contrast selections with a common theme (e.g., coming of age, rites of passage, life/death) that reflect diverse points of view.**

Inquiry and Research:

- **Create charts, learning logs, graphs and write abstracts to record the results of scientific investigations and research projects.**

Critical Standards.

- **Self-select/maintain pieces of writing for a portfolio based upon established criteria.**

II.  
EIGHTH GRADE  
MATHEMATICS OUTCOMES

The advances of technology have profoundly influenced society. The world today increasingly depends on information processing to solve problems. This revolution in technology will create professions requiring abilities and skills in mathematics and in decision making. To meet these needs, schools should provide a comprehensive mathematics curriculum that teaches the fundamentals of mathematics, develops critical thinking skills, and nurtures logical reasoning.

A mathematically literate person is one who:

- Values mathematics.
- Has confidence in his/her ability to do mathematics demonstrating conceptual understanding as well as proficiency in operations skills.
- Applies conceptual understandings, operational skills, and technological tools to problem solving.
- Communicates mathematical ideas orally and in writing.
- Reasons mathematically.

The following topics of study are recommended:

Fractions, Decimals, Ratio, And Percent: Solve ratio, proportion and percent problems using a calculator and computer. Use a calculator to compare and order fractions using decimal equivalents. Express ratio as percents, fractions, or decimals and relate each form to the other two. Identify and find equivalent ratios.

Measurement: Derive and use formulas for finding the area of two-dimensional figures and the volume of three-dimensional figures. Apply knowledge of the relationship among the basic metric units to solve multi-step problems.

Geometry: Model, identify and describe the properties of a circle: tangent, secant, chord, arc, sector; model, identify, describe and use size transformations; model, derive and use the Pythagorean Theorem to solve problems. Visualize, sketch, and construct geometric objects.

Statistics and Probability: Generate tables using calculators and computers, including the use of spreadsheets. Construct, read, describe and interpret stem- and leaf-plots, box plots and scatter plots; describe, determine and use outliers and quartiles; use probability devices and computers to simulate real-world and compound events. Read, interpret,

**determine, and apply probabilities to determine patterns, identify trends, predict outcomes, and make wise choices.**

**Algebraic Ideas: Solve linear equations using concrete and informal methods; model and find products and quotients of integers and relate to algorithms; analyze functional relationships to explain how a change in one quantity results in a change in another; analyze tables and graphs to identify properties and relationships and solve problems.**

**Problem Solving and Logical Reasoning: Determine and apply necessary steps to solve a problem, evaluate the solution and formulate a generalization for a given problem; select and apply appropriate problem-solving strategies; use logical reasoning to solve a problem and to draw valid conclusions from given information. Interpret and use statements involving logical operations and quantifiers (and, or, not, if...then, every, all, some, no, at least, at most, each, exactly).**

**Technology: Use the scientific calculator and computer to solve problems (computer percents, including percents of increase and decrease). Describe certain limitations to calculators and interpret selected calculator-displayed symbols.**

**Multicultural/Attitudinal:**

- **Demonstrate an awareness of various perspectives in the development of mathematics through examples of folklore, customs, symbols and practices related to mathematics;**
- **Demonstrate a historically accurate perspective of the development of mathematics;**
- **Demonstrate an understanding and respect for the contributions of one's own cultural/ethnic heritage as well as the contribution of other cultural/ethnic groups to the development of mathematics;**
- **Demonstrate a respect and understanding for a variety of viewpoints in problem situations and make judgments and decisions on the basis of evidence;**
- **Demonstrate a confidence in and a positive toward one's own ability to do mathematics;**
- **Demonstrate an understanding that the study of mathematics is relevant to one's own development and related to other content areas;**
- **Demonstrate a responsibility for one's own learning and the willingness to assist and work with others in solving problems.**

III.  
EIGHTH GRADE  
SCIENCE OUTCOMES

**Scientific literacy is the outcome of an effective science program that encourages reflection on the nature of science and the construction of new knowledge while the student learns and applies the principles and concepts of life, physical, earth and space science in many different real-world situations. The scientifically literate individual is one who:**

- **Uses scientific knowledge in a variety of real-world situations.**
- **Reflects on the nature of scientific knowledge.**
- **Constructs new personal knowledge from science.**

Constructing New Scientific Knowledge: **Scientifically literate students are effective learners as well as knower's of science. They can use new information, inquiry skills, and scientific habits of mind to build on and change their ideas about how the world works. The skills and habits of mind that follow are not, however, generic abilities to be taught separately from specific subject matter knowledge. They must be considered as outcomes only in the context of learning or constructing new scientific knowledge. The intended outcome for the sixth grade student in this area will be to:**

- **Construct charts and graphs and prepare summaries of observations.**
- **Generate scientific questions about the world based on observation.**
- **Design and conduct simple investigations.**
- **Investigate toys/simple appliances and explain how they work, using instructions and appropriate safety.**
- **Use measurement devices to provide consistency in an investigation.**
- **Use sources of information to help solve problems.**
- **Write and follow procedures in the form of step-by-step instructions, recipes, formulas, flow diagrams and sketches.**

Reflecting on Scientific Knowledge: **Scientifically literate students have an understanding of the nature of science and the scientific enterprise that allows them to analyze and reflect their own knowledge and on scientific knowledge in general, and to understand the impact of science and technology on society. The intended outcome for the eighth grade student in this area will be to:**

- Evaluate the strengths and weaknesses of claims, arguments, or data.
- Describe limitations in personal knowledge.
- Show how common themes of science, mathematics, and technology apply in selected real world contexts.
- Describe the benefits and risks of new technologies on patterns of human activity.
- Recognize the contributions made in science by cultures and individuals of diverse backgrounds.

Life Science: Cells:

- Explain how cells use food as a source of energy.

Life Science: Organization of Living Things:

- Compare and classify organisms into major groups on the basis of their structure.
- Describe evidence that plants make and store food.
- Explain how selected systems and processes work together in plants and animals.

Life Science: Heredity:

- Identify some common materials that cycle through the environment.
- Describe ways in which humans alter the environment.

Physical Science: Matter and Energy:

- Measure physical properties of objects or substances (mass, weight, temperature, dimensions, area, volume).
- Describe when length, mass, weight, area or volume are appropriate to describe the size of an object.
- Classify substances as elements, compounds, or mixtures.
- Describe matter as consisting of extremely small particles (atoms) which bond to form molecules.
- Describe the arrangement and motion of molecules in solids, liquids, and gases.

- **Describe energy and the many common forms it takes (mechanical, heat, light, sound, electrical).**
- **Describe how common forms of energy can be converted, one to another.**

Physical Science: Matter and Energy:

- **Describe electron flow in simple electrical circuits.**
- **Use electric circuits to create magnetic fields.**

Physical Science: Changes in Matter:

- **Describe common physical changes in materials: evaporation, condensation, thermal expansion, and contraction.**
- **Describe how waste products accumulating from natural and technological activity create pollution.**
- **Explain physical changes in terms of the arrangement and motion of atoms and molecules.**

Physical Science: Motion of Objects:

- **Qualitatively describe and compare motions in three dimensions.**
- **Relate changes in speed or direction to unbalanced forces in two dimensions.**
- **Describe the forces exerted by magnets, electrically charged objects, and gravity.**
- **Design strategies for moving objects by application of forces, including the use of simple machines.**

Physical Science: Waves and Vibrations:

- **Explain how sound travels through different media.**
- **Explain how echoes occur and how they are used.**
- **Explain how light helps us to see.**
- **Explain how objects or media reflect, refract, transmit, or absorb light.**
- **Describe the motion of pendulums or vibration objects (frequency, amplitude).**

- **Explain how waves transmit energy.**

Earth and Space Science: Geosphere:

- **Explain how technology changes the surface of the earth.**

Earth and Space Science: Hydrosphere:

- **Describe how rain water in Michigan reaches the oceans.**
- **Describe the origins of pollution in the hydrosphere.**

Earth and Space Science: Atmosphere and Weather:

- **Describe the composition and characteristics of the atmosphere.**
- **Describe patterns of changing weather and how they are measured.**

Earth and Space Science: Solar System, Galaxy and Universe:

- **Describe, compare, and explain the motions of planets, moons, and comets in the solar system.**
- **Explain how the solar system formed.**

IV.  
EIGHTH GRADE  
SOCIAL STUDIES OUTCOMES

UNITED STATES HISTORY TO 1865

Time, Continuity and Change: **Demonstrate knowledge of people, events, ideas, institutions and historical movements that contributed significantly to the development of the U.S. Through the Civil War.**

- **Understand the historical factors leading to the settlement of the United States.**
- **List and describe the effect of the Columbian encounter on the New World.**
- **Develop a time line to include the achievements of African Americans, in context, up to 1865.**
- **Analyze the Civil War as a catalyst for significant change in the country.**

Space and Place: **Understand the importance of the themes of movement and regions to the development of the United State through the Civil War.**

- **Evaluate the impact of manifest destiny on the development of the U.S.**
- **Describe how regions competed with each other for power.**

Production, Distribution and Consumption: **Understand the fundamental concepts of economics (economic systems; economic institutions and incentives; exchange, money and interdependence) as applied to the early development of the free market economic system in the United States.**

- **Analyze the impact of trade and tariffs on the history of the United States.**

**Understand the impact of African Americans on the development of the economic system of the United States.**

- **Analyze and discuss the economic impact of Triangular Trade.**
- **Apply the fundamental concepts of economics to the institution of slavery and assess its impact on the growth and development of the country.**

Power, Authority and Governance: **Understand the development of constitutional democracy in the United States.**

- **Examine the documents and identify the elements of democracy.**

- **Create a timeline to include the political achievements of African Americans to 1865.**
- **Analyze the attitudes and belief systems of Founding Fathers.**
- **Evaluate the impact constitutional amendments had in African Americans.**

Technology and Society: **Use technology and artifacts for gathering information.**

- **Research and report on issues in American history to 1865.**

Global Connections/Multicultural Education: **Understand cultural diversity and its impact on American history.**

- **Define and illustrate culture, giving examples of how components of one culture are borrowed by another culture.**

Civic Participation: **Participate in the political process at the local, state, or federal government level.**

Skills: **Compare and contrast current events with historical events using expository text.**

**-Place major events up to the Civil War on a timeline.**

**-Understand expository text as it relates to the comprehension of social studies, emphasizing the following:**

- **The use of chapter and section headings.**
- **Use of topics and summary sentences.**
- **Interpretations of charts and graphs.**
- **Selection of main and subordinate ideas.**

**-Demonstrate cause and effect relationships in various historical events.**

Values: **Recognize the constitutional rights of all citizens.**

V.  
EIGHTH GRADE  
TECHNOLOGY OUTCOMES

**Technology is the application of knowledge, materials (tools) and skills to solve practical problems and extend human capabilities. Technological systems/tools can be used in all curricular areas. Most frequently, it is the information technologies that are used to support curricular goals; they are used for communication, creative expression, knowledge and skill acquisition, problem solving, and information management.**

**When technology outcomes are effectively integrated across curricular areas, the result is a technologically literate individual. The technologically literate person is one who:**

- **Understands the role and impact of technology upon society, and the related issues such as information access and manipulation.**
- **Accepts the responsibilities associated with living in the technological oriented Information Age;**
- **Identifies when to use technology to solve a problem or accomplish a task and then selects and utilizes the appropriate technological system.**
- **Uses technology as a tool for obtaining, organizing and manipulating information and for communication and creative expression.**

**The following topics of study are recommended for the sixth grade level:**

**PROBLEM SOLVING**

- **Selection of the best combination of resources to operate the most appropriate technological system for the problem to be solved.**
- **Explain the purpose and need for monitoring technological systems.**
- **Explain the importance of feedback available from technological systems.**
- **Develop skills and aptitudes for the efficient and safe use of a technological system.**

**KNOWLEDGE and PRACTICAL EXPERIENCE**

- **Analyze the relationship among technologies.**
- **Describe technology-related careers.**

- Describe the history and advancements in technology, summarize their impact upon society, and prepare for the future.
- Investigate future technological advancements that are to be marketed in the near and distant future.
- Identify the resources needed to operate selected technological systems;
- Practical experience (hands-on approach) to learning common everyday technological systems (e.g., telephone, cellular telephone, facsimile machine, calculator, computer, computer on-line services, retrieving messages from answering machines, copy machines, dictaphone, word processor, electronic typewriter, VCR programming, videodiscs, video-recorder, microwave oven, and the use of other small electrical appliances, etc.).
- Articulate that computers are tools for information processing, communication, expression, decision making, problem solving, and control of other devices.
- Describe the components used in integrated technological systems (e.g., computers, videodiscs, cellular phones, etc.).
- Describe available information technologies, their functions and capabilities.
- Describe the advantages and disadvantages arising from the application of a technological solution to a problem.

#### SOCIAL AND ETHICAL ISSUES

- Adhere to copyright, patent, Freedom of Information laws as they relate to the use of technology.
- Demonstrate critical viewing skills by selecting and analyzing media and identifying whether visual images have distorted data being presented.
- Describe the impact of technology on the home, school, community, and workplace.
- Explain world interdependence on technology and the need to share resources and technical expertise.
- Describe how technology impacts information access, analysis, organization, and utilization.

#### APPLICATIONS

- **Demonstrate the use of system commands or a computer program to control a technological system.**
- **Use technology media (computer, laser disc technology, video, tele-communication) to effectively search, collect, process and store information.**
- **Apply techniques to interpret, analyze, synthesize, and evaluate data/information.**
- **Use more advanced features of computer applications software (word processing, database, graphics, tele-computing) within learning activities and introduce the use of spreadsheets to answer “what if” questions.**
- **Use information technologies as tools for creative expression and communication of ideas.**

VI.  
EIGHTH GRADE  
ARTS OUTCOMES

The arts outcomes have been designed to be appropriate and relevant for all students at all levels. The outcomes include knowledge, skills, attitudes, and values, as well as creating and performing art.

An effective arts program fosters the development of an individual who applies knowledge and skills in art to their personal performance and production of art. This individual is one who:

- **Compares and contrasts the roles of visual art, music, drama/theater and dance within a variety of cultures and throughout history.**
- **Demonstrates techniques to create and perform in the arts.**
- **Has a personal philosophy of the arts.**
- **Analyzes and makes judgments about art forms.**
- **Values his/her own and others creative products and performances as a way creating meaning and expressing ideas.**

Knowledge and Understanding about Different Historical, Cultural, and Societal Contexts for the Arts:

- **Know examples from each of the arts that were created during different historical periods.**
- **Be aware that the arts and artists have a function in our society to inform, define, and cause us to question and reflect.**

Applying Knowledge about Different Contexts for the Arts using Perceptual, Intellectual and Physical Skills:

- **Identify and analyze attributes of art forms from different historical periods.**
- **Identify and analyze attributes of art forms used in our society.**

Knowledge and Understanding about Creating, Producing, and Performing in the Arts:

- **Recognize increasingly sophisticated terms in the arts.**

- **Know additional expressive media used in the creation or performance of art forms.**
- **Know some reasons why the arts are created or performed.**

Applying Knowledge about Critically Analyzing the Arts using Perceptual, Intellectual and Physical Skills:

- **Observe, describe and analyze art forms using increasingly richer descriptive language.**

Knowledge and Understanding about An Aesthetic Philosophy in the Arts:

- **Know that how we react to artistic forms is a result of perceptions based upon current and past experiences.**
- **Know that aesthetics is an attempt to explain why some experiences are valued and cherished for their own sake rather than as a means to a particular end.**

VII.  
EIGHTH GRADE  
AESTHETIC AND CULTURAL  
AWARENESS OUTCOMES

**Cultural and aesthetic awareness outcomes acknowledge, address, and are sensitive to the human being in all of us. They help to develop tolerance for diversity, creativity, innovation, imagination, and the ability to become an increasingly discerning person who makes decisions based on high standards of quality. A core curriculum which effectively integrates these outcomes across curricular areas will help develop a person attuned to sensor stimuli and who uses that awareness to make better judgments and choices. This individual is one who:**

- **Shows appreciation of natural and human-created environment by exhibiting habits of conversation, recycling, maintenance, and environmental improvement.**
- **Values quality in the performance of products of one's own and other's work.**
- **Values the creative contributions of all cultures and ethnic groups.**
- **Makes use of the cultural and aesthetic opportunities available in the community.**
- **Communicates effectively using verbal and nonverbal communication.**
- **Exercises individual freedom while exhibiting social responsibility.**

Recognize, Appreciate and Demonstrate the Characteristics of Quality Found Within the Work Done:

- **Exhibit care and planning in producing works of quality.**
- **Appreciate and enjoy works of others that show quality.**
- **Demonstrate a respect and support for works of quality by all cultures and people, past and present.**

Recognize and Appreciate the Natural and Human Created Environment as a Source for Aesthetic Impressions and Self-Expression:

- **Recognize and respect the similarities and differences between aesthetic qualities found in the natural and human-created environments of different cultures.**
- **Demonstrate continued efforts of conservation, recycling, maintenance, and improvement of aesthetic features of the natural and human-created environments.**

- **Recognize those aspects of the natural and human-created environments that evoke an aesthetic impression and provide inspiration for self-expression.**

Appreciate the Aesthetic Dimensions of Different Cultures, Past and Present:

- **Appreciate the diversity and differences of aesthetic expression exhibited by different cultures.**

Be Aware of Aesthetic and Cultural Opportunities in Leisure Time:

- **Demonstrate the ability to critically assess leisure time activities and consider participation in those that offer aesthetic opportunities.**
- **Explore and experience aesthetic opportunities available through the home, school and community.**
- **Participate as both an originator and an audience member as they explore a variety of mediums of aesthetic expression.**

Create, Appreciate and Critically Evaluate Verbal and Nonverbal Communication:

- **Create forms of verbal and nonverbal communication that successfully convey on the appropriate level of maturity and development, ideas, information and aesthetic expression.**

Appreciate and Understand the Relationship Between Individual Freedom and Social Responsibility:

- **Recognize, appreciate, and exercise their right of freedom of expression while demonstrating the ability to perceive and successfully respond to social and moral tenets.**
- **Demonstrate both the development of personal ethics and morals, as well as a consideration of those principles, throughout the process of creative expression.**

VIII.  
EIGHTH GRADE  
HEALTH OUTCOMES

The outcome of an effective health program is an individual who knows and understands how to maximize his/her own personal health. This person is a person who:

- Accepts responsibility for personal health decisions and practices.
- Is a discrimination consumer of health information, services, and products.
- Works with others to maintain an ecological balance between human beings and the environment.

The following topics of study are recommended, with specific outcomes delineated for the middle/junior high school level.

DISEASE PREVENTION & CONTROL

- Identify and describe the characteristics of disease.
- Related disease prevention and control to their lives.
- Identify risk factors associated with disease.

PERSONAL HEALTH PRACTICES

- Evaluate the benefits of incorporating a program of physical activity into one's lifestyle.
- Describe personal responsibility for personal health practices.

NUTRITION

- Assess and evaluate personal eating habits in relationship to reducing health risks
- Describe the effect of eating disorders on health status.
- Describe the relationship among eating habits, nutrition, and physical performance.

GROWTH & DEVELOPMENT

- Describe the physical and emotional changes occurring during adolescence.
- Describe the range of differences in normal maturation rates of adolescents.

- **Identify the role of sexuality in human growth and development.**
- **Identify abstinence from sexual intercourse as responsible behavior.**

#### FAMILY HEALTH

- **Explain the desirability of a mentally healthy lifestyle.**
- **Accept the normalcy of changes in emotions, feelings, and moods.**
- **Demonstrate a variety of positive coping behaviors.**
- **Analyze and evaluate the influence of peer and other social pressures in personal decision-making.**
- **Demonstrate peer refusal skills in a variety of situations.**
- **Express needs, wants, and feelings appropriately.**

#### SUBSTANCE ABUSE PREVENTION

- **Evaluate personal risk for chemical dependency based upon personal, family and environmental factors.**
- **Apply self-protection, resistance, and peer refusal skills in substance abuse situations.**
- **Identify community resources for help in substance abuse situations.**
- **Understand the legal/societal penalties for use of illicit substances.**

#### CONSUMER HEALTH

- **Describe agencies within the community that provide health information and health services.**
- **Identify the effects of advertising on health product choices.**

#### SAFETY AND FIRST AID

- **Identify basic first aid techniques for common emergency conditions.**
- **Evaluate their own safety practice (e.g., transportation, recreation).**

## COMMUNITY HEALTH

- **Identify health problems common to their community.**
- **Identify the factors that influence community health.**
- **Examine ways that individuals, communities, and state and federal governments cooperate to promote environmental health.**

**XI.**  
**EIGHTH GRADE**  
**PHYSICAL EDUCATION OUTCOMES**

The outcome of an effective physical education program is an individual with an optimal fitness level for work and leisure. This person is one who:

- Realizes his/her personal capabilities and optimal potential.
- Has a positive and accurate self-image.
- Has the skills, understanding and motivation to maintain optimal fitness for work and leisure.

Optimal fitness can be attained with the following recommended core curriculum, which provides general outcomes in six areas. Outcomes are listed for the middle/junior high school level.

**COGNITIVE CONCEPTS**

- Explain the concepts of physical education as they relate to making wise lifestyle choices in the areas of: cardiovascular endurance, body composition, strength and endurance, posture, flexibility, weight control, and the beneficial effects of activity.

**PHYSICAL FITNESS**

- Maintain healthy levels of cardiovascular endurance.
- Maintain healthy levels of strength and endurance of selected muscular groups.
- Maintain healthy levels of flexibility about selected joints of the body.

**BODY CONTROL SKILL**

- Demonstrate competence on selected twisting and turning skills.
- Demonstrate competence on selected inverted balance skills,
- Demonstrate competence on selected lifting and lowering skills.

**SPORTS & LEISURE SKILLS**

- Demonstrate competence on selected objectives that enable participation at a recreational level in at least three leisure sports (e.g., swimming, racquet sports, volleyball).

- **Apply appropriate rules, strategies, and etiquette in at least three leisure sports.**

#### EFFECTIVE PERSONAL/SOCIAL SKILLS

- **Demonstrate the appropriate behavior related to personal character traits (e.g., best effort, following directions, responsibility, and self control) in selected activities.**
- **Demonstrate appropriate behavior related to social characteristics (e.g., leadership, cooperation, fair play, winning, and losing) in selected activities.**

X.  
EIGHT GRADE  
LIFE AND PERSONAL  
MANAGEMENT OUTCOMES

Curricular outcomes in Life and Personal Management foster the development of a responsible person who:

- Analyzes priorities and responsibilities in the home, family, and community and successfully manages life roles, including those of nurturer, caregiver and parent.
- Is a responsible producer and consumer within the family structure.
- Makes ethical and successful decisions for individual and family life styles taking into consideration the impact of societal and technological changes, and the physical, social, intellectual, and emotional needs of individuals and family members.
- Values the cultural and ethnic diversity of the community, nation, and world.
- Exercises legal rights and responsibilities as related to the family.

To attain this educational result, the following categories of outcomes are recommended for the eighth grade level:

The Relationship Between Life Roles and Management Skills for Individual and Family Members:

- Recognize personal priorities for home, school, and community.
- Analyze how interdependent relationships influence management skills.

The Relationship Between a Responsible Producer and Consumer Within The Family Structure:

- Explore the relationships between personal work attitudes and responsible performance in the workplace.
- Define the relationship between a responsible producer and consumer.
- Determine how personal priorities and achievement goals affect consumer decisions.
- Demonstrate effective conservation of personal and community resources.

Ethical and Successful Decision-Making for Individual and Family Life Styles:

- **Comprehend the relationship between personal priorities and ethical decisions.**

Societal and Technological Changes that Influence Personal and Family Needs:

- **Analyze societal and technological changes and their effects on personal and family environment.**
- **Identify ways in which individuals and families respond, adapt, and initiate change.**

Safe Environmental Procedures for Personal and Family Well-Being:

- **Recognize personal and governmental roles and responsibilities in the establishment of a safe environment.**

Physical, Social, Intellectual and Emotional Needs of Individuals and Family Members:

- **Comprehend the relationship of life style to needs, wants, and personal priorities.**
- **Explore factors that relate to an individual and/or family member's personal, physical, intellectual and emotional needs.**

The Cultural and Ethnic Variety of Social Contributions of Individuals and Families:

- **Examine family heritage and its relationship to personal priorities.**
- **Identify a variety of cultural and ethnic backgrounds.**
- **Explore ways in which culture and ethnic heritage influence life style.**

**XI.**  
**EIGHT GRADE**  
**CAREER AND EMPLOYABILITY**  
**OUTCOMES**

When career and employability outcomes are effectively integrated into all curricular areas individuals will acquire knowledge and skills to prepare them to move into the world of work or further education. This individual is one who:

- Uses the basic skills of language (reading, writing, listening, speaking), mathematics, science, and social studies in work-related situations.
- Has a career plan of action and the skills/strategies to implement it.
- Is an effective team member.
- Demonstrates honesty, integrity, and respect for others.

The following outcomes are recommended:

Basic Knowledge and Skills Necessary for Successful Employment and/or Further Education:

- Describe the characteristics of effective communication in the workplace.
- Read and interpret occupationally-oriented graphs, charts, and displays.
- Describe the relationships of life, physical, and earth sciences to the workplace.
- Recognize the dignity of all work.

Personal and Employability Skills for Successful Transition from School to Work and/or Advanced Education:

- Investigate career opportunities including those nontraditional for their sex.
- Describe one's personal traits, interests, priorities, strengths, and weaknesses.
- Describe job seeking skills.
- Demonstrate positive leadership behaviors.
- Complete assignments with minimum supervision and initiate projects and extra activities for personal satisfaction.

- **Develop with parent(s) or guardian(s) and school personnel, and educational and career plan of action.**
- **Describe the effects of employee productivity, loyalty, and competence.**
- **Demonstrate grooming, dress and personal hygiene appropriate to the classroom and explain how these skills will translate into workplace behaviors.**
- **Explain the consequences of deviating from school and/or workplace standards for grooming, personal hygiene, and being free from substance abuse.**
- **Translate knowledge of labor market information and training opportunities into a career decision.**
- **Demonstrate honesty, integrity, and respect for others and explain the importance of these characteristics for future school and/or work experiences.**

Awareness of Entrepreneurship:

- **Describe various economic systems and their impact in the world economy.**
- **Analyze the monetary value of occupations as it relates to the world economy.**
- **Investigate business ownership as a career option.**
- **Identify personal characteristics of entrepreneurs.**

Occupational Skills and Knowledge to Obtain and Sustain Employment and/or Advanced Education:

- **Investigate technological applications and their effect on various occupations.**
- **Demonstrate proper use of technical tools, machines, materials, and processes.**
- **Employ safety practices in using technical equipment and materials in the classroom/laboratory.**

Teamwork:

- **Integrate negotiation, cooperation, conflict resolution, and respect for individuality into a team effort to accomplish classroom goals.**
- **Describe one's personal management and leadership styles as they contribute to the team effort in accomplishing school and/or community goals.**

- **Describe how the unique traits, interests, values, strengths, and weaknesses of self and others contribute to the completion of projects.**
- **Apply constructive criticism with team members in order to move toward accomplishment of team goals.**
- **Use a variety of methods to solve problems or complete tasks.**
- **Demonstrate openness and adaptability in a variety of learning situations.**