As math and literacy skills must sometimes be taught outside the purview of the learning expeditions, the Everyday Math and Transition curricula will be used to supplement math instruction, when math content and skills cannot be authentically woven into the curricular theme. The instructional methods used, however, will still embody best practices in teaching, such as a workshop format for lesson planning, inquiry as the driving force, and an emphasis on literacy skills within the content area.

The EL approach to literacy instruction, reading and writing, is rooted in the balanced literacy approach in the primary and elementary grades. The recommendations for this type of program include the following features: a print-rich environment, shared reading, interactive writing, and interactive editing, read-alouds, phonemic awareness exercises, differentiated phonics instruction, explicit teaching of comprehension/thinking strategies across content areas, guided reading, reader's workshop for comprehension and decoding, writer's workshop, anchor texts, vocabulary development, book clubs, and protocols such as readers' theatre. Most often literacy instruction can be woven seamlessly into the scope of the learning expedition (Early literacy in EL classrooms, 2009).

Literacy instruction focuses on the explicit teaching of the seven reading comprehension strategies and the 6 + 1 traits of writing.

The 7 reading comprehension strategies are:

- Schema
- Visualization
- Questioning
- Making inferences
- Determining importance
- Synthesis
- Using fix-up strategies

(Harvey & Goudvis, 2007)

The 6 + 1 writing traits are:

- Ideas and content
- Organization
- Sentence fluency
- Word choice
- Voice
- Conventions
- Performance

(Culham, 2003; Culham, 2005)

Projects and authentic products that culminate learning expeditions are the purview of the teachers in writing the curriculum as it is to be taught in a semester. The skills map reflecting literacy and math standards will emerge as projects are added to the curricular map. This skills map will also include any math and literacy instruction that occurred outside the learning expedition.

Rio Gallinas School of Ecology and the Arts
Curriculum Map – Content

Learning Expedition Summary

Grade Level: Kindergarten

Curricular Cycle: Year-Long Expedition

Title: Farms and Food

Las Vegas and surrounding communities have been home to agrarian and hunter-gatherer societies for many centuries. Using local resources and the knowledge of community members, students will learn about the roles farming, ranching, hunting, fishing and food production have played in shaping the local culture historically up through the present day. Students will work hands on in a service learning environment with local farmers to better understand how food is produced and moves from fields to tables. In the process, classes will learn about nutrition, economic factors in food production, distribution and consumption.

NM State Standards

Science Standards Addressed:

Strand I: Scientific Thinking and Practice

Standard I: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting and validating to think critically.

K-4 Benchmark I: Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.

Grade Performance Standards

1. Use observation and questioning skills in the science inquiry (e.g., What happens when something is pushed or pulled?).

2. Ask and answer questions about surroundings and share findings with classmates.

3. Record observations and data with pictures, numbers, and/or symbols.

K-4 Benchmark II: Use scientific thinking and knowledge and communicate findings.

Grade Performance Standards

1. Communicate observations and answer questions about surroundings.

K-4 Benchmark III: Use mathematical skills and vocabulary to analyze data, understand patterns and relationships, and communicate findings.

Grade Performance Standards

1. Observe and describe the relative sizes and characteristics of objects (e.g., bigger, brighter, louder, smellier).

Strand II: Content of Science

Standard I (Physical Science): Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

K-4 Benchmark I: Recognize that matter has different forms and properties.

Grade Performance Standards

1. Observe that objects are made of different types of materials (e.g., metal, plastic, cloth, wood).

2. Observe that different materials have different properties (e.g., color, odor).

K-4 Benchmark II: Know that energy is needed to get things done and that energy has different forms.

Grade Performance Standards

1. Observe how energy does things (e.g., batteries, the sun, wind, electricity).

K-4 Benchmark III: Identify forces and describe the motion of objects.

Grade Performance Standard

1. Observe things move in different ways (e.g., straight line, vibration, circular).

2. Know that the position and motion of an object (direction or speed) are changed by pushing or pulling it.

Strand II: Content of Science

Standard II (Life Science): Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

K-4 Benchmark I: Know that living things have diverse forms, structures, functions, and habitats.

Grade Performance Standards

1. Identify major structures of common livings organisms (e.g., stems, leaves, and roots of plants; arms, wings, and legs of animals).

2. Observe that differences exist among individual living organisms (e.g., plants, animals) of the same kind.

K-4 Benchmark II: Know that living things have similarities and differences and that living things change over time.

Grade Performance Standards

1. Observe and describe similarities and differences in the appearance and behavior of living organisms (e.g., plants, animals).

2. Observe that living organisms (e.g., plants, animals) closely resemble their parents.

K-4 Benchmark III: Know the parts of the human body and their functions.

Grade Performance Standards

1. Use the senses (e.g., sight, hearing, smell, taste, touch) to observe surroundings, and describe the observations.

2. Identify the parts of the human body (e.g., legs, arms, head, hands) and the functions of these parts.

Standard III (Earth and Space Science): Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

K-4 Benchmark I: Know the structure of the solar system and the objects in the universe.

Grade Performance Standards

1. Observe that there are many objects in the night sky and that some are brighter than others.

2. Describe the location and movements of objects in the sky (e.g., stars, sun, moon).

K-4 Benchmark II: Know the structure and formation of Earth and its atmosphere and the processes that shape them.

Grade Performance Standards

1. Observe that changes in weather occur from day to day and season to season.

2. Observe that the sun warms the land and water and they warm the air.

Strand III: Science and Society

Standard I: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by, individuals and societies.

K-4 Benchmark I: Describe how science influences decisions made by individuals and societies.

Grade Performance Standards

1. Recognize that germs exist and may cause disease.

2. Describe how science helps provide products we use every day (e.g., gasoline for cars; electricity for lights, refrigerators, TVs; gas or electricity for heating, cooking).

Social Studies Standards Addressed:

STRAND : History

Content Standard I: Students are able to identify important people and events in order to analyze significant

patterns, relationships, themes, ideas, beliefs, and turning points in New Mexico, United States, and world history in order to understand the complexity of the human experience.

K-4 Benchmark I-A—New Mexico: Describe how contemporary and historical people and events have influenced New Mexico communities and regions. Grade Performance Standards

K 1. Identify the customs, celebrations, and holidays of various cultures in New Mexico.

K-4 Benchmark I-B—United States: Understand connections among historical events, people, and symbols significant to United States history and cultures.

Grade Performance Standards

K 1. Demonstrate an awareness of community leaders.

K-4 Benchmark I-C—World: Students will identify and describe similar historical characteristics of the United States and its neighboring countries.

Grade Performance Standards

K 1. Identify the local, state, and national symbols (e.g., flag, bird, song).

K-4 Benchmark I-D—Skills: Understand time passage and chronology. **K** 1. Understand the concept of past and present.

STRAND : Geography

Content Standard II: Students understand how physical, natural, and cultural processes influence where people live, the ways

in which people live, and how societies interact with one another and their environments.

K-4 Benchmark II-A: Understand the concept of location by using and constructing maps, globes, and other geographic tools to identify and derive information about people, places, and environments.

Grade Performance Standards

K 1. Define relative location of items in the physical environment in terms of over, under, near, far, up, and down.

2. Define personal direction of front, back, left, and right.

K-4 Benchmark II-B: Distinguish between natural and human characteristics of places and use this knowledge to define regions, their relationships with other regions, and patterns of change.

Grade Performance Standards

K 1. Identify natural characteristics of places (e.g., climate, topography).

K-4 Benchmark II-C: Be familiar with aspects of human behavior and man-made and natural environments in order to recognize their impact on the past and present.

Grade Performance Standards

K 1. Identify family customs and traditions and explain their importance. 2. Describe the natural characteristics of places (e.g., landforms, bodies of water, natural resources, and weather).

K-4 Benchmark II-D: Understand how physical processes shape the Earth's surface patterns and biosystems.

Grade Performance Standards

K 1. Describe the Earth's physical characteristics

K-4 Benchmark II-E: Describe how economic, political, cultural, and social processes interact to shape patterns of human populations, and their interdependence, cooperation, and conflict.

Grade Performance Standards

K 1. Identify classroom population.

K-4 Benchmark II-F: Describe how natural and man-made changes affect the meaning, use, distribution, and value of resources.

Grade Performance Standards

K 1. Identify natural resources.

Strand: Civics and Government

Content Standard III: Students understand the ideals, rights, and responsibilities of citizenship and understand

the content and history of the founding documents of the United States with particular emphasis on the United

States and New Mexico constitutions and how governments function at local, state, tribal, and national levels.

K-4 Benchmark III-A: Know the fundamental purposes, concepts, structures, and functions of local, state, tribal, and national governments.

Grade Performance Standards

K 1. Identify authority figures and describe their roles (e.g., parents, teachers, principal, superintendent, police, public officials).

K-4 Benchmark III-B: Identify and describe the symbols, icons, songs, traditions, and leaders of local, state, tribal, and national levels that exemplify ideals and provide continuity and a sense of community across time.

Grade Performance Standards

K 1. Recognize and name symbols and activities of the United States, New Mexico, and tribes, to include:

a. United States symbols to include the flag, bald eagle, monuments

b. New Mexico symbols to include the flag, Smokey Bear, State Bird, chili

c. tribal symbols and activities to include Feast Days, pottery, arts, storytelling.

2. Recognize patriotic activities including The Pledge of Allegiance, The Star Spangled Banner, salute to the New Mexico flag, and New Mexico state songs.

K-4 Benchmark III-C: Become familiar with the basic purposes of government in New Mexico and the United States. K 1. Describe and provide examples of fairness.

K-4 Benchmark III- D: Understand rights and responsibilities of "good citizenship" as members of a family, school and community.

Grade Performance Standards

K 1. Describe what is meant by citizenship.

2. Explain what is meant by "good citizenship," to include:

a. taking turns and sharing

b. taking responsibility for own actions, assignments, and personal belongings within the classroom and respecting the property of others.

Strand: Economics

Content Standard IV: Students understand basic economic principles and use economic reasoning skills to analyze the impact of economic systems (including the market economy) on individuals, families, businesses, communities, and governments.

K-4 Benchmark IV-A: Understand that individuals, households, businesses, governments, and societies make decisions that affect the distribution of resources and that these decisions are influenced by incentives (both economic and intrinsic).

Grade Performance Standards

K 1. Understand that basic human needs are met in many ways. make decisions about goods and services.

Grade Performance Standards

K 1. Understand the concept of product (something produced by human, mechanical, or natural process).

2. Understand the importance of jobs.

K-4 Benchmark IV-C: Understand the patterns and results of trade and exchange among individuals, households, businesses, governments, and societies, and their interdependent qualities.

Grade Performance Standards

K 1. Describe trade (e.g., buying and selling, bartering, simple exchange).

Learning Expedition Summary

Grade Level:
1st

2nd Grade

Curricular Cycle: Year 1, 1st Semester

Title: Home

The communities of the Las Vegas area are among some of the oldest settlements in the United States, pre-dating the Declaration of Independence. Students will study the deep history of the area and how it relates to the concept of a home in various contexts, including literally and culturally. Through interactions with the local environment and cultural resources classes will also examine the social and physical components that form the concept of home including language, geography, climate, political systems and local economies.

NM State Standards

Science Standards Addressed:

Strand I: Scientific Thinking and Practice

Standard I: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting and validating to think critically.

K-4 Benchmark I: Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.1. Make observations, develop simple questions, and make comparisons of familiar situations (e.g., What does the seed look like when it starts to grow?).

2. Describe relationships between objects (e.g., above, next to, below) and predict the results of changing the relationships (e.g., When that block moves, what will happen to the one next to it?).

1. Conduct simple investigations (e.g. measure the sizes of plants of the same kind that are grown in sunlight and in shade).

2. Use tools to provide information not directly available through only the senses (e.g., magnifiers, rulers, thermometers).

3. Make predictions based on observed patterns as opposed to random guessing.

4. Follow simple instructions for scientific investigation.

K-4 Benchmark II: Use scientific thinking and knowledge and communicate findings. 1. Know that simple investigations do not always turn out as planned.

1. Understand that in doing science it is often helpful to work with a team and share findings.

2. Make accurate observations and communicate findings about investigations.

K-4 Benchmark III: Use mathematical skills and vocabulary to analyze data, understand patterns and relationships, and communicate findings.1. Use numbers and mathematical language (e.g., "addition" instead of "add to," "subtraction" instead of "take away") to describe phenomena.

1. Record observations on simple charts or diagrams.

2. Measure length, weight, and temperature with appropriate tools and express those measurements in accurate mathematical language.

Strand II: Content of Science

Standard II (Life Science): Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

K-4 Benchmark I: Know that living things have diverse forms, structures, functions, and habitats.**1** 1. Know that living organisms (e.g., plants, animals) have needs (e.g., water, air, food, sunlight).

2. Know that living organisms (e.g., plants, animals) inhabit various environments and have various external features to help them satisfy their needs (e.g., leaves, legs, claws).

3. Describe the differences and similarities among living organisms (e.g., plants, animals).

4. Observe that living organisms (e.g., plants, animals) have predictable but varied life cycles.

2 1. Observe that diversity exists among individuals within a population.

2. Observe and describe various shapes of fungi.

3. Know that bacteria and viruses are germs.

K-4 Benchmark II: Know that living things have similarities and differences and that living things change over time.**1** 1. Identify differences between living and nonliving things.

2. Recognize the differences between mature and immature plants and animals (e.g., trees/seedlings, dogs/puppies, cats/kittens).

2 1. Explain that stages of the life cycle are different for different animals (e.g., mouse, cat, horse, butterfly, frog).

2. Observe that many characteristics of the offspring of living organisms (e.g., plants or animals) are inherited from their parents.

3. Observe how the environment influences some characteristics of living things (e.g., amount of sunlight required for plant growth).

Strand III: Science and Society

Standard I: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by, individuals and societies.

K-4 Benchmark I: Describe how science influences decisions made by individuals and societies.**1** 1. Know that germs can be transmitted by touching, breathing, and coughing, and that washing hands helps prevent the spread of germs.

2. Describe how science has assisted in creating tools (e.g., plows, knives, telephones, cell phones, computers) to make life easier and more efficient.

3. Describe how tools and machines can be helpful, harmful, or both (e.g., bicycles, cars, scissors, stoves).

4. Know that men and women of all ethnic and social backgrounds practice science and technology.

2 1. Describe ways to prevent the spread of germs (e.g., soap, bleach, cooking).

2. Know that science has ways to help living things avoid sickness or recover from sickness (e.g., vaccinations, medicine) and adult supervision is needed to administer them.

3. Know that some materials are better than others for making particular things (e.g., paper, cardboard, plastic, metal, fiberglass, wood).

4. Understand that everybody can do science, invent things, and formulate ideas.

5. Know that science has discovered many things about objects, events, and nature and that there are many more questions to be answered.

Social Studies Standards Addressed:

STRAND : History

Content Standard I: Students are able to identify important people and events in order to analyze significant patterns, relationships, themes, ideas, beliefs, and turning points in New Mexico, United States, and world history in order to understand the complexity of the human experience.

K-4 Benchmark I-A—New Mexico: Describe how contemporary and historical people and events have influenced New Mexico communities and regions. 1 1. Identify common attributes of people living in New Mexico today.

2 1. Describe how historical people, groups, and events have influenced the local community.

K-4 Benchmark I-B—United States: Understand connections among historical events, people, and symbols significant to United States history and cultures. K 1. Demonstrate an awareness of community leaders.

1 1. Identify the significance of United States historical events and symbols (e.g., Martin Luther King, Jr. Day, Memorial Day, Independence Day, Labor

Day, Veterans Day, United States flag, bald eagle).

2. Identify and recognize major political and social figures in the United States.

2 1. Describe the cultural diversity of individuals and groups and their contributions to United States history (e.g., George Washington, Ben Franklin,

César Chávez, Rosa Parks, National Association for Advancement of Colored People [NAACP], tribal leaders, American Indian Movement [AIM]).

STRAND : Geography

Content Standard II: Students understand how physical, natural, and cultural processes influence where people live, the ways in which people live, and how societies interact with one another and their environments.

K-4 Benchmark II-A: Understand the concept of location by using and constructing maps, globes, and other geographic tools to identify and derive information about people, places, and environments. 1 1. Understand maps and globes as representations of places and phenomena.

2. Identify and use the four cardinal directions to locate places in community, state, and tribal districts.

3. Create, use, and describe simple maps to identify locations within familiar places (e.g., classroom, school, community, state).

2 1. Use a variety of maps to locate specific places and regions.

2. Identify major landforms, bodies of water, and other places of significance in selected countries, continents, and oceans.

K-4 Benchmark II-C: Be familiar with aspects of human behavior and man-made and natural environments in order to recognize their impact on the past and present. 1 1. Identify examples of and uses for natural resources in the community, state, and nation.

2. Describe the human characteristics of places such as housing types and professions.

2 1. Identify ways in which people depend on natural and man-made environments including natural resources to meet basic needs.

K-4 Benchmark II-D: Understand how physical processes shape the Earth's surface patterns and biosystems. 1 1. Describe the Earth-Sun relationship and how it affects living conditions on Earth.

2 1. Describe the physical processes that affect the Earth's features (e.g., weather, erosion).

2. Identify characteristics of physical systems (e.g., water cycle)

K-4 Benchmark II-F: Describe how natural and man-made changes affect the meaning, use, distribution, and value of resources. 1 1. Describe the role of resources in daily life. 2. Describe ways that humans depend upon, adapt to, and affect the physical environment.

2 1. Describe ways that people and groups can conserve and replenish natural resources.

Strand: Civics and Government

Content Standard III: Students understand the ideals, rights, and responsibilities of citizenship and understand the content and history of the founding documents of the United States with particular emphasis on the United States and New Mexico constitutions and how governments function at local, state, tribal, and national levels. 1 1. Understand the purpose of rules and identify examples of rules and the consequences of breaking them.

2. Describe different groups and rules that apply to them (e.g., families, classrooms, communities).

2 1. Understand the purposes of government.

2. Describe and compare class rules made by direct democracy (entire class votes on the rules) and by representative democracy (class elects a smaller group to make the rules).

K-4 Benchmark III-B: Identify and describe the symbols, icons, songs, traditions, and leaders of local, state, tribal, and national levels that exemplify ideals and provide continuity and a sense of community across time. 1 1. Identify the President of the United States and the Governor of New Mexico.

2. Describe how local, state, tribal and national leaders exemplify the ideals of the communities they represent.

2 1. Identify local governing officials and explain how their roles reflect their community

K-4 Benchmark III-C: Become familiar with the basic purposes of government in New Mexico and the United States. 1 1. Describe different ways to determine a decision (e.g., majority rule, consensus, authoritarian [parent, teacher, principal]).

2 1. Describe the concept of "public good" and identify local examples of systems that support the "public good."

K-4 Benchmark III- D: Understand rights and responsibilities of "good citizenship" as members of a family, school and community. 1 1. Identify examples of honesty, courage, fairness, loyalty, patriotism, and other character traits seen in American history.

2. Explain and apply "good citizenship" traits within the school and community using the elements of fair play, good sportsmanship, the idea of treating others the way you want to be treated, and being trustworthy.

2 1. Understand characteristics of "good citizenship" as exemplified by historic and ordinary people.

2. Explain the responsibilities of being a member of various groups (e.g. family, school, community).

Strand: Economics

Content Standard IV: Students understand basic economic principles and use economic reasoning skills to analyze the impact of economic systems (including the market economy) on individuals, families, businesses, communities, and governments. 1 1. Understand how resources are limited and varied in meeting human needs.

2. Define and differentiate between needs and wants.

2 1. Identify economic decisions made by individuals and households and explain how resources are distributed.

K-4 Benchmark IV-B: Understand that economic systems impact the way individuals, households, businesses, governments, and societies make decisions about goods and services. 1 1. Understand the concept of goods and services.

2. Understand the condition of not being able to have all of the goods and services one wants.

3. Understand the value of work.

2 1. Understand the roles of producers and consumers in the production of goods and services.

2. Explain the role of the worker in the local economy.

K-4 Benchmark IV-C: Understand the patterns and results of trade and exchange among individuals, households, businesses, governments, and societies, and their interdependent qualities. 1 1. Define the simplest form of exchange (the barter system being the direct trading of goods and services between people).

2 1. Understand that money is the generally accepted medium of exchange in most societies, and that different countries use different currencies.

Learning Expedition Summary

Grade Level: 1st/2nd Grade

Curricular Cycle: Year 1, 2nd Semester

Title: Myths

In Northern New Mexico, myths like the tale of La Llorona help to communicate cultural values, ethics and traditions through generations. Students will begin by dissecting local myths with the help of community members – how they came in to existence, changed over years and impacted culture. Drawing on this foundation, classes will expand to examine, compare and contrast other regional, national and global myths and how they shape rules, consequences and decision-making on levels ranging from the familial to the political. The roles of language, religion, spirituality, the land, symbolism and storytelling in relation to myths will also be studied.

NM Standards

Science Standards Addressed:

Strand I: Scientific Thinking and Practice

Standard I: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting and validating to think critically.

K-4 Benchmark I: Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.1. Make observations, develop simple questions, and make comparisons of familiar situations (e.g., What does the seed look like when it starts to grow?).

2. Describe relationships between objects (e.g., above, next to, below) and predict the results of changing the relationships (e.g., When that block moves, what will happen to the one next to it?).

1. Conduct simple investigations (e.g. measure the sizes of plants of the same kind that are grown in sunlight and in shade).

2. Use tools to provide information not directly available through only the senses (e.g., magnifiers, rulers, thermometers).

3. Make predictions based on observed patterns as opposed to random guessing.

4. Follow simple instructions for scientific investigation.

K-4 Benchmark II: Use scientific thinking and knowledge and communicate findings. 1. Know that simple investigations do not always turn out as planned.

1. Understand that in doing science it is often helpful to work with a team and share findings.

2. Make accurate observations and communicate findings about investigations.

K-4 Benchmark III: Use mathematical skills and vocabulary to analyze data, understand patterns and relationships, and communicate findings.1. Use numbers and mathematical language (e.g., "addition" instead of "add to," "subtraction" instead of "take away") to describe phenomena.

1. Record observations on simple charts or diagrams.

2. Measure length, weight, and temperature with appropriate tools and express those measurements in accurate mathematical language.

Strand III: Science and Society

Standard I: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by, individuals and societies.

K-4 Benchmark I: Describe how science influences decisions made by individuals and societies.1 1. Know that germs can be transmitted by touching, breathing, and coughing, and that washing hands helps prevent the spread of germs.

2. Describe how science has assisted in creating tools (e.g., plows, knives, telephones, cell phones, computers) to make life easier and more efficient.

3. Describe how tools and machines can be helpful, harmful, or both (e.g., bicycles, cars, scissors, stoves).

4. Know that men and women of all ethnic and social backgrounds practice science and technology.

2 1. Describe ways to prevent the spread of germs (e.g., soap, bleach, cooking).

2. Know that science has ways to help living things avoid sickness or recover from sickness (e.g., vaccinations, medicine) and adult supervision is needed to administer them.

3. Know that some materials are better than others for making particular things (e.g., paper, cardboard, plastic, metal, fiberglass, wood).

4. Understand that everybody can do science, invent things, and formulate ideas.

5. Know that science has discovered many things about objects, events, and nature and that there are many more questions to be answered.

Social Studies Standards Addressed:

STRAND : History

Content Standard I: Students are able to identify important people and events in order to analyze significant patterns, relationships, themes, ideas, beliefs, and turning points in New Mexico, United States, and world history in order to understand the complexity of the human experience.

K-4 Benchmark I-C—World: Students will identify and describe similar historical characteristics of the United States and its neighboring countries. 1 1. Identify and compare celebrations and events from the United States, Mexico, and Canada.

2 1. Describe and compare similarities of the history of peoples in North America through literature (e.g., story-telling, fables, folktales, fairy tales).

K-4 Benchmark I-D—Skills: Understand time passage and chronology. 1 1. Demonstrate the use of timelines in order to show events in relation to one another.

2 1. Correctly sequence historical events.

STRAND : Geography

Content Standard II: Students understand how physical, natural, and cultural processes influence where people live, the ways in which people live, and how societies interact with one another and their environments.

K-4 Benchmark II-B: Distinguish between natural and human characteristics of places and use this knowledge to define regions, their relationships with other regions, and patterns of change. 1 1. Identify and classify characteristics of places as human or natural.

2. Identify how traditional tribal and local folklore attempt to explain weather, characteristics of places, and human origins and relationships.

2 1. Describe how climate, natural resources, and natural hazards affect activities and settlement patterns.

2. Explain how people depend on the environment and its resources to satisfy their basic needs.

K-4 Benchmark II-E: Describe how economic, political, cultural, and social processes interact to shape patterns of human populations, and their interdependence, cooperation, and conflict. 1 1. Identify characteristics of culture (e.g., language, customs, religion, shelter).

2 1. Describe how characteristics of culture affect behaviors and lifestyles.

Strand: Civics and Government

Content Standard III: Students understand the ideals, rights, and responsibilities of citizenship and understand the content and history of the founding documents of the United States with particular emphasis on the United States and New Mexico constitutions and how governments function at local, state, tribal, and national levels.

Learning Expedition Summary

Grade Level: 1st/2nd Grade

Curricular Cycle: Year 2, 1st Semester

Title: Human Body

Students explore a range of related topics including human physiology, nutrition, basic medicine and fitness through the integration of science, math, physical education, and art. Classes conduct basic experiments using scientific methods including observations, human body measurement and data collection, comparison of the human body with that of other animals, drawing, sculpture, and exercise to develop a new appreciation and respect for both the complexity of the human anatomy and the importance of nutrition and fitness.

NM State Standards

Science Standards Addressed:

Strand I: Scientific Thinking and Practice

Standard I: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting and validating to think critically.

K-4 Benchmark I: Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.1. Make observations, develop simple questions, and make comparisons of familiar situations (e.g., What does the seed look like when it starts to grow?).

2. Describe relationships between objects (e.g., above, next to, below) and predict the results of changing the relationships (e.g., When that block moves, what will happen to the one next to it?).

1. Conduct simple investigations (e.g. measure the sizes of plants of the same kind that are grown in sunlight and in shade).

2. Use tools to provide information not directly available through only the senses (e.g., magnifiers, rulers, thermometers).

3. Make predictions based on observed patterns as opposed to random guessing.

4. Follow simple instructions for scientific investigation.

K-4 Benchmark II: Use scientific thinking and knowledge and communicate findings. 1. Know that simple investigations do not always turn out as planned.

1. Understand that in doing science it is often helpful to work with a team and share findings.

2. Make accurate observations and communicate findings about investigations.

K-4 Benchmark III: Use mathematical skills and vocabulary to analyze data, understand patterns and relationships, and communicate findings.1. Use numbers and mathematical language (e.g., "addition" instead of "add to," "subtraction" instead of "take away") to describe phenomena.

1. Record observations on simple charts or diagrams.

2. Measure length, weight, and temperature with appropriate tools and express those measurements in accurate mathematical language.

Strand II: Content of Science

Standard II (Life Science): Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

K-4 Benchmark III: Know the parts of the human body and their functions.**1** 1. Describe simple body functions (e.g., breathing, eating).

2. Describe the basic food requirements for humans.

3. Describe how some parts of human bodies differ from similar parts of other animals (e.g., hands and feet/paws; ears).

2 1. Identify a variety of human organs (e.g., lungs, heart, stomach, brain).

2. Know that various nutrients are required for specific parts and functions of the body (e.g., milk for bones and teeth, protein for muscles, sugar for energy).

3. Identify the functions of human systems (e.g., respiratory, circulatory, digestive).

Strand III: Science and Society

Standard I: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by, individuals and societies.

K-4 Benchmark I: Describe how science influences decisions made by individuals and societies.**1** 1. Know that germs can be transmitted by touching, breathing, and coughing, and that washing hands helps prevent the spread of germs.

2. Describe how science has assisted in creating tools (e.g., plows, knives, telephones, cell phones, computers) to make life easier and more efficient.

3. Describe how tools and machines can be helpful, harmful, or both (e.g., bicycles, cars, scissors, stoves).

4. Know that men and women of all ethnic and social backgrounds practice science and technology.

2 1. Describe ways to prevent the spread of germs (e.g., soap, bleach, cooking).

2. Know that science has ways to help living things avoid sickness or recover from sickness (e.g., vaccinations, medicine) and adult supervision is needed to administer them.

3. Know that some materials are better than others for making particular things (e.g., paper, cardboard, plastic, metal, fiberglass, wood).

4. Understand that everybody can do science, invent things, and formulate ideas.

5. Know that science has discovered many things about objects, events, and nature and that there are many more questions to be answered.

Learning Expedition Summary

Grade Level: 1st/2nd Grade

Curricular Cycle: Year 2, 2nd Semester

Title:
Solar System

Students will study the structure of the solar system, including the planets, sun, earth, moon and their relationships to each other. Place-based projects will integrate local and regional resources such as astrologically-aligned ruins like those at Chaco Canyon and other sites. The effects of solar system components on the physical properties of the earth such as the tides and seasons.

NM State Standards

Science Standards Addressed:

Strand I: Scientific Thinking and Practice

Standard I: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting and validating to think critically.

K-4 Benchmark I: Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.1. Make observations, develop simple questions, and make comparisons of familiar situations (e.g., What does the seed look like when it starts to grow?).

2. Describe relationships between objects (e.g., above, next to, below) and predict the results of changing the relationships (e.g., When that block moves, what will happen to the one next to it?).

1. Conduct simple investigations (e.g. measure the sizes of plants of the same kind that are grown in sunlight and in shade).

2. Use tools to provide information not directly available through only the senses (e.g., magnifiers, rulers, thermometers).

3. Make predictions based on observed patterns as opposed to random guessing.

4. Follow simple instructions for scientific investigation.

K-4 Benchmark II: Use scientific thinking and knowledge and communicate findings. 1. Know that simple investigations do not always turn out as planned.

1. Understand that in doing science it is often helpful to work with a team and share findings.

2. Make accurate observations and communicate findings about investigations.

K-4 Benchmark III: Use mathematical skills and vocabulary to analyze data, understand patterns and relationships, and communicate findings.1. Use numbers and mathematical language (e.g., "addition" instead of "add to," "subtraction" instead of "take away") to describe phenomena.

1. Record observations on simple charts or diagrams.

2. Measure length, weight, and temperature with appropriate tools and express those measurements in accurate mathematical language.

Strand II: Content of Science

Standard I (Physical Science): Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

K-4 Benchmark I: Recognize that matter has different forms and properties.**1** 1. Observe that the three states of matter (i.e., solids, liquids, and gases) have different properties (e.g., water can be liquid, ice, or steam).

2. Describe simple properties of matter (e.g., hardness, flexibility, transparency).

2 1. Observe that properties of substances can change when they are mixed, cooled, or heated (e.g., salt dissolves in water, ice melts).

2. Describe the changes that occur when substances are heated or cooled and change from one state of matter to another (i.e., solid, liquid, and gas).

K-4 Benchmark II: Know that energy is needed to get things done and that energy has different forms.**1** 1. Observe and describe how energy produces changes (e.g., heat melts ice, gas makes cars go uphill, electricity makes TV work).

2 1. Describe how heat can be produced (e.g., burning, rubbing, mixing some substances).

2. Know that heat moves more rapidly in thermal conductors (e.g., metal pan) than in insulators (e.g., plastic handle).

3. Describe the usefulness of some forms of energy (e.g., electricity, sunlight, wind, sound) and how energy (e.g., heat, light,) can affect common objects (e.g., sunlight warms dark objects, heat melts candles).

4. Observe that sound is made by vibrating objects and describe it by its pitch and loudness.

5. Recognize that moving objects carry energy (kinetic energy).

K-4 Benchmark III: Identify forces and describe the motion of objects.**1** 1. Describe ways to make things move, what causes them to stop, and what causes a change of speed, or change of direction.

2. Observe that gravity makes things fall to the ground unless something holds them up.

2 1. Describe how the strength of a push or pull affects the change in an object's motion (e.g., how a big or small push affects how high a swing rises).

PART C–THE RENEWAL CHARTER

Learning Expedition Summary

Grade Level: 3rd/4th Grade

Curricular Cycle: Year 1, 1st Semester

Title: Acequias

Students will trace the historical development of the acequia system, and the roles it has played in local communities, including as a lifeline for agriculture and as a source of socialization and political organization. Classes will investigate the physical properties of acequias, from the engineering that allows them to function efficiently to the community involvement required to maintain a functioning system, providing ample opportunity for service learning projects. Classes will discuss the importance of water as a non-renewable resource, water quality, and the impacts of climate change on water allocation. The curriculum will also detail the traditional use of acequias and water on local arts and culture.

NM State Standards

Science Standards Addressed:

Strand I: Scientific Thinking and Practice

Standard I: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting and validating to think critically.

K-4 Benchmark I: Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.**3** 1. Make new observations when discrepancies exist between two descriptions of the same object or phenomenon to

improve accuracy.

2. Recognize the difference between data and opinion.

3. Use numerical data in describing and comparing objects, events, and measurements.

4. Collect data in an investigation and analyze those data.

5. Know that the same scientific laws govern investigations in different times and places (e.g., gravity, growing plants).**4** 1. Use instruments to perform investigations (e.g., timers, balances) and communicate findings.

2. Differentiate observation from interpretation and understand that a scientific explanation comes in part from what is observed and in part from how observation is interpreted.

3. Conduct multiple trials to test a prediction, draw logical conclusions, and construct and interpret graphs from measurements.

4. Collect data in an investigation using multiple techniques, including control groups, and analyze those data to determine what other investigations could be conducted to validate findings.

K-4 Benchmark II: Use scientific thinking and knowledge and communicate findings.**3** 1. Use a variety of methods to display data and present findings.

2. Understand that predictions are based on observations, measurements, and cause-and-effect relationships.

4 1. Communicate ideas and present findings about scientific investigations that are open to critique from others.

2. Describe how scientific investigations may differ from one another (e.g., observations of nature, measurements of things changing over time).

3. Understand how data are used to explain how simple system functions (e.g., a thermometer to measure heat loss as water cools).

K-4 Benchmark III: Use mathematical skills and vocabulary to analyze data, understand patterns and relationships, and communicate

findings.**3** 1. Use numerical data in describing and comparing objects, events, and measurements.

2. Pose a question of interest and present observations and measurements with accuracy.

2. Observe that electrically charged materials and magnets attract and repel each other, and observe their effects on other kinds of materials.

Standard III (Earth and Space Science): Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

K-4 Benchmark I: Know the structure of the solar system and the objects in the universe.**1** 1. Observe the changes that occur in the sky as day changes into night and night into day.

2. Describe the basic patterns of objects as they move through the sky:

• sun appears in the day

• moon appears at night but can sometimes be seen during the day

• sun and moon appear to move across the sky

• moon appears to change shape over the course of a month.

3. Recognize that the sun, moon, and stars all appear to move slowly across the sky.

2 1. Observe that the phase of the moon appears a little different every day but looks the same again after about four weeks.

2. Observe that some objects in the night sky are brighter than others.

3. Know that the sun is a star.

K-4 Benchmark II: Know the structure and formation of Earth and its atmosphere and the processes that shape them.**1** 1. Know that simple tools can be used to measure weather conditions (e.g., thermometer, wind sock, hand held anemometer, rain gauge) and that measurements can be recorded from day to day and across seasons.

2. Know that there are different climates (e.g., desert, arctic, rainforest).

2 1. Know that rocks have different shapes and sizes (e.g., boulders, pebbles, sand) and that smaller rocks result from the breaking and weathering of larger rocks.

2. Understand that rocks are made of materials with distinct properties.

3. Know that soil is made up of weathered rock and organic materials, and that soils differ in their capacity to support the growth of plants.

4. Recognize the characteristics of the seasons.

Strand III: Science and Society

Standard I: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by, individuals and societies.

K-4 Benchmark I: Describe how science influences decisions made by individuals and societies.**1** 1. Know that germs can be transmitted by touching, breathing, and coughing, and that washing hands helps prevent the spread of germs.

2. Describe how science has assisted in creating tools (e.g., plows, knives, telephones, cell phones, computers) to make life easier and more efficient.

3. Describe how tools and machines can be helpful, harmful, or both (e.g., bicycles, cars, scissors, stoves).

4. Know that men and women of all ethnic and social backgrounds practice science and technology.

2 1. Describe ways to prevent the spread of germs (e.g., soap, bleach, cooking).

2. Know that science has ways to help living things avoid sickness or recover from sickness (e.g., vaccinations, medicine) and adult supervision is needed to administer them.

3. Know that some materials are better than others for making particular things (e.g., paper, cardboard, plastic, metal, fiberglass, wood).

4. Understand that everybody can do science, invent things, and formulate ideas.

5. Know that science has discovered many things about objects, events, and nature and that there are many more questions to be answered.

3. Use various methods to display data and present findings and communicate results in accurate mathematical languages.

4 1. Conduct multiple trials using simple mathematical techniques to make and test predications.

2. Use mathematical equations to formulate and justify predictions based on cause-and-effect relationships.

3. Identify simple mathematical relationships in a scientific investigation (e.g., the relationship of the density of materials that will or will not float in water to the density of water).

Strand II: Content of Science

Standard III (Earth and Space Science): Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

K-4 Benchmark II: Know the structure and formation of Earth and its atmosphere and the processes that shape them.**3** 1. Know that Earth's features are constantly changed by a combination of slow and rapid processes that include the action of volcanoes, earthquakes, mountain building, biological changes, erosion, and weathering.

2. Know that fossils are evidence of earlier life and provide data about plants and animals that lived long ago.

3. Know that air takes up space, is colorless, tasteless, and odorless, and exerts a force.

4. Identify how water exists in the air in different forms (e.g., in clouds and fog as tiny droplets; in rain, snow, and hail) and changes from one form to another through various processes (e.g., freezing/condensation, precipitation, evaporation).

4 1. Know that the properties of rocks and minerals reflect the processes that shaped them (i.e., igneous, metamorphic, and sedimentary rocks).

2. Describe how weather patterns generally move from west to east in the United States.

3. Know that local weather information describes patterns of change over a period of time (e.g., temperature, precipitation symbols, cloud conditions, wind speed/direction).

Strand III: Science and Society

Standard I: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by, individuals and societies.

K-4 Benchmark I: Describe how science influences decisions made by individuals and societies.**3** 1. Describe how food packaging (e.g., airtight containers, date) and preparation (heating, cooling, salting, smoking, drying) extend food life and the safety of foods (e.g., elimination of bacteria).

2. Know that science produces information for the manufacture and recycling of materials (e.g., materials that can be recycled [aluminum, paper, plastic] and others that cannot [gasoline]).

3. Know that naturally occurring materials (e.g., wood, clay, cotton, animal skins) may be processed or combined with other materials to change their properties.

4. Know that using poisons can reduce the damage to crops caused by rodents, weeds, and insects, but their use may harm other plants, animals, or the environment.**4** 1. Know that science has identified substances called pollutants that get into the environment and can be harmful to living things.

2. Know that, through science and technology, a wide variety of materials not appearing in nature have become available (e.g., steel, plastic, nylon, fiber optics).

3. Know that science has created ways to store and retrieve information (e.g., paper and ink, printing press, computers,

CD ROMs) but that these are not perfect (e.g., faulty programming, defective hardware).

4. Know that both men and women of all races and social backgrounds choose science as a career.

Social Studies Standards Addressed:

Strand: Civics and Government

Content Standard III: Students understand the ideals, rights, and responsibilities of citizenship and understand the content and history of the founding documents of the United States with particular

emphasis on the United States and New Mexico constitutions and how governments function at local, state, tribal, and national levels. K-4 Benchmark III-A: Know the fundamental purposes, concepts, structures, and functions of local, state, tribal, and national governments. 3 1. Explain the basic structure and functions of local governments.

2. Describe and give examples of "public good."

3. Explain how New Mexico helps to form a nation with other states.

4 1. Explain how the organization of New Mexico's government changed during its early history.

2. Compare how the State of New Mexico serves national interests and the interests of New Mexicans.

3. Explain the difference between making laws, carrying out the laws, and determining if the laws have been broken, and identify the government bodies

that perform these functions at the local, state, tribal, and national levels.

K-4 Benchmark III-B: Identify and describe the symbols, icons, songs, traditions, and leaders of local, state, tribal, and national levels that exemplify ideals and provide continuity and a sense of community across time. 3 1. Explain how symbols, songs, icons, and traditions combine to reflect various cultures over time.

4 1. Describe various cultures and the communities they represent, and explain how they have evolved over time.

K-4 Benchmark III-C: Become familiar with the basic purposes of government in New Mexico and the United States. 3 1. Describe how the majority protects the rights of the minority.

2. Explain how rules/laws are made and compare different processes used by local, state, tribal, and national governments to determine rules/laws.

4 1. Compare and contrast how the various governments have applied rules/laws, majority rule, "public good," and protections of the minority in different periods of New Mexico's history.

K-4 Benchmark III- D: Understand rights and responsibilities of "good citizenship" as members of a family, school and community. 3 1. Explain the significance of participation and cooperation in a classroom and community.

2. Understands the impact of individual and group decisions on communities in a democratic society.

3. Explain the significance and process of voting.

4 1. Explain the difference between rights and responsibilities, why we have rules and laws, and the role of citizenship in promoting them.

2. Examine issues of human rights.

Learning Expedition Summary

Grade Level: 3rd/4th Grade

Curricular Cycle: Year 1, 2nd Semester

Title: Energy

Using local resources, students will participate in expeditions detailing the sources of energy available in the area, ranging from wind and solar to fossil fuels and nuclear power. Classes will continue their examinations through a deconstructive scientific inquiry into the physical properties of energy and matter on a molecular level, then using this knowledge to design and implement models and working experiments in the creation and use of energy as a source of heat, propulsion and other practical uses.

NM State Standards

Science Standards Addressed:

Strand I: Scientific Thinking and Practice

Standard I: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting and validating to think critically.

K-4 Benchmark I: Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.**3** 1. Make new observations when discrepancies exist between two descriptions of the same object or phenomenon to

improve accuracy.

2. Recognize the difference between data and opinion.

3. Use numerical data in describing and comparing objects, events, and measurements.

4. Collect data in an investigation and analyze those data.

5. Know that the same scientific laws govern investigations in different times and places (e.g., gravity, growing plants).**4** 1. Use instruments to perform investigations (e.g., timers, balances) and communicate findings.

2. Differentiate observation from interpretation and understand that a scientific explanation comes in part from what is observed and in part from how observation is interpreted.

3. Conduct multiple trials to test a prediction, draw logical conclusions, and construct and interpret graphs from measurements.

4. Collect data in an investigation using multiple techniques, including control groups, and analyze those data to determine what other investigations could be conducted to validate findings.

K-4 Benchmark II: Use scientific thinking and knowledge and communicate findings.**3** 1. Use a variety of methods to display data and present findings.

2. Understand that predictions are based on observations, measurements, and cause-and-effect relationships.

4 1. Communicate ideas and present findings about scientific investigations that are open to critique from others.

2. Describe how scientific investigations may differ from one another (e.g., observations of nature, measurements of things changing over time).

3. Understand how data are used to explain how simple system functions (e.g., a thermometer to measure heat loss as water cools).

K-4 Benchmark III: Use mathematical skills and vocabulary to analyze data, understand patterns and relationships, and communicate

findings.**3** 1. Use numerical data in describing and comparing objects, events, and measurements.

2. Pose a question of interest and present observations and measurements with accuracy.

3. Use various methods to display data and present findings and communicate results in accurate mathematical languages.

4 1. Conduct multiple trials using simple mathematical techniques to make and test predications.

2. Use mathematical equations to formulate and justify predictions based on cause-and-effect relationships.

3. Identify simple mathematical relationships in a scientific investigation (e.g., the relationship of the density of materials that will or will not float in water to the density of water).

Strand II: Content of Science

Standard I (Physical Science): Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

K-4 Benchmark I: Recognize that matter has different forms and properties.**3** 1. Identify and compare properties of pure substances and mixtures (e.g., sugar, fruit juice).

2. Separate mixtures based on properties (e.g., by size or by substance; rocks and sand, iron filings and sand, salt and sand).

4 1. Know that changes to matter may be chemical or physical and when two or more substances are combined, a new substance may be formed with properties that are different from those of the original substances (e.g., white glue and borax, cornstarch and water, vinegar and baking soda).

2. Know that materials are made up of small particles (atoms and molecules) that are too small to see with the naked eye.

3. Know that the mass of the same amount of material remains constant whether it is together, in parts, or in a different state.

K-4 Benchmark II: Know that energy is needed to get things done and that energy has different forms.**3** 1. Understand that light is a form of energy and can travel through a vacuum.

2. Know that light travels in a straight line until it strikes an object and then it is reflected, refracted, or absorbed.

3. Measure energy and energy changes (e.g., temperature changes).

4. Construct charts or diagrams that relate variables associated with energy changes (e.g., melting of ice over time).

4 1. Identify the characteristics of several different forms of energy and describe how energy can be converted from one form to another (e.g., light to heat, motion to heat, electricity to heat, light, or motion).

2. Recognize that energy can be stored in many ways (e.g., potential energy in gravity or springs, chemical energy in batteries).

3. Describe how some waves move through materials (e.g., water, sound) and how others can move through a vacuum

(e.g., x-ray, television, radio).

4. Demonstrate how electricity flows through a simple circuit (e.g., by constructing one).

K-4 Benchmark III: Identify forces and describe the motion of objects.**3** 1. Recognize that magnets can produce motion by attracting some materials (e.g., steel) and have no effect on others

(e.g., plastics).

2. Describe how magnets have poles (N and S) and that like poles repel each other while unlike poles attract.

3. Observe that some forces produce motion without objects touching (e.g., magnetic force on nails).

4. Describe motion on different time scales (e.g., the slow motion of a plant toward light, the fast motion of a tuning fork).

4 1. Know that energy can be carried from one place to another by waves (e.g., water waves, sound waves), by electric currents, and by moving objects.

2. Describe the motion of an object by measuring its change of position over a period of time.

3. Describe that gravity exerts more force on objects with greater mass (e.g., it takes more force to hold up a heavy object than a lighter one).

4. Describe how some forces act on contact and other forces act at a distance (e.g., a person pushing a rock versus gravity acting on a rock).

Strand III: Science and Society

Standard I: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by, individuals and societies.

K-4 Benchmark I: Describe how science influences decisions made by individuals and societies.**3** 1. Describe how food packaging (e.g., airtight containers, date) and preparation (heating, cooling, salting, smoking, drying) extend food life and the safety of foods (e.g., elimination of bacteria).

2. Know that science produces information for the manufacture and recycling of materials (e.g., materials that can be recycled [aluminum, paper, plastic] and others that cannot [gasoline]).

3. Know that naturally occurring materials (e.g., wood, clay, cotton, animal skins) may be processed or combined with other materials to change their properties.

4. Know that using poisons can reduce the damage to crops caused by rodents, weeds, and insects, but their use may harm other plants, animals, or the environment.**4** 1. Know that science has identified substances called pollutants that get into the environment and can be harmful to living things.

2. Know that, through science and technology, a wide variety of materials not appearing in nature have become available (e.g., steel, plastic, nylon, fiber optics).

3. Know that science has created ways to store and retrieve information (e.g., paper and ink, printing press, computers,

CD ROMs) but that these are not perfect (e.g., faulty programming, defective hardware).

4. Know that both men and women of all races and social backgrounds choose science as a career.

Learning Expedition Summary

Grade Level: 3rd/4th Grade

Curricular Cycle: Year 2, 1st Semester

Title: Migration

Using Northern New Mexico as an example, students will map out original land bases and show how political borders have changed through wars, annexation and other historical events. Classes will investigate the motivations behind migration and the impacts of human movement on social/family relationships, connections to the land, environment and economy. Current immigration issues will also be discussed.

NM State Standards

Science Standards Addressed:

Strand I: Scientific Thinking and Practice

Standard I: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting and validating to think critically.

K-4 Benchmark I: Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.**3** 1. Make new observations when discrepancies exist between two descriptions of the same object or phenomenon to

improve accuracy.

2. Recognize the difference between data and opinion.

3. Use numerical data in describing and comparing objects, events, and measurements.

4. Collect data in an investigation and analyze those data.

5. Know that the same scientific laws govern investigations in different times and places (e.g., gravity, growing plants).**4** 1. Use instruments to perform investigations (e.g., timers, balances) and communicate findings.

2. Differentiate observation from interpretation and understand that a scientific explanation comes in part from what is observed and in part from how observation is interpreted.

3. Conduct multiple trials to test a prediction, draw logical conclusions, and construct and interpret graphs from measurements.

4. Collect data in an investigation using multiple techniques, including control groups, and analyze those data to determine what other investigations could be conducted to validate findings.

K-4 Benchmark II: Use scientific thinking and knowledge and communicate findings.**3** 1. Use a variety of methods to display data and present findings.

2. Understand that predictions are based on observations, measurements, and cause-and-effect relationships.

4 1. Communicate ideas and present findings about scientific investigations that are open to critique from others.

2. Describe how scientific investigations may differ from one another (e.g., observations of nature, measurements of things changing over time).

3. Understand how data are used to explain how simple system functions (e.g., a thermometer to measure heat loss as water cools).

K-4 Benchmark III: Use mathematical skills and vocabulary to analyze data, understand patterns and relationships, and communicate

findings.**3** 1. Use numerical data in describing and comparing objects, events, and measurements.

2. Pose a question of interest and present observations and measurements with accuracy.

3. Use various methods to display data and present findings and communicate results in accurate mathematical languages.

4 1. Conduct multiple trials using simple mathematical techniques to make and test predications.

2. Use mathematical equations to formulate and justify predictions based on cause-and-effect relationships.

3. Identify simple mathematical relationships in a scientific investigation (e.g., the relationship of the density of materials that will or will not float in water to the density of water).

Strand II: Content of Science

Standard II (Life Science): Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

K-4 Benchmark I: Know that living things have diverse forms, structures, functions, and habitats.

3 1. Know that an adaptation in physical structure or behavior can improve an organism's chance for survival (e.g., horned toads, chameleons, cacti, mushrooms).

2. Observe that plants and animals have structures that serve different functions (e.g., shape of animals' teeth).

3. Classify common animals according to their observable characteristics (e.g., body coverings, structure).

4. Classify plants according to their characteristics (e.g., tree leaves, flowers, seeds).

4 1. Explain that different living organisms have distinctive structures and body systems that serve specific functions

(e.g., walking, flying, swimming).

2. Know that humans and other living things have senses to help them detect stimuli, and that sensations (e.g., hunger) and stimuli (e.g., changes in the environment) influence the behavior of organisms.

3. Describe how roots are associated with the intake of water and soil nutrients and green leaves are associated with making food from sunlight (photosynthesis).

4. Describe the components of and relationships among organisms in a food chain (e.g., plants are the primary source of energy for living systems).

5. Describe how all living things are made up of smaller units that are called cells.

K-4 Benchmark II: Know that living things have similarities and differences and that living things change over time.**3** 1. Identify how living things cause changes to the environments in which they live, and that some of these changes are detrimental to the organism and some are beneficial.

2. Know that some kinds of organisms that once lived on Earth have become extinct (e.g., dinosaurs) and that others resemble those that are alive today (e.g., alligators, sharks).

4 1. Know that in any particular environment some kinds of plants and animals survive well, some survive less well, and others cannot survive at all.

2. Know that a change in physical structure or behavior can improve an organism's chance of survival (e.g., a chameleon changes color, a turtle pulls its head into its shell, a plant grows toward the light).

3. Describe how some living organisms have developed characteristics from generation to generation to improve chances of survival (e.g., spines on cacti, long beaks on hummingbirds, good eyesight on hawks).

K-4 Benchmark III: Know the parts of the human body and their functions.**3** 1. Know that bacteria and viruses are germs that affect the human body.

2. Describe the nutrients needed by the human body.

4 1. Know that the human body has many parts that interact to function as systems (e.g., skeletal, muscular) and describe the parts and their specific functions in selected systems (e.g., the nose, lungs, and diaphragm in the respiratory system).

2. Recognize that the human body is organized from cells, to tissues, to organs, to systems, to the organism.

Strand II: Content of Science

Standard III (Earth and Space Science): Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

K-4 Benchmark I: Know the structure of the solar system and the objects in the universe.**3** 1. Describe the objects in the solar system (e.g., sun, Earth and other planets, moon) and their features (e.g., size,

temperature).

2. Describe the relationships among the objects in the solar system (e.g., relative distances, orbital motions).

3. Observe that the pattern of stars stays the same as they appear to move across the sky nightly.

4. Observe that different constellations can be seen in different seasons.

5. Know that telescopes enhance the appearance of some distant objects in the sky (e.g., the moon, planets).

4 1. Understand that the number of stars visible through a telescope is much greater than the number visible to the naked eye.

2. Know that there are various types of telescopes that use different forms of light to observe distant objects in the sky.

3. Know that the pattern of stars (e.g., constellations) stays the same although they appear to move across the sky nightly due to Earth's rotation.

Strand III: Science and Society

Standard I: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by, individuals and societies.

K-4 Benchmark I: Describe how science influences decisions made by individuals and societies.**3** 1. Describe how food packaging (e.g., airtight containers, date) and preparation (heating, cooling, salting, smoking, drying) extend food life and the safety of foods (e.g., elimination of bacteria).

2. Know that science produces information for the manufacture and recycling of materials (e.g., materials that can be recycled [aluminum, paper, plastic] and others that cannot [gasoline]).

3. Know that naturally occurring materials (e.g., wood, clay, cotton, animal skins) may be processed or combined with other materials to change their properties.

4. Know that using poisons can reduce the damage to crops caused by rodents, weeds, and insects, but their use may harm other plants, animals, or the environment.**4** 1. Know that science has identified substances called pollutants that get into the environment and can be harmful to living things.

2. Know that, through science and technology, a wide variety of materials not appearing in nature have become available (e.g., steel, plastic, nylon, fiber optics).

3. Know that science has created ways to store and retrieve information (e.g., paper and ink, printing press, computers,

CD ROMs) but that these are not perfect (e.g., faulty programming, defective hardware).

4. Know that both men and women of all races and social backgrounds choose science as a career.

Social Studies Standards Addressed:

STRAND : History

Content Standard I: Students are able to identify important people and events in order to analyze significant patterns, relationships, themes, ideas, beliefs, and turning points in New Mexico, United States, and world history in order to understand the complexity of the human experience. 3 1. Describe how the lives and contributions of people of New Mexico influenced local communities and regions.

4 1. Identify important issues, events, and individuals from New Mexico pre-history to the present.

2. Describe the role of contemporary figures and how their contributions and perspectives are creating impact in New Mexico.

K-4 Benchmark I-B—United States: Understand connections among historical events, people, and symbols significant to United States history and cultures. 3 1. Describe local events and their connections to state history.

4 1. Describe local events and their connections and relationships to national history.

K-4 Benchmark I-C—World: Students will identify and describe similar historical characteristics of the United States and its neighboring countries. 3 1. Identify and compare components that create a community in the United States and its neighboring countries.

4 1. Explain how historical events, people, and culture influence present day Canada, Mexico, and the United States (e.g., food, art, shelter, language).

K-4 Benchmark I-D—Skills: Understand time passage and chronology. 3 1. Interpret information from multiple resources and contexts to determine chronological relationships.

4 1. Describe and explain how historians and archaeologists provide information about people in different time periods.

STRAND : Geography

Content Standard II: Students understand how physical, natural, and cultural processes influence where people live, the ways in which people live, and how societies interact with one another and their environments. Identify and use the mapping tools of scale, compass rose, grid, symbols and mental mapping to locate and draw places on maps and globes;

4 1. apply geographic tools of title, grid system, legends, symbols, scale and compass rose to construct and interpret maps;

2. translate geographic information into a variety of formats such as graphs, maps, diagrams and charts;

3. draw conclusions and make generalizations from geographic information and inquiry;

K-4 Benchmark II-B: Distinguish between natural and human characteristics of places and use this knowledge to define regions, their relationships with other regions, and patterns of change. 3 1. Describe how human and natural processes can sometimes work together to shape the appearance of places (e.g., post-fire reforestation).

2. Explore examples of environmental and social changes in various regions.

4 1. Identify a region as an area with unifying characteristics (e.g., human, weather, agriculture, industry, natural characteristics).

2. Describe the regions of New Mexico, the United States, and the Western Hemisphere.

3. Identify ways in which different individuals and groups of people view and relate to places and regions.

K-4 Benchmark II-C: Be familiar with aspects of human behavior and man-made and natural environments in order to recognize their impact on the past and present. 3 1. Identify personal behaviors that can affect community planning.

2. Identify ways in which people have modified their environments (e.g., building roads, clearing land for development, mining, and constructing towns and cities).

3. Describe the consequences of human modification of the natural environment (e.g., use of irrigation to improve crop yields, highways).

4 1. Explain how geographic factors have influenced people, including settlement patterns and population distribution in New Mexico, past and present.

2. Describe how environments, both natural and man-made, have influenced people and events over time, and describe how places change.

3. Understand how visual data (e.g., maps, graphs, diagrams, tables, charts) organizes and presents geographic information.

K-4 Benchmark II-D: Understand how physical processes shape the Earth's surface patterns and biosystems. 3 1. Identify the components of the Earth's biosystems and their makeup (e.g., air, land, water, plants, and animals).

2. Describe how physical processes shape features on the Earth's surface.

4 1. Explain how the Earth-Sun relationships produce day and night, seasons, major climatic variations, and cause the need for time zones.

2. Describe the four provinces (plains, mountains, plateau, and basin and range) that make up New Mexico's land .surface (geographic conditions)

Learning Expedition Summary

Grade Level: 3rd/4th Grade

Curricular Cycle: Year 2, 2nd Semester

Title: Money

Classes will examine different forms of exchange used in the local area and nation throughout history, such as barter, trade, indentured servitude, slavery, etc. Students will examine different components of the local economy through the years and consider ways in which commerce, industry and other forms of economic development impact community planning, democracy and culture. Basic math and analytical skills will also be employed in creating models of the flow of money through individual households, local economies and communities, including schools.

NM State Standards

Science Standards Addressed:

Strand I: Scientific Thinking and Practice

Standard I: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting and validating to think critically.

K-4 Benchmark I: Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.**3** 1. Make new observations when discrepancies exist between two descriptions of the same object or phenomenon to

improve accuracy.

2. Recognize the difference between data and opinion.

3. Use numerical data in describing and comparing objects, events, and measurements.

4. Collect data in an investigation and analyze those data.

5. Know that the same scientific laws govern investigations in different times and places (e.g., gravity, growing plants).**4** 1. Use instruments to perform investigations (e.g., timers, balances) and communicate findings.

2. Differentiate observation from interpretation and understand that a scientific explanation comes in part from what is observed and in part from how observation is interpreted.

3. Conduct multiple trials to test a prediction, draw logical conclusions, and construct and interpret graphs from measurements.

4. Collect data in an investigation using multiple techniques, including control groups, and analyze those data to determine what other investigations could be conducted to validate findings.

K-4 Benchmark II: Use scientific thinking and knowledge and communicate findings.**3** 1. Use a variety of methods to display data and present findings.

2. Understand that predictions are based on observations, measurements, and cause-and-effect relationships.

4 1. Communicate ideas and present findings about scientific investigations that are open to critique from others.

2. Describe how scientific investigations may differ from one another (e.g., observations of nature, measurements of things changing over time).

3. Understand how data are used to explain how simple system functions (e.g., a thermometer to measure heat loss as water cools).

K-4 Benchmark III: Use mathematical skills and vocabulary to analyze data, understand patterns and relationships, and communicate

findings.**3** 1. Use numerical data in describing and comparing objects, events, and measurements.

2. Pose a question of interest and present observations and measurements with accuracy.

3. Use various methods to display data and present findings and communicate results in accurate mathematical languages.

4 1. Conduct multiple trials using simple mathematical techniques to make and test predications.

2. Use mathematical equations to formulate and justify predictions based on cause-and-effect relationships.

3. Identify simple mathematical relationships in a scientific investigation (e.g., the relationship of the density of materials that will or will not float in water to the density of water).

Strand III: Science and Society

Standard I: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by, individuals and societies.

K-4 Benchmark I: Describe how science influences decisions made by individuals and societies.**3** 1. Describe how food packaging (e.g., airtight containers, date) and preparation (heating, cooling, salting, smoking, drying) extend food life and the safety of foods (e.g., elimination of bacteria).

2. Know that science produces information for the manufacture and recycling of materials (e.g., materials that can be recycled [aluminum, paper, plastic] and others that cannot [gasoline]).

3. Know that naturally occurring materials (e.g., wood, clay, cotton, animal skins) may be processed or combined with other materials to change their properties.

4. Know that using poisons can reduce the damage to crops caused by rodents, weeds, and insects, but their use may harm other plants, animals, or the environment.**4** 1. Know that science has identified substances called pollutants that get into the environment and can be harmful to living things.

2. Know that, through science and technology, a wide variety of materials not appearing in nature have become available (e.g., steel, plastic, nylon, fiber optics).

3. Know that science has created ways to store and retrieve information (e.g., paper and ink, printing press, computers,

CD ROMs) but that these are not perfect (e.g., faulty programming, defective hardware).

4. Know that both men and women of all races and social backgrounds choose science as a career.

Social Studies Standards Addressed:

STRAND : Geography

Content Standard II: Students understand how physical, natural, and cultural processes influence where people live, the ways in which people live, and how societies interact with one another and their environments. K-4 Benchmark II-E: Describe how economic, political, cultural, and social processes interact to shape patterns of human populations, and their interdependence, cooperation, and conflict. 3 1. Describe how patterns of culture vary geographically.

2. Describe how transportation and communication networks are used in daily life.

3. Describe how cooperation and conflict affect neighborhoods and communities.

4 1. Describe how cultures change.

2. Describe how geographic factors influence the location and distribution of economic activities.

3. Describe types and patterns of settlements.

4. Identify the causes of human migration.

5. Describe how and why people create boundaries and describe types of boundaries.

K-4 Benchmark II-F: Describe how natural and man-made changes affect the meaning, use, distribution, and value of resources. 3 1. Identify the characteristics of renewable and nonrenewable resources.

4 1. Identify the distributions of natural and man-made resources in New Mexico, the Southwest, and the United States.

Content Standard IV: Students understand basic economic principles and use economic reasoning skills to analyze the impact of economic systems (including the market economy) on individuals, families, businesses, communities, and governments.

K-4 Benchmark IV-A: Understand that individuals, households, businesses, governments, and societies make decisions that affect the distribution of resources and that these decisions are influenced by incentives (both economic and intrinsic). 3 1. Explain that people want more goods and services than is possible to produce.

2. Define and categorize resources (e.g., human, financial, natural).

3. Identify a variety of products that use similar resources.

4 1. Understand when choices are made that those choices impose "opportunity costs."

2. Describe different economic, public, and/or community incentives (wages, business profits, amenities rights for property owners and renters).

3. Illustrate how resources can be used in alternative ways and, sometimes, allocated to different users. 4. Explain why there may be unequal distribution of resources (e.g., among people, communities, states, nations).

5. Understand and explain how conflict may arise between private and public incentives (e.g., new parks, parking structures).

K-4 Benchmark IV-B: Understand that economic systems impact the way individuals, households, businesses, governments, and societies make decisions about goods and services. 3 1. Recognize that a market system exists whenever buyers and sellers exchange goods and services.

2. Understand how businesses operate in the United States' free enterprise system.

3. Identify examples of economic systems.

4 1. Understand how the characteristics and benefits of the free enterprise system in New Mexico compares to other economic systems in New Mexico

(e.g., acequia sytems).

2. Explain that government raises money by taxing and borrowing to pay for the goods and services it provides.

K-4 Benchmark IV-C: Understand the patterns and results of trade and exchange among individuals, households, businesses, governments, and societies, and their interdependent qualities. 3 1. Understand the purposes of spending and saving money.

2. Identify currency, credit, debit, and checks as the basic mediums of exchange in Western society.

4 1. Identify patterns of work and economic activity in New Mexico and their sustainability over time (e.g., farming, ranching, mining, retail, transportation, manufacturing, tourism, high tech).

2. Explain how New Mexico, the United States, and other parts of the world are economically interdependent.

3. Explain that banks handle currency and other forms of money and serve as intermediaries between savers and borrowers.

4. Explain that money can be used to express the "market value" of goods and services in the form of prices.

5. Use data to explain an economic pattern.

Learning Expedition Summary

Grade Level: 5th/6th Grade

Curricular Cycle: Year 1, 1st Semester

Title: Early Peoples

Students will spend time in the local environment attempting to see the landscape through the eyes of its earliest residents. They will discover local medicinal plants, geology, petroglyphs, early tools and means that early peoples used to adapt to the environment. The curriculum will then broaden and

students will study other ancient civilizations around the region and world. Through these examinations, students will learn about the social evolution of technology, customs, rituals and beliefs.

NM State Standards

Science Standards Addressed:

Strand I: Scientific Thinking and Practice

Standard I: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

5-8 Benchmark I: Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.

Grade Performance Standards

5 1. Plan and conduct investigations, including formulating testable questions, making systematic observations, developing logical conclusions, and communicating findings.

2. Use appropriate technologies (e.g., calculators, computers, balances, spring scales, microscopes) to perform scientific tests and to collect and display data.

3. Use graphic representations (e.g., charts, graphs, tables, labeled diagrams) to present data and produce explanations for investigations.

4. Describe how credible scientific investigations use reproducible elements including single variables, controls, and appropriate sample sizes to produce valid scientific results.

5. Communicate the steps and results of a scientific investigation.

6 1. Construct appropriate graphs from data and develop qualitative and quantitative statements about the relationships between variables being investigated.

2. Examine the reasonableness of data supporting a proposed scientific explanation.

3. Justify predictions and conclusions based on data.

5-8 Benchmark II: Understand the processes of scientific investigation and how scientific inquiry results in scientific knowledge.

Grade Performance Standards

5 1. Understand that different kinds of investigations are used to answer different kinds of questions (e.g., observations, data collection, controlled experiments).

2. Understand that scientific conclusions are subject to peer and public review.

6 1. Understand that scientific knowledge is continually reviewed, critiqued, and revised as new data become available.

2. Understand that scientific investigations use common processes that include the collection of relevant data and observations, accurate measurements, the identification and control of variables, and logical reasoning to formulate hypotheses and explanations.

3. Understand that not all investigations result in defensible scientific explanations.

5-8 Benchmark III: Use mathematical ideas, tools, and techniques to understand scientific knowledge.

Grade Performance Standards

5 1. Use appropriate units to make precise and varied measurements.

2. Use mathematical skills to analyze data.

3. Make predictions based on analyses of data, observations, and explanations.

4. Understand the attributes to be measured in a scientific investigation and describe the units, systems, and processes for making the measurement.

6 1. Evaluate the usefulness and relevance of data to an investigation.

2. Use probabilities, patterns, and relationships to explain data and observations.

Strand II: Content of Science

Standard III (Earth and Space Science): Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

5-8 Benchmark I: Describe how the concepts of energy, matter, and force can be used to explain the observed behavior of the solar system, the universe, and their structures.

Grade Performance Standards

5 1. Know that many objects in the universe are huge and are separated from one another by vast distances (e.g., many stars are larger than the sun but so distant that they look like points of light).

2. Understand that Earth is part of a larger solar system, which is part of an even larger galaxy (Milky Way), which is

One of many galaxies.

3. Know that there have been manned and unmanned journeys to space and to the moon.

6 Universe

1. Describe the objects in the universe, including:

• billions of galaxies, each containing billions of stars

• different sizes, temperatures, and colors of stars in the Milky Way galaxy.

Solar System

2. Locate the solar system in the Milky Way galaxy.

3. Identify the components of the solar system, and describe their defining characteristics and motions in space, including:

• sun as a medium sized star

• sun's composition (i.e., hydrogen, helium) and energy production

• nine planets, their moons, asteroids.

4. Know that the regular and predictable motions of the Earth-moon-sun system explain phenomena on Earth, including:

• Earth's motion in relation to a year, a day, the seasons, the phases of the moon, eclipses, tides, and shadows

• moon's orbit around Earth once in 28 days in relation to the phases of the moon.

Strand III: Science and Society

Standard I: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by, individuals and societies.

5-8 Benchmark I: Explain how scientific discoveries and inventions have changed individuals and societies.

Grade Performance Standards

5 1. Describe the contributions of science to understanding local or current issues (e.g., watershed and community decisions regarding water use).

2. Describe how various technologies have affected the lives of individuals (e.g., transportation, entertainment, health).

6 1. Examine the role of scientific knowledge in decisions (e.g., space exploration, what to eat, preventive medicine and medical treatment).

2. Describe the technologies responsible for revolutionizing information processing and communications (e.g., computers, cellular phones, Internet).

Social Studies Standards:

STRAND : History

Content Standard I: Students are able to identify important people and events in order to analyze

significant patterns, relationships, themes, ideas, beliefs, and turning points in New Mexico, United States, and world history in order to understand the complexity of the human experience. Students will:

5-8 Benchmark 1-C. World: compare and contrast major historical eras, events and figures from ancient civilizations to the age of exploration:

Grade Performance Standards

5 1. describe the characteristics of early societies, including the development of tools and adaptation to environments;

2. identify, describe and explain the political, religious, economic and social conditions in Europe that led to the era of colonization;

3. identify the European countries that colonized the North American continent and their areas of settlement; and

4. describe the development of slavery as a widespread practice that limits human freedoms and potentials.

6 1. describe and compare the characteristics of the ancient civilizations of Egypt, Mesopotamia and China and explain the importance of their contributions to later civilizations, to include:

a. significance of river valleys; early irrigation and its impact on agriculture;

b. forms of government (e.g., the theocracies in Egypt, dynasties in China);

c. effect on world economies and trade;

d. key historical figures;

e. religious traditions, cultural, and scientific contributions (e.g., writing systems, calendars, building of monuments such as the pyramids);

2. describe and analyze the geographic, political, economic, religious and social structures of early civilizations of India, to include:

a. location and description of the river systems and other topographical features that supported the rise of this civilization;

b. significance of the Aryan invasions;

c. structure and function of the caste system;

d. important aesthetic and intellectual traditions (e.g., Sanskrit literature, medicine, metallurgy, mathematics including Hindu-Arabic numerals and the number zero);

3. describe and analyze the geographic, political, economic, religious and social structures of the early civilizations in China, to include:

a. location and description of the origins of Chinese civilization in the Huang-He valley, Shang dynasty, geographical features of China that made governance and movement of ideas and goods difficult and served to isolate the country; c. rule by dynasties (e.g., Shang, Qin, Han, Tang, and Ming);

d. historical influence of China on other parts of the world (e.g., tea, paper, wood-block printing, compass, gunpowder);

4. describe major religions of the world to include Hinduism, Buddhism, Judaism, Christianity and Islam (e.g., founding leaders, traditions, customs, beliefs);

5. compare and contrast the geographic, political, economic, and social characteristics of the ancient Greek, ancient Roman, Ottoman, Indian,

Arabic, African and middle eastern civilizations and their enduring impacts on later civilizations, to include:

a. influence of Mediterranean geography on the development and expansion of the civilizations;

b. development of concepts of government and citizenship (e.g., democracy, republic, codification of laws, Code of Hammurabi);

c. scientific and cultural advancements (e.g., networks of roads, aqueducts, art, architecture, literature, theater, philosophy);

d. contributions and roles of key figures (e.g., Socrates, Plato, Aristotle, Alexander the Great, Julius Caesar, Augustus); and

6. compare and contrast the political and economic events and the social and geographic characteristics of medieval European life and their enduring impacts on later civilizations, to include:

a. creation and expansion of the Byzantine empire;

b. reasons for the fall of the Roman Empire;

c. new forms of government, feudalism and the beginning of limited government with the Magna Carta;

d. role of the roman catholic church and its monasteries;

e. causes, course and effects of the Crusades; impact of the black plague; contributions and roles of key figures (e.g., Charlemagne, Joan of Arc, Marco Polo)

5-8 Benchmark 1-D. Skills: research historical events and people from a variety of perspectives:

Grade Performance Standards

5 1. differentiate between, locate and use primary and secondary sources (e.g., computer software, interviews, biographies, oral histories, print, visual material, artifacts) to acquire information;

2. use resources for historical information (e.g., libraries, museums, historical societies, courthouse, worldwide web, family records, elders);

3. gather, organize and interpret information using a variety of media and technology;

4. show the relationship between social contexts and events; and

5. use effective communication skills and strategies to share research findings.

6 1. organize information by sequencing, categorizing, identifying cause-and-effect relationships, comparing and contrasting, finding the main idea, summarizing, making generalizations and predictions, drawing inferences and conclusions;

2. identify different points of view about an issue or topic; and

3. use a decision-making process to identify a situation that requires a solution; gather information, identify options, predict consequences and take action to implement that solution.

STRAND : Geography

Content Standard II: Students understand how physical, natural, and cultural processes influence where people live, the ways in which people live, and how societies interact with one another and their environments. Students will

5-8 Benchmark 2-B: explain the physical and human characteristics of places and use this knowledge to define regions, their relationships with other regions, and their patterns of change:

Grade Performance Standards

5 1. describe human and natural characteristics of places; and

2. describe similarities and differences among regions of the globe, and their patterns of change.

6 1. explain how places change due to human activity;

2. explain how places and regions serve as cultural symbols and explore the influences and effects of regional symbols; and

3. identify a region by its formal, functional or perceived characteristics.

Strand: Civics and Government

Content Standard III: Students understand the ideals, rights, and responsibilities of citizenship and understand the content and history of the founding documents of the United States with particular emphasis on the United States and New Mexico constitutions and how governments function at local, state, tribal, and national levels. Students will:

5-8 Benchmark 3-A: demonstrate understanding of the structure, functions and powers of government (local, state, tribal and national):

Grade Performance Standards

5 1. explain how the three branches of national government function and explain how they are defined in the United States constitution;

2. identify the fundamental ideals and principles of our republican form of government (e.g., inalienable rights such as "life, liberty, and the pursuit of happiness," the rule of law, justice, equality under the law);

3. identify and describe the significance of American symbols, landmarks and essential documents (e.g., declaration of independence; United States constitution; bill of rights; the federalist papers; Washington, D.C.; liberty bell; Gettysburg address; statue of liberty; government to government accords; treaty of Guadalupe Hildago; Gadsden purchase); and

4. compare and contrast the basic government sovereignty of local, state, tribal and national governments.

6 1. describe the concept of democracy as developed by the Greeks and compare the evolution of democracies throughout the world; and

2. describe the concept of republic as developed by the Romans and compare to other republican governments.

5-8 Benchmark 3-B: explain the significance of symbols, icons, songs, traditions and leaders of New Mexico and the United States that exemplify ideals and provide continuity and a sense of unity:

Grade Performance Standards

5 1. explain the significance and importance of American customs, symbols, landmarks and celebrations;

2. identify and summarize contributions of various racial, ethnic and religious groups to national identity; and

3. describe selected ethnic and religious customs and celebrations that enhance local, state, tribal and national identities.

6 1. describe the significance of leadership in democratic societies and provide examples of local, national and international leadership, to include: qualities of leadership; names and contributions of New Mexico leaders; names and contributions of national leaders.

5-8 Benchmark 3-C: compare political philosophies and concepts of government that became the foundation for the American revolution and the United States government:

Grade Performance Standards

5 1. describe the narrative of the people and events associated with the development of the United States constitution, and describe its significance to the foundation of the American republic, to include:

a. colonists' and Native Americans' shared sense of individualism, independence and religious freedom that developed before the revolution;

b. articles of confederation;

c. purpose of the constitutional convention;

d. natural rights expressed in the declaration of independence; and

2. describe the contributions and roles of major individuals, including George Washington, James Madison and Benjamin Franklin. 6 1. explain how Greek and Roman societies expanded and advanced the role of citizen; and

2. identify historical origins of democratic forms of government (e.g., early civilizations, Native American governments).

5-8 Benchmark 3-D: explain how individuals have rights and responsibilities as members of social groups, families, schools, communities, states, tribes and countries:

Grade Performance Standards

5 1. explain the meaning of the American creed that calls on citizens to safeguard the liberty of individual Americans within a unified nation, to respect the rule of law and to preserve the constitutions of local, state, tribal and federal governments.

6 understand that the nature of citizenship varies among societies

Strand: Economics

Content Standard IV: Students understand basic economic principles and use economic reasoning skills to analyze the impact of economic systems (including the market economy) on individuals, families, businesses, communities, and governments. Students will:

5-8 Benchmark 4-C: describe the patterns of trade and exchange in early societies and civilizations and explore the extent of their continuation in today's world:

Grade Performance Standards

5 1. explain basic economic patterns of early societies (e.g., hunter-gathers, early farming, trade); and

2. explain the economic motivation of exploration and colonization by colonial powers.

6 1. compare and contrast the trade patterns of early civilizations; and

2. analyze the impact of the Neolithic agricultural revolution on mankind, and the impact of technological changes in the bronze age and the iron age.

Learning Expedition Summary

Grade Level: 5th/6th Grade

Curricular Cycle: Year 1, 2nd Semester

Title: Imperialism

Using the history of Northern New Mexico as a foundation, students will determine causes and motivations for imperialism such as human and natural resources, religion and government. Classes will also examine why some cultures are able to colonize others, such as weaponry, technology, modes of transportation, etc. Comparisons will be made between Natives and settlers and the harms and benefits done/gained by each. The New World and European exploration will serve as an example, integrating lessons involving history, geography and citizenship.

NM State Standards

Science Standards Addressed:

Strand I: Scientific Thinking and Practice

Standard I: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

5-8 Benchmark I: Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.

Grade Performance Standards

5 1. Plan and conduct investigations, including formulating testable questions, making systematic observations, developing logical conclusions, and communicating findings.

2. Use appropriate technologies (e.g., calculators, computers, balances, spring scales, microscopes) to perform scientific tests and to collect and display data.

3. Use graphic representations (e.g., charts, graphs, tables, labeled diagrams) to present data and produce explanations for investigations.

4. Describe how credible scientific investigations use reproducible elements including single variables, controls, and appropriate sample sizes to produce valid scientific results.

5. Communicate the steps and results of a scientific investigation.

6 1. Construct appropriate graphs from data and develop qualitative and quantitative statements about the relationships between variables being investigated.

2. Examine the reasonableness of data supporting a proposed scientific explanation.

3. Justify predictions and conclusions based on data.

5-8 Benchmark II: Understand the processes of scientific investigation and how scientific inquiry results in scientific knowledge.

Grade Performance Standards

5 1. Understand that different kinds of investigations are used to answer different kinds of questions (e.g., observations, data collection, controlled experiments).

2. Understand that scientific conclusions are subject to peer and public review.

6 1. Understand that scientific knowledge is continually reviewed, critiqued, and revised as new data become available.

2. Understand that scientific investigations use common processes that include the collection of relevant data and observations, accurate measurements, the identification and control of variables, and logical reasoning to formulate hypotheses and explanations.

3. Understand that not all investigations result in defensible scientific explanations.

5-8 Benchmark III: Use mathematical ideas, tools, and techniques to understand scientific knowledge.

Grade Performance Standards

5 1. Use appropriate units to make precise and varied measurements.

2. Use mathematical skills to analyze data.

3. Make predictions based on analyses of data, observations, and explanations.

4. Understand the attributes to be measured in a scientific investigation and describe the units, systems, and processes for making the measurement.

6 1. Evaluate the usefulness and relevance of data to an investigation.

2. Use probabilities, patterns, and relationships to explain data and observations.

Strand III: Science and Society

Standard I: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by, individuals and societies.

5-8 Benchmark I: Explain how scientific discoveries and inventions have changed individuals and societies.

Grade Performance Standards

5 1. Describe the contributions of science to understanding local or current issues (e.g., watershed and community decisions regarding water use).

2. Describe how various technologies have affected the lives of individuals (e.g., transportation, entertainment, health).

6 1. Examine the role of scientific knowledge in decisions (e.g., space exploration, what to eat, preventive medicine and medical treatment).

2. Describe the technologies responsible for revolutionizing information processing and communications (e.g., computers, cellular phones, Internet).

Social Studies Standards:

STRAND : History

Content Standard I: Students are able to identify important people and events in order to analyze significant patterns, relationships, themes, ideas, beliefs, and turning points in New Mexico, United States, and world history in order to understand the complexity of the human experience. Students will: 5-8 Benchmark 1-A. New Mexico: explore and explain how people and events have influenced the development of New Mexico up to the present day: Grade Performance Standards

5 1. describe changes of governance of New Mexico (e.g., indigenous, Spanish, Mexican, French, Texan, confederate, United States);

2. explain the reasons for European exploration of the Americas.

6 1. describe the relationships among ancient civilizations of the world (e.g., scientific discoveries, architecture, politics, cultures and religious systems) and their connection to the early development of New Mexico.

5-8 Benchmark 1-B. United States: analyze and interpret major eras, events and individuals from the periods of exploration and colonization through the civil war and reconstruction in United States history:

Grade Performance Standards

5 1. explain the motivations for the European exploration of the Americas (e.g., Leif Ericson, Christopher Columbus, John Cabot, Hernán

Cortez, Jacques Cartier, Henry Hudson);

2. describe and explain the reasons for colonization, to include: religious freedom, desire for land, economic opportunity, a new way of life, including the roles and views of key individuals who founded colonies (e.g., John Smith, William Penn, Lord Baltimore);

3. explain the significance of major historical documents (e.g., the Mayflower compact, the declaration of independence, the federalist papers,

United States constitution, bill of rights, the Gettysburg address);

4. identify the interactions between American Indians and European settlers, including agriculture, cultural exchanges, alliances and conflicts

(e.g., the first Thanksgiving, the pueblo revolt, French and Indian war);

5. describe how the introduction of slavery into the Americas, and especially the United States, laid a foundation for conflict; and

6. explain early representative government and identify democratic practices that emerged (e.g., Iroquois nation model, town meetings, assemblies).

6 1. explain and describe the origins, obstacles and impact of the age of exploration, to include: improvements in technology (e.g., the clock, the sextant, work of Prince Henry the navigator), voyages of Columbus to the new world and the later searches for the northwest passage, introduction

of disease and the resulting population decline (especially among indigenous peoples), exchanges of technology, ideas, agricultural products and practices.

5-8 Benchmark 1-D. Skills: research historical events and people from a variety of perspectives:

Grade Performance Standards

5 1. differentiate between, locate and use primary and secondary sources (e.g., computer software, interviews, biographies, oral histories, print, visual material, artifacts) to acquire information;

2. use resources for historical information (e.g., libraries, museums, historical societies, courthouse, worldwide web, family records, elders);

3. gather, organize and interpret information using a variety of media and technology;

4. show the relationship between social contexts and events; and

5. use effective communication skills and strategies to share research findings.

6 1. organize information by sequencing, categorizing, identifying cause-and-effect relationships, comparing and contrasting, finding the main idea, summarizing, making generalizations and predictions, drawing inferences and conclusions;

2. identify different points of view about an issue or topic; and

3. use a decision-making process to identify a situation that requires a solution; gather information, identify options, predict consequences and take action to implement that solution.

STRAND : Geography

Content Standard II: Students understand how physical, natural, and cultural processes influence where people live, the ways in which people live, and how societies interact with one another and their environments. Students will

5-8 Benchmark 2-A: analyze and evaluate the characteristics and purposes of geographic tools, knowledge, skills and perspectives and apply them to explain the past, present and future in terms of patterns, events and issues:

Grade Performance Standards

5 1. make and use different kinds of maps, globes, charts and databases;

2. demonstrate how different areas of the United States are organized and interconnected;

3. identify and locate each of the fifty states and capitols of the United States;

4. identify tribal territories within states;

5. employ fundamental geographic vocabulary (e.g., latitude, longitude, interdependence, accessibility, connections);

6. demonstrate a relational understanding of time zones;

7. use spatial organization to communicate information; and

8. identify and locate natural and man-made features of local, regional, state, national and international locales.

6 1. identify the location of places using latitude and longitude; and

2. draw complex and accurate maps from memory and interpret them to answer questions about the location of physical features.

STRAND : Geography

Content Standard II: Students understand how physical, natural, and cultural processes influence where people live, the ways in which people live, and how societies interact with one another and their environments. Students will

5-8 Benchmark 2-E: explain how economic, political, cultural and social processes interact to shape patterns of human populations and their interdependence, cooperation and conflict:

Grade Performance Standards

5 1. explain how physical features influenced the expansion of the United States.

6 1. explain how human migration impacts places, societies and civilizations;

2. describe, locate and compare different settlement patterns throughout the world; and

3. explain how cultures create a cultural landscape, locally and throughout the world, and how these landscapes change over time.

Strand: Economics

Content Standard IV: Students understand basic economic principles and use economic reasoning skills to analyze the impact of economic systems (including the market economy) on individuals, families, businesses, communities, and governments. Students will:

5-8 Benchmark 4-A: explain and describe how individuals, households, businesses, governments and societies make decisions, are influenced by incentives (economic as well as intrinsic) and the availability and use of scarce resources, and that their choices involve costs and varying ways of allocating:

Grade Performance Standards

5 1. understand the impact of supply and demand on consumers and producers in a free-enterprise system; 2. understand the patterns of work and economic activities in New Mexico and the United States (e.g., farming, ranching, oil and gas production, high tech, manufacturing, medicine);

3. describe the aspects of trade; and

4. explain how voluntary trade is not coercive.

6 1. explain and predict how people respond to economic and intrinsic incentives.

5-8 Benchmark 4-B: explain how economic systems impact the way individuals, households, businesses, governments and societies make decisions about resources and the production and distribution of goods and services:

Grade Performance Standards

5 1. explain how all economic systems must consider the following: What will be produced? How will it be produced? For whom will it be produced; and

2. identify the influence of bordering countries (Canada and Mexico) on United States commerce.

6 1. describe the characteristics of traditional, command, market and mixed economic systems;

2. explain how different economic systems affect the allocation of resources; and

3. understand the role that "factors of production" play in a society's economy (e.g., natural resources, labor, capital, entrepreneurs).

Learning Expedition Summary

Grade Level: 5th/6th Grade

Curricular Cycle: Year 2, 1st Semester

Title: Climate Change

Curriculum will cover the weather cycle on Earth, and how elements flow through the cycle, impacting the local environment along the way. Students will learn about the physical properties and forms of matter in the cycle, including heat and moisture. Classes will use geography and maps to illustrate and put this knowledge in a place-based context. A variety of technological databases and resources will be used to analyze the effects of climate change.

NM State Standards

Science Standards Addressed:

Strand I: Scientific Thinking and Practice

Standard I: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

5-8 Benchmark I: Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.

Grade Performance Standards

5 1. Plan and conduct investigations, including formulating testable questions, making systematic observations, developing logical conclusions, and communicating findings.

2. Use appropriate technologies (e.g., calculators, computers, balances, spring scales, microscopes) to perform scientific tests and to collect and display data.

3. Use graphic representations (e.g., charts, graphs, tables, labeled diagrams) to present data and produce explanations for investigations.

4. Describe how credible scientific investigations use reproducible elements including single variables, controls, and appropriate sample sizes to produce valid scientific results.

5. Communicate the steps and results of a scientific investigation.

6 1. Construct appropriate graphs from data and develop qualitative and quantitative statements about the relationships between variables being investigated.

2. Examine the reasonableness of data supporting a proposed scientific explanation.

3. Justify predictions and conclusions based on data.

5-8 Benchmark II: Understand the processes of scientific investigation and how scientific inquiry results in scientific knowledge.

Grade Performance Standards

5 1. Understand that different kinds of investigations are used to answer different kinds of questions (e.g., observations, data collection, controlled experiments).

2. Understand that scientific conclusions are subject to peer and public review.

6 1. Understand that scientific knowledge is continually reviewed, critiqued, and revised as new data become available.

2. Understand that scientific investigations use common processes that include the collection of relevant data and observations, accurate measurements, the identification and control of variables, and logical reasoning to formulate hypotheses and explanations.

3. Understand that not all investigations result in defensible scientific explanations.

5-8 Benchmark III: Use mathematical ideas, tools, and techniques to understand scientific knowledge.

Grade Performance Standards

5 1. Use appropriate units to make precise and varied measurements.

2. Use mathematical skills to analyze data.

3. Make predictions based on analyses of data, observations, and explanations.

4. Understand the attributes to be measured in a scientific investigation and describe the units, systems, and processes for making the measurement.

6 1. Evaluate the usefulness and relevance of data to an investigation.

2. Use probabilities, patterns, and relationships to explain data and observations.

Strand II: Content of Science

Standard I (Physical Science): Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

5-8 Benchmark I: Know the forms and properties of matter and how matter interacts.

Grade Performance Standards

5 1. Describe properties (e.g., relative volume, ability to flow) of the three states of matter.

2. Describe how matter changes from one phase to another (e.g., condensation, evaporation).

3. Know that matter is made up of particles (atoms) that can combine to form molecules and that these particles are too small to see with the naked eye.

4. Know that the periodic table is a chart of the pure elements that make up all matter.

5. Describe the relative location and motion of the particles (atoms and molecules) in each state of matter.

6. Explain the relationship between temperature and the motion of particles in each state of matter.

6 1. Understand that substances have characteristic properties and identify the properties of various substances (e.g., density, boiling point, solubility, chemical reactivity).

2. Use properties to identify substances (e.g., for minerals: the hardness, streak, color, reactivity to acid, cleavage, fracture).

3. Know that there are about 100 known elements that combine to produce compounds in living organisms and nonliving substances.

4. Know the differences between chemical and physical properties and how these properties can influence the interactions of matter.

5-8 Benchmark II: Explain the physical processes involved in the transfer, change, and conservation of energy.

Grade Performance Standards

5 1. Know that heat is transferred from hotter to cooler materials or regions until both reach the same temperature.

2. Know that heat is often produced as a by-product when one form of energy is converted to another form (e.g., when machines or organisms convert stored energy into motion).

3. Know that there are different forms of energy.

4. Describe how energy can be stored and converted to a different form of energy (e.g., springs, gravity) and know that machines and living things convert stored energy to motion and heat.

6 1. Identify various types of energy (e.g., heat, light, mechanical, electrical, chemical, nuclear).

2. Understand that heat energy can be transferred through conduction, radiation and convection.

3. Know that there are many forms of energy transfer but that the total amount of energy is conserved (i.e., that energy is neither created nor destroyed).

4. Understand that some energy travels as waves (e.g., seismic, light, sound), including:

• the sun as source of energy for many processes on Earth

• different wavelengths of sunlight (e.g., visible, ultraviolet, infrared)

• vibrations of matter (e.g., sound, earthquakes)

• different speeds through different materials.

5-8 Benchmark III: Describe and explain forces that produce motion in objects.

Grade Performance Standards

5 1. Understand how the rate of change of position is the velocity of an object in motion.

2. Recognize that acceleration is the change in velocity with time.

3. Identify forces in nature (e.g., gravity, magnetism, electricity, friction).

4. Understand that when a force (e.g., gravity, friction) acts on an object, the object speeds up, slows down, or goes in a different direction.

5. Identify simple machines and describe how they give advantage to users (e.g., levers, pulleys, wheels and axles, inclined planes, screws, wedges).

6 1. Know that every object exerts gravitational force on every other object dependent on the masses and distance of separation (e.g., motions of celestial objects, tides).

2. Know that gravitational force is hard to detect unless one of the objects (e.g., Earth) has a lot of mass.

Strand II: Content of Science

Standard III (Earth and Space Science): Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.

5-8 Benchmark II: Describe the structure of Earth and its atmosphere and explain how energy, matter, and forces shape Earth's systems.

Grade Performance Standards

5 1. Understand that water and air relate to Earth's processes, including:

• how the water cycle relates to weather

• how clouds are made of tiny droplets of water, like fog or steam.

2. Know that air is a substance that surrounds Earth (atmosphere), takes up space, and moves, and that temperature fluctuations and other factors produce wind currents.

3. Know that most of Earth's surface is covered by water, that most of that water is salt water in oceans, and that fresh water is found in rivers, lakes, underground sources, and glaciers.

4. Recognize that the seasons are caused by Earth's motion around the sun and the tilt of Earth's axis of rotation.

6 Structure of Earth

1. Know that Earth is composed of layers that include a crust, mantle, and core.

2. Know that Earth's crust is divided into plates that move very slowly, in response to movements in the mantle.

3. Know that sedimentary, igneous, and metamorphic rocks contain evidence of the materials, temperatures, and forces that created them.

Weather and Climate

4. Describe the composition (i.e., nitrogen, oxygen, water vapor) and strata of Earth's atmosphere, and differences between the atmosphere of Earth and those of other planets.

5. Understand factors that create and influence weather and climate, including:

• heat, air movement, pressure, humidity, oceans

• how clouds form by condensation of water vapor

• how weather patterns are related to atmospheric pressure

• global patterns of atmospheric movement (e.g., El Niño)

• factors that can impact Earth's climate (e.g., volcanic eruptions, impacts of asteroids, glaciers).

6. Understand how to use weather maps and data (e.g., barometric pressure, wind speeds, humidity) to predict weather.

Changes to Earth

7. Know that landforms are created and change through a combination of constructive and destructive forces, including:

• weathering of rock and soil, transportation, deposition of sediment, and tectonic activity

• similarities and differences between current and past processes on Earth's surface (e.g., erosion, plate tectonics,

changes in atmospheric composition)

• impact of volcanoes and faults on New Mexico geology.

8. Understand the history of Earth and how information about it comes from layers of sedimentary rock, including:

• sediments and fossils as a record of a very slowly changing world

• evidence of asteroid impact, volcanic and glacial activity.

Strand III: Science and Society

Standard I: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by, individuals and societies.

5-8 Benchmark I: Explain how scientific discoveries and inventions have changed individuals and societies.

Grade Performance Standards

5 1. Describe the contributions of science to understanding local or current issues (e.g., watershed and community decisions regarding water use).

2. Describe how various technologies have affected the lives of individuals (e.g., transportation, entertainment, health).

6 1. Examine the role of scientific knowledge in decisions (e.g., space exploration, what to eat, preventive medicine and medical treatment).

2. Describe the technologies responsible for revolutionizing information processing and communications (e.g., computers, cellular phones, Internet).

Social Studies Standards:

STRAND : Geography

Content Standard II: Students understand how physical, natural, and cultural processes influence where people live, the ways in which people live, and how societies interact with one another and their environments. Students will

5-8 Benchmark 2-C: understand how human behavior impacts man-made and natural environments, recognize past and present results and predict potential changes:

Grade Performance Standards

5 1. describe how man-made and natural environments have influenced conditions in the past; and

2. identify and define geographic issues and problems from accounts of current events.

6 1. compare and contrast the influences of man-made and natural environments upon ancient civilizations.

5-8 Benchmark 2-D: explain how physical processes shape the earth's surface patterns and biosystems:

Grade Performance Standards

5 1. explain how the four provinces of New Mexico's land surface (plains, mountains, plateau, basin and range) support life.

6 1. describe how physical processes shape the environmental patterns of air, land, water, plants and animals.

STRAND : Geography

Content Standard II: Students understand how physical, natural, and cultural processes influence where people live, the ways in which people live, and how societies interact with one another and their environments. Students will

5-8 Benchmark 2-F: understand the effects of interactions between human and natural systems in terms of changes in meaning, use, distribution and relative importance of resources

Grade Performance Standards

5 1. understand how resources impact daily life.

6 1. understand how resources impact daily life

Learning Expedition Summary

Grade Level: 5th/6th Grade

Curricular Cycle: Year 2, 2nd Semester

Title: Predators

Curriculum will center around local predators such as coyotes to examine food webs and the place of humans and other local species within. Students will make scientific inquiries into the necessary tools and skills of predators such as speed, parts of the anatomy and physiology and adaptation. The role of humans as predators, relationships between people and predators, and local folklore and myths will also be studied.

NM State Standards

Science Standards Addressed:

Strand I: Scientific Thinking and Practice

Standard I: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

5-8 Benchmark I: Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.

Grade Performance Standards

5 1. Plan and conduct investigations, including formulating testable questions, making systematic observations, developing logical conclusions, and communicating findings.

2. Use appropriate technologies (e.g., calculators, computers, balances, spring scales, microscopes) to perform scientific tests and to collect and display data.

3. Use graphic representations (e.g., charts, graphs, tables, labeled diagrams) to present data and produce explanations for investigations.

4. Describe how credible scientific investigations use reproducible elements including single variables, controls, and appropriate sample sizes to produce valid scientific results.

5. Communicate the steps and results of a scientific investigation.

6 1. Construct appropriate graphs from data and develop qualitative and quantitative statements about the relationships between variables being investigated.

2. Examine the reasonableness of data supporting a proposed scientific explanation.

3. Justify predictions and conclusions based on data.

5-8 Benchmark II: Understand the processes of scientific investigation and how scientific inquiry results in scientific knowledge.

Grade Performance Standards

5 1. Understand that different kinds of investigations are used to answer different kinds of questions (e.g., observations, data collection, controlled experiments).

2. Understand that scientific conclusions are subject to peer and public review.

6 1. Understand that scientific knowledge is continually reviewed, critiqued, and revised as new data become available.

2. Understand that scientific investigations use common processes that include the collection of relevant data and observations, accurate measurements, the identification and control of variables, and logical reasoning to formulate hypotheses and explanations.

3. Understand that not all investigations result in defensible scientific explanations.

5-8 Benchmark III: Use mathematical ideas, tools, and techniques to understand scientific knowledge.

Grade Performance Standards

5 1. Use appropriate units to make precise and varied measurements.

2. Use mathematical skills to analyze data.

3. Make predictions based on analyses of data, observations, and explanations.

4. Understand the attributes to be measured in a scientific investigation and describe the units, systems, and processes for making the measurement.

6 1. Evaluate the usefulness and relevance of data to an investigation.

2. Use probabilities, patterns, and relationships to explain data and observations.

Strand II: Content of Science

Standard II (Life Science): Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

5-8 Benchmark I: Explain the diverse structures and functions of living things and the complex relationships between living things and their environments.

Grade Performance Standards

5 1. Identify the components of habitats and ecosystems (producers, consumers, decomposers, predators).

2. Understand how food webs depict relationships between different organisms.

3. Know that changes in the environment can have different effects on different organisms (e.g., some organisms move, some survive, some reproduce, some die).

4. Describe how human activity impacts the environment.

6 1. Understand how organisms interact with their physical environments to meet their needs (i.e., food, water, air) and how the water cycle is essential to most living systems.

2. Describe how weather and geologic events (e.g., volcanoes, earthquakes) affect the function of living systems.

3. Describe how organisms have adapted to various environmental conditions.

5-8 Benchmark II: Understand how traits are passed from one generation to the next and how species evolve.

Grade Performance Standards

5 1. Know that plants and animals have life cycles that include birth, growth and development, reproduction, and death and that these cycles differ for different organisms.

2. Identify characteristics of an organism that are inherited from its parents (e.g., eye color in humans, flower color in plants) and other characteristics that are learned or result from interactions with the environment.

3. Understand that heredity is the process by which traits are passed from one generation to another.

6 1. Understand that the fossil record provides data for how living organisms have evolved.

2. Describe how species have responded to changing environmental conditions over time (e.g., extinction, adaptation).

5-8 Benchmark III: Understand the structure of organisms and the function of cells in living systems.

Grade Performance Standards

5 1. Understand that all living organisms are composed of cells from one to many trillions, and that cells are usually only visible thought a microscope.

2. Know that some organisms are made of a collection of similar cells that cooperate (e.g., algae) while other organisms are made of cells that are different in appearance and function (e.g., corn, birds).

3. Describe the relationships among cells, tissues, organs, organ systems, whole organisms, and ecosystems.

6 1. Explain how fossil fuels were formed from animal and plant cells.

2. Describe the differences between substances that were produced by living organisms (e.g., fossil fuels) and substances that result from nonliving processes (e.g., igneous rocks).

Strand III: Science and Society

Standard I: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by, individuals and societies.

5-8 Benchmark I: Explain how scientific discoveries and inventions have changed individuals and societies.

Grade Performance Standards

5 1. Describe the contributions of science to understanding local or current issues (e.g., watershed and community decisions regarding water use).

2. Describe how various technologies have affected the lives of individuals (e.g., transportation, entertainment, health).

6 1. Examine the role of scientific knowledge in decisions (e.g., space exploration, what to eat, preventive medicine and medical treatment).

2. Describe the technologies responsible for revolutionizing information processing and communications (e.g., computers, cellular phones, Internet).

3. Strategies and Methods

- Provide a description of the strategies and methods used in delivering the curriculum.

Statutory & Regulatory Reference(s):
NMSA 1978 Section 22-8B-8C
6.80.4.9C(4) NMAC & 6.80.4.9I(1) NMAC

Planning Learning Expeditions:

Within the Expeditionary Learning (EL) framework, the learning expeditions crafted are the result of an organic process based on the place, the interests of teachers, and the interests and abilities of students. These expeditions are created following a backwards design curriculum development process (Wiggins & McTighe, 2005), with a focus on the intended product from students designed to demonstrate their learning. Within the crafted learning expedition, EL describes very specific lesson design structures and pedagogical strategies.

Planning of the learning expedition begins with the curriculum map and developing ideas for skills-rich projects that provide the structure for in-school instruction. From the starting point of projects and authentic products, teachers can schedule the appropriate skill and content lessons and revision sessions to ensure student success. Literacy and technology are generally crucial to the completion of a successful product that has relevance to an authentic audience and is applicable to the world outside of school.

Examples of Rio Gallinas School authentic products:

- Drafting and getting passed legislation to allow charter school students to play sports on their district teams
- Creating a public candidates forum based on wind energy development that drew two hundred
- Developing a regional conference titled 'Choose Your Weapon: Fighting nonviolently that featured civil rights leader Minnijean Trikey-Brown and 40 workshops. Hundreds attended.
- Hosting a student developed arts, cuisine, performance, and written products event that raised $4,000 for Save the Chimps effort to provide sanctuary for medically abused chimpanzees
- Creating a web-based site featuring student research on nonviolent actions world wide
- Developing a research questionaire and conducting a survey for 4th and 5th graders in Las Vegas on health issues whose results were presented to New Mexico Department of Health
- Conducting and compiling 28 scientific experiments in the school's 30-foot Grow Dome and presenting the research for use by the manufacturer

At this early level of planning a learning expedition, teachers are also making the curricular decisions around specific case studies that can best contextualize learning. In other words, a broad topic, such as food production for a 1st grade class, is narrowed into 3-6 week case studies involving the investigation of a local orchard, service learning on a local working farm, studying migrant farm workers in the area, and, finally, exploring issues facing homeless people without equitable access to food. Within case studies, plans are created that schedule the appropriate fieldwork, experts, and service learning opportunities that will ground in-school learning into authentic and local contexts.

Finally, teachers write the guiding questions (i.e., essential questions in the Understanding By Design terminology) for the learning expedition that function to provide focus around the big ideas that underlie the expedition, to guide student reflection and inquiry, and to make inter-disciplinary connections.

Examples of guiding questions: (note: These examples are from an archive of exemplar elementary level learning expeditions.)

- Are some natural species more important than others?
- What difference can one person make on the world around them?
- Should land ownership determine the use of that land?

Lesson Design Formats:

Three recommended lesson design formats with EL include the **workshop model, "5 Es,"** and **protocol lessons**. When alternative lesson formats are used, such as lecture, video viewing, and labs, engagement strategies are embedded in the lesson planning with graphic organizers, pair shares, mid-lesson questioning, etc.

The **workshop model** format is appropriate for teaching reading comprehension strategies, writing, and lessons from any subject that require a focus on one standard of quality. A detailed workshop model description follows:

Component	Instructional Purpose
Introduction	• Engage students • Build the need to know • Tap into students' curiosity • Set a positive tone--build momentum • Link to previous learning • Name and clearly communicate the learning target
Mini-Lesson	• Focus on one trait, strategy, or aspect of quality at a time in direct support of the learning target • Prepare students for success during practice/application by providing a model of proficiency • Provide direct instruction through explicit modeling of the task (*not just what to do, but how to think through the process*)
Guided Practice	• Provide opportunities for all students to try the task as modeled • Assess student readiness to move into practice/application • Create a "safe place" for students to practice the task—either through modified content or through peer support (Give students experience with success) • Address student misconceptions (group or individual) • Support students in completing the task as needed
Practice/ Application	• Give students the opportunity to practice or apply the task modeled independent of the teacher • Use work generated during this time to assess students' proficiency in relation to the learning target • Facilitate student thinking and understanding by asking probing questions (conferring, but not instructing) • Provide intentional differentiation
Share	• Honor student work, ideas and voice • Celebrate successes • Share progress towards the target, focusing on the product

Debrief	• Drive students' metacognition about how the lesson furthered their learning, focusing on the process • Create meaning by synthesizing as a group • Make connections between the specific learning target and the larger context • Identify next steps and set goals • Assess students' proficiency in relation to the learning target (self-assessment; teacher assessment)

THE 5 ES LESSON PLANNING TOOL IS INQUIRY-BASED FORMAT, USED PARTICULARLY IN MATH, SCIENCE, AND SOCIAL STUDIES. PROTOCOLS PROMOTE EQUITY AND SUPPORT THE INCLUSION OF ALL VOICES IN DISCUSSION. THE FOLLOWING TABLE DESCRIBES THE COMPONENTS OF 5 ES LESSON AND PROVIDES EXAMPLES OF EACH COMPONENT:

I. Engagement: The activities in this section capture the student's attention, stimulate their thinking and help them access prior knowledge.	• Demonstration
	  ○ teacher and/or student
	• Reading from a
	  ○ current media release
	  ○ science journal or book
	  ○ piece of literature (biography, essay, peom, etc)
	• Free write
	• Analyze a graphic organizer

II. Exploration: In this section students are given time to think, plan, investigate, and organize collected information	• Reading authentic resources to collect information
	  ○ to answer an open-ended question
	  ○ to make a decision
	• Solve a problem
	• Construct a model
	• Experiment
	  ○ design and/or
	  ○ perform

III. Explanation: Students are now involved in an analysis of their exploration. Their understanding is clarified and modified because of reflective activities	• Student analysis and explanation • Supporting ideas with evidence • Reading and discussion
IV. Extension: This section gives students the opportunity to expand and solidify their understanding of the concept and/or	• Problem solving

apply it to a real world situation	• Experimental inquiry • Thinking Skills Activities o classifying, abstracting, error analysis, etc. • Decision-making
V. Evaluation	• Teacher and/or student generated scoring tools or rubrics

Protocol-based lessons are appropriate to guide revision of student project/product work or to structure student discussion. Protocols are also appropriate for primary students with modification so that independent reading is not necessary for participation. A list of protocols that can be used in classrooms where and when appropriate to the curriculum or learning expedition follows:

Protocols- An Annotated List

4 A's

Used to hear multiple perspectives after reading a text. Participant discuss Agreements, Aspirations, Alignments, and Adjustments in four rounds of conversation. (Discussion)

ABC Relay

An active way to assess and activate background knowledge about a topic. (Background knowledge)

Admit and Exit Tickets

These quick writes can be used to assess students' knowledge or to make decisions about next teaching steps or points that need clarifying. (Background knowledge)

BBK Gallery Method

This multi-phase protocol includes observing, listening, speaking, reading, and writing to help create a mood, foster community, encourage identification, spark curiosity, build background knowledge, and prepare participants to write. (Background knowledge)

BBK Mystery Piece Method

This protocol demonstrates how quickly participants can become interested in a topic, build background knowledge, and use that background knowledge to become better and more informed readers of hard text. (Background knowledge)

Book Club Discussion - Questioning

Used to help facilitate an effective discussion about a short piece of fiction or nonfiction text. (Discussion)

Boxing - Getting to the Heart of the Matter

This protocol will help students build background knowledge and synthesize their understanding of a topic. (Background knowledge)

Carousel Brainstorm

The purpose of using the carousel brainstorm process is to allow participants to share their ideas and build a common vision or vocabulary. (Background knowledge)

Chalk Talk

A protocol to promote discussion and awareness of issues and perspectives – silently. (Discussion)

Collaborative Assessment Conference

The purpose is to learn more about the strengths and needs of a particular student and to reflect on and gather ideas for revising classroom practice. It could be adapted for use as a tool for examining documents, learning sequences and school plans. (Staff)

Concentric Circles

This protocol provides students with a structure to actively engage in discussions around short text, questions, opinions, or debates on any topic with several different partners. (Discussion)

Concept Mapping: List-Group-Label

This protocol is useful for reviewing and solidifying understanding of vocabulary words and/or concepts that are related. (Background knowledge)

Concept Mapping: Word Wall

Students apply background knowledge and make inferences to categorize and to make connections among important words. (Background knowledge)

Consultancy Protocol

The purpose of the consultancy protocol is to foster a rich and productive conversation on a piece of student (or teacher) work, the use of an instructional practice, or an element of an expedition. *Modified versions also included for administrative issues and 15-minute approach.* (Staff)

Conversation Café

This protocol is used to guide discussion in small groups, often on multiple topics that participants chose from. (Discussion)

Creating Metaphors

The purpose of this protocol is to foster reflection and discussion about each individual's strengths and needs in a professional learning community. (Staff)

Critical Friends

The purpose of a protocol is to engage teachers in professional dialogue about work students do in their classrooms. This is a reflective activity to share what the learning targets were, what actually happened in a unit or lesson, and the level in which students were engaged. (Staff)

Fishbowl

The fishbowl is a peer learning strategy in which some participants are in an outer circle and one or more are in the center. Those in the center model a particular practice or strategy. The outer circle acts as observers and may assess the interaction of the center group. Fishbowls can be used to assess comprehension, to assess group work, to encourage constructive peer assessment, to discuss issues in the classroom, or to model specific techniques such as literature circles or Socratic Seminars. (Discussion)

Five Whys

The Five Whys is a process for uncovering the cause or roots of a situation, issue, or belief. It is particularly helpful when used before establishing action plans or setting specific goals. (Staff)

Future Protocol

This protocol is used to formulate what a plan or project would look like in the very best-case scenario. Also, it is used to initiate discussion about the steps, players, actions, and timelines it will take to be successful. (Staff)

Jigsaw

This protocol allows small groups to engage in an effective, time efficient comprehension of a longer text. Students can divide up the text, become an expert in one section, and hear oral summaries of the others and still gain an understanding of the material. (Background knowledge)

KWL

With this protocol, students create a 3-column chart that helps capture the Before, During, and After components of reading a text selection in order to aid comprehension. (Background knowledge)

Learning Logs

Learning logs are journals in which students record their thoughts, observations, feelings, and questions that relate to what they are learning in the content area classroom or in reading material. (Background knowledge)

Listening Circle

A protocol used for "discussion" where listening is emphasized over talking. Can be used to assess background knowledge and/or to make decisions about next steps to take in an investigation. (Discussion)

Magnetic Questions

This protocol is valuable for having participants talk about key issues before a reading, videotape viewing, or experience to build their curiosity and establish purpose. (Background knowledge)

Notice and Wonder

The "Notice and Wonder" protocol provides a format for giving and receiving feedback about written work or projects in a positive, productive way. This could be a good strategy to use during the revision stage of a product. (Critique)

Peer Critique

Provides structure for students to provide feedback to one another on their work in a safe environment. (Critique)

Praise Question Suggest

This protocol can be used by students to offer each other critique and feedback for revision of products and projects. (Critique)

Science Talks

Science Talks are discussions about big questions. They provide space for students to collectively theorize, to build on each other's ideas, and to learn about scientific discourse. (Discussion)

Scored Discussion Model

This is a protocol which raises the caliber of class discussion by asking students to be accountable for their contributions and helps develop a classroom culture of listening. (Discussion)

Sharing and Critique Planning Documents

This protocol provides a silent method for staff members to examine investigation/expedition planning documents and share resources and ideas by providing individual, written feedback/ (Staff)

Silent Gallery Walk

A protocol used to promote discussion about an investigation topic. (Background knowledge)

Socratic Seminar

Socratic Seminar is a whole group or fishbowl discussion of a common piece of text. It is a way for students to deepen their understanding of a piece of text through discussion. *See folder of materials.* (Discussion)

Spirit Read

This protocol helps a group determine importance and synthesize their understanding of a text. (Discussion)

Tableaus

Tableaus invite participants to collaborate and come to consensus on what a text means. The group then represents that meaning through a "still photo" - a moment "frozen in time." (Background knowledge)

Tea Party

This strategy offers students a chance to consider parts of a text before they actually read it. It allows students to predict what they think will happen in the text as they make inferences, see causal relationships, compare and contrast, practice sequencing, and draw on prior knowledge. (Background knowledge)

Text Rendering

To collaboratively construct meaning, clarify and expand our thinking about a text or document. (Discussion)

Text-based Seminar

The purpose of this discussion protocol is to understand text and to give all members of a group the opportunity to have their ideas, understandings, and perspectives enhanced by hearing from others. See version modified for questioning as well. (Discussion)

Voices Debate

A Voices Debate is an "arts-infused" instructional practice pairing a structured discussion format with an exploration of multiple perspectives on a compelling topic, issue, or question. While not designed as a traditional debate, the voices debate allows students to take a position on an issue, develop arguments to support their position, and to promote their perspective by both building on and countering other perspectives on the same issue. (Discussion)

World Café

To discuss a topic or various topics, rotating the role of leadership and mixing up a group of people. (Discussion)

Written Conversation

With this protocol, you can have a "discussion" where everyone is actively talking at once – though silently, and in writing. (Discussion)

Example Lesson:

What follows is one example of a possible lesson to be used at RGS. This lesson follows the workshop model described above:

Math Workshop – 1st Grade

Subject: 1st Grade Math – Math

Learning Targets: I can determine the two addends that create a sum.

	Description of Instruction
Instructional Focus:	The operation of addition with an introduction to subtraction as an inverse operation.
Mini Lesson and Application	**Hook:** *Jack knows that magic beans are growing on Hermit's Peak. He needs to have*

Connect Teach Active participation	*enough magic beans grow really quickly so his family has enough food to last through the winter. As he wandered up the mountain, he collected as many beans as he could find. At the top, he stopped for a rest, and a little snack, and counted his beans. He had 7. On the way down the mountain, he tripped over his shoelace that was not tied and some beans spilled from his hand and fell over a cliff. Sad and crying because he didn't think he only now had 2 beans to grow the food needed for his family, he stumbles into a bear. This bear is a mystical creature and talks to Jack. He says, "Son, I was napping in the sun at the bottom of the mountain and these beans came pelting onto my head." I am willing to give these beans back to you if you can guess how many I am holding in my paw."* Students solve the problem independently. Pair-share answers. Have one student share his or her answer and the strategy for finding it. I name the strategy. Name the strategy by the student's name. Ask for another way to solve the problem. If nothing, then I model a few other strategies. **Mini-lesson:** Model game with another person. Jack and the Beanstalk Game: From the same number of beans for each player (play in pairs), one person holds a mystery number of beans in hand and says, "Hey, Jack and the Beanstalk." The player guessing the number of beans in hand says, "Hi there bear!" The response is in return, "How many beans?" Guess how many beans. The difference is owed to the person holding the beans.
Application/Practice	**Grouping** (circle 1) : Individual **Partnerships** Sm. Group Whole Group Pairs of students have a piece of white paper and crayons. They draw their mountain. With beans for manipulatives, they play the Jack and the Beanstalk game. They place the beans on either side of the mountain to help them figure out how many beans the bear had in paw.
Share / Debrief	Share out "deep questions." Students find another set of partners and share out their hardest problem so that the other partners have to solve the problem. Ask for 2 groups to share out hardest problems to the whole class. Debrief by turning in student workbooks to introduce mountain math to the first problem. I model how to solve the mountain by a think aloud that draws the parallels to the Jack and the Beanstalk game. The students do the next 2 as guided practice. I then write out the fourth problem as an equation (8 + __ = 10). How do you know? Do the next 2 problems as independent practice.

B) EDUCATIONAL PROGRAM

1. Length of School Day and School Year

- State the length of the school day, including the number of instructional hours;
- State the length of the school year, including number of days and total number of instructional hours.

Statutory & Regulatory Reference(s):
6.80.4.9C(5) NMAC

Length of school day: 7.25 hours

Length of school year: 171 days 1111.50 instructional hours 185 contracted teacher days

2. Grade Levels, Class Size and Projected Enrollment

- State the grade levels the charter school will serve.
- State the total projected student enrollment (maximum enrollment for the school).

Statutory & Regulatory Reference(s):
6.80.4.9C(6) NMAC

Grade levels: K-8

Total enrollment: 125 (depending on space for classrooms, may be less if space is not available)

3. Graduation Requirements (if applicable)

- Describe the credits and requirements for graduation.

Statutory & Regulatory Reference(s):
NMSA 1978 Section 22-13-1.1
6.80.4.9C(7) NMAC

While RGS will not formally graduate students but certain grades will be expected to present passage portfolios for matriculation to the next grade level. These passage experiences will take place in 4th and 8th grades. These portfolios will contain multiple drafts, reflections on their work – how they have improved and met the learning targets, and rubrics and learning targets associated with the projects and assignments. Work will be drawn from all major subject areas. The purpose of the portfolio is to demonstrate student proficiency over time as well as growth in habits of scholarship. The passage experience is designed to be a ritual and tradition that serves to confirm that a student can move to the next level in his or her education.

During the passage experience, students present to a panel consisting of a teacher, a community member, and a parent or caregiver. Students who are not in a passage year will still present their portfolios to their parents during student-led conferences.

X) STUDENT PERFORMANCE EXPECTATIONS

Student academic performance is central to a school's existence. Student performance expectations must be aligned with the mission and the educational plan. The student performance expectations must be stated in SMART goal format.

- Provide student-centered goals that are SMART:
    - Specific;
    - Measurable;
    - Ambitious and Attainable
    - Reflective of the school's mission;
    - Time-Specific with Target Dates

Statutory & Regulatory Reference(s):
NMSA 1978 Section 22-8B-8E
6.80.4.9C NMAC

1. Through the high level of implementation of EL Core Practices, students will demonstrate academic excellence based on the performance on tests such as Measures of Academic Progress (MAP), Writing assessment, and the NMSBA or other state-mandated standards-based assessments.
   Students attending RGS for four years will show a **5% growth** in their NMSBA scores. The percentage of students achieving proficiency in math and reading on the NMSBA will increase **10% over** each year.

   Annually, students will make an 8-point gain in reading, math, and science according to the NWEA MAPS.
2. English Language Learners will make **50% or more of the required growth** to attain the next level on Assessing Comprehension and Communication in English State-to-State (ACCESS) or a similar test. Of these children, **80% will achieve the middle level or higher by the end of their fifth year**. Children acquiring Spanish in the language program will make consistent progress towards the level of Limited Spanish Speaker annually with at least **15% of them achieving the category of Fluent Spanish Speaker by the end of their fifth year** on the LAS (Language Assessment Survey) or similar test.
3. 50 % of students who attend RGS for **two consecutive years prior to 3rd grade** will achieve proficient or higher on their NMSBA scores in reading, and 30 % of students who attend RGS for **two consecutive years prior to 3rd grade** will achieve proficient or higher on their NMSBA scores in math.
4. 60% of students who enter RGS in third grade or above and attend school for **three consecutive years** will achieve proficient or higher on their NMSBA scores in reading, and 50 % of students who attend RGS for **two consecutive years prior to 3rd grade** will achieve proficient or higher on their NMSBA scores in math.
5. Students will demonstrate meeting benchmarks in art by attaining an assessment of a 3 on teacher-made rubrics and assessments.
6. After two consecutive years, **90% of all students will have achieved proficiency level in their portfolio** as measured by the portfolio evaluation criteria. Indicators used to define profi-

ciency level include successful defense of progress and work at bi-annual student-led conferences, ability to revise work based on feedback, and formation and execution of action plans to achieve self-directed goals.

Δ) PLAN FOR EVALUATING STUDENT PERFORMANCE

A Plan for Evaluating Student Performance must address the following components:

- the types of assessments, in addition to the statewide mandated testing, that will be used to measure student progress toward achievement of the NM Standards and the school's student performance expectations;
- the procedures for taking corrective action in the event that student performance falls below the NM Standards and/or the school's student performance expectations;
- remediation for students not achieving standards, including a timeline for implementation of the remediation plan; and
- the process for documenting and reporting of student data to students and parents.

Statutory & Regulatory Reference(s):
NMSA 1978 Section 22-8B-8E
6.80.4.9E NMAC

Expeditionary Learning guides schools to use multiple sources of data to improve student achievement. Teachers and school leaders in Expeditionary Learning schools collect data to understand student achievement, assess teaching practices, and make informed decisions about instruction. They analyze and disaggregate test data to determine patterns of performance and collect and use multiple sources of data beyond test scores (e.g., data on school-level assessments, student engagement, family participation, and teaching practices). Expeditionary Learning school leaders use data to tell their schools' stories, and to leverage change and make decisions about investment of resources to promote equity and achievement.

Assessment practices in Expeditionary Learning classrooms drive instructional decisions and invite students into the assessment process. Teachers analyze student work and evidence of student thinking to understand learning and to shape instruction. Assessment practices help students understand, reflect on, and take responsibility for their own learning. Teachers and students collaborate to develop standards-based criteria for good work, and students learn to use explicit criteria to assess their progress and improve.

Types of assessments to be used at RGS

Standardized or Criterion Referenced Tests

Students will take all state and federally required Standardized or Criterion Referenced Tests including the NMSBA--or a future state recognized standardized test based on NM standards and benchmarks. In addition, students will be administered short-cycle standards–aligned assessments including Measures of Academic Progress (MAP), Dibbles, and writing assessment. Short cycle formative assessments will be used to target instruction, address conceptual difficulties displayed by students, identify students needing additional support, and inform the subject-specific EPSS plan.

Teacher-generated Assessment Tools

Teacher-generated assessment tools, based on the NM state standards, will be given throughout the year. These formative and summative assessments will be given to chart student progress and to provide the necessary information to modify instruction and target student support. These assessments can range from short quizzes, criterion-referenced projects (using rubrics), written and oral tests, or summative exams. Teacher assessments are used to inform the instructor of teaching effectiveness and student needs. This information will be utilized for evaluative purposes as well as diagnostic and curriculum design purposes.

Standards-based assessment is used at RGS. Using long-term targets as the assessment measure, students are evaluated on the level at which they meet the target. Teachers at Expeditionary Learning schools are instructed to use the standards-based approach, as it has been articulated by Rick Stiggins and the Assessment Training Institute (http://www.assessmentinst.com/). Teachers at RGS will use both assessment "for" learning and assessment "of" learning. In other words, both formative and summative assessments are fully integrated into the teaching and learning. The assessments "of" learning will range from quizzes and tests, to rubrics, oral evaluations, and performances. The fundamental expectations of the assessment process are to engage, support, and hold students accountable.

Formative Assessment

From the EL perspective, formative assessment is pedagogical practice that forms a cycle of project-based teaching and learning. Based on the work of Rick Stiggins and ATI, with input from the EL assessment program group, when implementing curriculum, there are nine components of the formative assessment cycle infused into lesson planning. The nine components are as follows:

Assessments FOR Learning (formative)

Teachers…

- Provide students with a clear and understandable vision of the learning targets
- Use examples of strong and weak work
- Offer regular descriptive feedback
- Teach students to self-assess and set goals.
- Design lessons to focus on one aspect of quality at a time.
- Teach students focused revision.
- Engage students in reflecting on, tracking, and sharing their learning
- Use assessment information to refine curriculum and guide instruction

(Stiggins' seven AFL strategies, plus 1 from ELS)

Students…

- Articulate learning targets
- Analyze models to describe what reaching the target does and does not look like
- Analyze models to identify strategies for meeting the learning targets
- Make use of descriptive feedback from peers or teachers
- Assess their own work (or work of peers) to determine the distance between their current understanding or skill level and the target, and to identify next steps
- Revise for one aspect of quality at a time.
- Reflect on and keep track of progress over time
- Use reflection to set goals for future work

Assessments OF learning (summative)

Teachers…

- Create a set of targets with an intentional distribution of types and outcomes (knowledge, skill, reasoning; subject area content and skills, literacy, craftsmanship, character)
- Select appropriate methods to assess learning
- Design high-quality assessments to measure progress toward long-term and supporting learning targets for expeditions, investigations, learning experiences and lessons

Within an EL school, the student-friendly learning targets written from state standards for each learning expedition, project, and product are aligned with the appropriate assessments, formative and summative. The creation of assessments prior to the writing of lessons ensures that teachers and students are explicit and understand exactly the skill or content they are intended to learn and on which they are to demonstrate proficiency. The following examples show the target-assessment alignment and the translation of this level of backwards planning into a document that shows the scaffold necessary to support all learners in achieving proficiency on standards.

Expedition Target/Assessment Overview Example

Expedition: Cardiovascular System
Investigation 3: Heart Health - Exercise

Standards Addressed (Content, Literacy & Habits):

(Content) Biology:

- Students understand the importance of exercise as a component of basic health requirements for humans (USDA-U.S. Department of Agriculture).

(Content) Systems and Interdependence:

- Students can predict the cause and effect of their cardiovascular health based on a lifestyle with or without exercise.

(Content) Models:

- Students can model how anaerobic and aerobic exercise impacts parts of the cardiovascular system (heart, blood, blood vessels) and the health of the cardiovascular system as a whole.

Literacy:

- **New Focus - Students can use lively verbs and specific nouns.**
- **Ongoing**-(Writing-Ideas) Students can choose details that are interesting, important, and informative.
- **Ongoing**-(Writing-Conventions) Students can use strong conventions in spelling, punctuation, capitalization, and penmanship.
- **Ongoing**-(Reading-Determining Importance) Students can identify the main idea and find information to support particular ideas.

Habits:

▪ (Revision) - Students can use critical feedback to improve their work.	
Long-term Learning Targets *Learning Targets that correlate directly with standards and are reported on in a grade and/or progress report*	**Assessments** *Summative Assessments that are planned to match long-term targets*
Content Target: I can describe how the choices I make about exercise affect my heart health.	▪ **Exercise Journal Analysis & Conclusion** ▪ **Exercise Presentation – Site Seminar Survey**
Literacy Target: I can write a persuasive statement about the importance of exercise for heart health.	▪ **Persuasive Writing - drafts** ▪ **Exercise Presentation - Site Seminar Participant Survey & Display**
Culture Target (Revision): I can revise my persuasive statement (or exercise routine) to present a high quality product for site seminar guests.	▪ **Persuasive Writing – yellow and blue draft** ▪ **Exercise Presentation – Site Seminar Survey & Display**

Content Target: I can describe how the choices I make about exercise affect my heart health.

Content Supporting Targets	Content Formative Assessments
o I can locate and highlight important information to help me learn more from my research about exercise. (skill)	▪ Copies of differentiated text that has been text-coded.
o I can define and categorize aerobic and anaerobic exercise. (knowledge)	o Definition exit ticket o Group T-Chart
o I can describe the difference between life choices and inherited problems that affect heart health. (knowledge)	o Matching quiz o I Control/I Can't Control T-Chart
o I can describe how aerobic and anaerobic exercise affects heart health. (knowledge)	o Cause and Affect Map (i.e. I swim, which causes my heart to pump faster, and the affect is my heart becomes a stronger muscle) o Short answer response
o I can create an exercise routine that is heart healthy.	o Group Exercise Routine Plan o Peer Critique o Rubric o Conferring
o I can assess how my own exercise is affecting my heart health. (reasoning)	o Exercise Journal analysis and conclusion.

Literacy Target: I can write a persuasive statement about the importance of exercise for heart health.

Literacy & Habits Supporting Targets	Literacy Formative Assessments
○ I can compare explanatory and persuasive writing about the same topic. (reasoning)	▪ T-Chart on similarities and differences or Venn Diagram.
○ I can identify specific nouns, verbs, and adjectives used in persuasive writing. (knowledge) ○ I can write a persuasive statement using persuasive language. (Skill)	▪ Highlighting selected nouns and verbs found in model text. ▪ Short Write slips – All students given the same details about the topic. Highlight the nouns and verbs used.
○ I can plan my persuasive writing and include three reasons why aerobic exercise is important to heart health. (Skill) *Tricky Target (determining Importance)	▪ Anchor Chart ▪ Persuasive Statement Plan with 3 reasons outlined.
○ I can write my persuasive statement following my plan and rubric. (Skill)	Persuasive Statement - Writing Yellow Draft

Culture Target (Revision): I can revise my persuasive statement (or exercise routine) to present a high quality product for site seminar guests.

Literacy & Habits Supporting Targets	Literacy Formative Assessments
○ I can use teacher feedback to revise my persuasive statement. (skill)	▪ Persuasive Statement - Rubric ▪ Persuasive Statement - Writing Yellow Draft
○ I can use peer feedback to edit my persuasive statement. (skill)	▪ Persuasive Statement - Rubric ▪ Persuasive Statement - Writing Yellow Draft
○ I can revise my exercise routine using a rubric to present a high quality product for site seminar guests.	▪ Rubric ▪ Revised Exercise Routine Plan ▪ Debrief

Scaffolding Plan – CONTENT
Expedition: The Cardiovascular System
Investigation 3: Heart Health - Exercise

Long Term Target(s):

I can describe how the choices I make about exercise affect my heart health.

Supporting Target(s):

- (Literacy/Content) I can locate and highlight important information to help me learn more from my research about exercise.
- I can define and categorize aerobic and anaerobic exercise.
- I can describe the difference between life choices and inherited problems that affect heart health.
- I can describe how aerobic and anaerobic exercise affects heart health.
- I can create an exercise routine that is heart healthy.
- I can assess how my own exercise is affecting my heart health.

Instructional Steps – Practices and Strategies **Formative Assessments in Green** **Summative Assessments in Bold**	**Predicted Areas of Difficulty**	**Ideas that I have for Differentiation**
Review – Prior Learning (heart, blood, now health)		
Introduce-LT & Exercise Presentation for site visit		
Introduce-Exercise journal routine for data collection		
Journal Question & Share – How do you think exercise affects (changes) your heart health?		
Partners – Locate kinds of exercise from magazines (cut and paste). Confer with students on selections.		
Color teams –Sort exercise by more tiring and less tiring to perform.		
Partners – Research types of exercises from pre-selected, printout resources. [redacted] information and start Crew T-Chart outlining information on aerobic and anaerobic exercise		
Whole Group - Review PE activity and exercise discussion with P.E. teacher.		
Whole Group - Develop definition for aerobic and anaerobic.		
Color teams – [redacted]		
[redacted]		
Journal Question & Share – Name and describe any heart problems you know about.		
Whole Group: Discuss heart problems they are aware of that we predict we had a choice in or not.		

Guest Speaker: (A. Anderson) Personal Story: A hole in my heart. Exit ticket: In my control/out of my control		
Whole Group: Video & website on heart disease and discussion on risk factors (focus in on physical inactivity).		
Review USDA physical activity pyramid		
Journal Question: Based on BBK do you think aerobic and anaerobic exercise both help prevent heart problems like heart disease? Why or why not?		
Partners: Pre-selected resources on anaerobic and aerobic exercise. Students research to uncover the benefits of these types of exercise and highlight. Record on crew anchor chart (benefits of each type of exercise)		
Whole Group: KWL anchor chart on what we know and still need to know about benefits of exercise to heart health.		
Partners: Continue researching to answer remaining questions from KWL. Save remaining questions for expert.	**Yes**	Find focused resources that have the answers to remaining questions.
Expert: (F. Jovel) personal trainer. Remaining exercise questions answered.		
Cause and Effect Map Quiz – Aerobic & Anaerobic		
Journal Question: How do you know when you've done enough exercise to keep your heart healthy?		
Partners: Explore USDA and other resources recommendations on frequency and duration of aerobic exercise.		
Whole Group: Take resting heart rate and record. Students go through an exercise routine including warm up, cardio, (take active heart rate and record) and cool down.		
Color Teams: Students work together to draft an exercise routine plan that is heart healthy. Confer with groups and have them prove with facts or demonstration that their routine is heart healthy.		
Whole Group: Discuss Exercise Routine Rubric and make adjustments as needed to language and final product ideas. Fishbowl using rubric. Groups self-assess based on rubric, revise routine, and debrief.	**Yes**	Meet first with groups that struggle with self-assessment and rubric reading to clarify and give small steps as needed.
Cardio. Exercise Presentations – Students demonstrate their exercise routine with site visit participants. **They also present their final persuasive piece. Site visit guests complete**		

surveys based on presentation and content (knowledge).		
Individual/Partners: Graph exercise data	**Yes**	Mini-lesson with timed check ins. Visual model on Elmo & buddy pairs
Whole Group: Graph crew exercise data		Use dot plot graph and sticker dots
Individual/Partners: Re-graph for aerobic only Students revisit data tables and use BBK to determine if their exercise was aerobic or not and update.	**Yes**	Mini-lesson with timed check ins. Visual model on Elmo & buddy pairs
Whole Group: Re-graph crew aerobic data and compare with recommendations.		Use dot plot graph and sticker dots
Partner & Whole Group: **Write analysis** in exercise journal and discuss findings.	**Yes**	Examples of good and poor notices from data/graphs.
Individual & Whole Group: **Write conclusion** in exercise journal and discuss.		

Proficiency-based assessment

To adequately determine progress in meeting state standards through learning targets, all major work must be assessed following a standards-based rubric. Rubrics clarify for the teacher and the learner the qualities of success, what proficiency "looks like."

Scoring

The following scoring system will be used when assessing student work. The use of this system will be well articulated with parents and students, with the goal of transparency and clarity of both expectations and level of accomplishment.

"4" = DISPLAYS EXCELLENCE IN MEETING LEARNING TARGETS
"3" = DISPLAYS PROFICIENCY IN MEETING LEARNING TARGETS
"2"= ADEQUATELY MEETS LEARNING TARGETS
"1"= APPROACHES LEARNING TARGETS
"0"= HASN'T BEGUN or JUST BEGINNING TO MEET TARGET

Effort and Participation

Within the standards based assessment methodology comes the removing of character assessment to a separate evaluation. In other words, participation, behavior, and extra-credit are not included in the academic assessment of whether a student has met the standard. Realizing that character assessment is also a valuable piece of information, character will be assessed separately, evaluating students "habits of work."

Habits of Work

In addition to academic expectations, students are expected to build culture and character through their Expeditionary Learning experiences. 5P's will be fostered through learning expeditions and

instructional practices, as well as activities specifically focused on community building. Students will be assessed on these Habits of Work as they are articulated through academic courses, crew, intensives and any related school activities or events. RGS' Habits of Work are based on the school motto, "Respect, Responsibility, Above All Be Kind and the 5 P's: prompt, prepared, positive relationships, positive mental attitude, and participation.

Academic Portfolios

At RGS, academic portfolios will the place where students house evidence of intellectual achievement. The content of portfolios will be the projects and products associated with each grade level learning expedition. Portfolios will contain evidence and artifacts that demonstrate a student's progress towards a standard- based learning target. The portfolios include multiple drafts, rubrics, feedback from peers and teacher, and elements of self-reflection and goal setting.

Students use these portfolios to present their learning at student-led conferences throughout the year. Teachers analyze those portfolios and other classroom assessments to determine progress toward academic targets and/or "Habits of a Learner" targets. The portfolio is a crucial tool for revealing what each student has learned. They help teachers and students notice missing links in a child's learning and also acknowledge and celebrate a student's accomplishments. Portfolio's will assessed as "mastery level" or "in progress" based on evaluation criteria laid out in the previous section.

- ***Provide the procedures for taking corrective action in the event that student performance falls below the NM Standards and/or the school's student performance expectations.***

Effective use of differentiation in the classroom is also a pathway for the remediation of students. Differentiation strategies should be implemented continuously in classrooms and be reflected in lesson planning. The two strategies for differentiation that work toward remediation are tiering and compacting (Tomlinson, 1999). Tiering is a method of activity planning based on readiness. Within the planned, tiered activities, all students are engaging in the enduring understandings of the lesson, but at varying levels of complexity, difficulty, and abstraction. Compacting relies on the results of pre-assessments prior to engaging with a set of new learning targets. If a student already knows ¾ of the content, that student needs a new set of learning targets. The results of the pre-assessment are also used to locate patterns in what students know and what they don't know. These results are then used to create more meaningful and challenging work crafted for the needs of students in the classroom (Tomlinson, 1999).

In the event that more extensive corrective action is warranted, Title I services, after school-tutoring, individual and small group instruction will be provided. There will be on-going conference with parents/guardians to set goals for the student.

- **Provide remediation for students not achieving standards, including a timeline for implementation of the remediation plan**

Intervention and Remediation

We have designed the Rio Gallinas School curriculum to meet the individual learning styles and academic, social, and physical needs of all students. A high percentage of students who enroll in non-traditional public school programs are at risk. These students may be bilingual with limited English

proficiency, identified as special education performing below or above grade level, and/or exhibiting social and behavioral needs.

Formative assessments and observations helps identify the performance of each student on a specific skill measure. During data analysis, previous benchmark data for the class, RGS will review to identify where the majority of the students appear. The students who are not performing to the class norm are the students referred to the academic support team consisting of teaching staff and support people.

How Students are Referred to the Academic Support Team:

The following are reasons that a student might be referred to the Academic Support Team. When any of these concerns arise, the parents will be notified.

- Missing or incomplete class work.
- Missing or incomplete homework.
- Work is consistently turned in late.
- Work does not reflect quality expected.
- Independent/group work time is consistently used unproductively.
- Student does not show habits of a learner (5 P's).

Grade level expectations will vary. If a child has an IEP or 504, then that document will be used as reference and taken into consideration in class/work modifications and in the academic contract. The goal is to support the student, or, if the support does not succeed, assist the student in finding an academic placement better matched to his/her learning needs. RGS is not intended to be an academic fit for all students and our goal is success for each student, even if that means recommending a different academic environment.

The process of Academic Support Program is as follows and would be an aspect of Tier I intervention leading to Tier II placement, if necessary:

- An initial meeting is arranged with parents, teachers (including Special Ed if needed), and the student.
- At the initial meeting, a contract is developed to improve performance and growth. Clear guidelines are developed so everyone knows what will need to happen for the student to get off academic probation. The contract will last approximately 6 weeks.
- At the initial meeting, follow-up meetings will be scheduled – the first to be held in three weeks and the other at the end of the contract. These meetings will serve to assess progress on the contract and the student's probationary status.
- At the three-week follow-up meeting:
    1. If the student is making progress, that progress will be celebrated. The contract will be discussed and revised, if necessary.
    2. If insufficient progress is being made, the director will join the meeting. The contract will be discussed and updated. An additional meeting may be set in two weeks to track progress, if deemed necessary.
- At the end of contract meeting:
    1. If the student is making progress and all parties agree that contract requirements have been fulfilled, the student may be removed from probationary status.
    2. If insufficient progress has been made during the contract period, probationary status will continue. The student will be referred to the Student Intervention Team. Other outcomes could be referral to the SAT team, retention, tutoring, discussion of a better academic match, summer school.

RESPONSE TO INTERVENTION (RTI)
SIX CRITICAL COMPONENTS OF AN RTI MODEL

A six-stage academic intervention program that addresses the needs of low performing students is recommended before the student is referred to special education. John E.

McCook from Knox County Schools (TN) presented the six components in a recent audio-conference:

1. Initiate Universal Screening

The first critical component of RTI is universal screening administered to all students three times a year beginning in mid-kindergarten. Universal screening is used to pinpoint early academic difficulties.

- ☐ Develop "benchmark" data norms for the classroom, grade level, school/district.
- ☐ Collect benchmark data during the fall, winter and spring.
- ☐ Supply the data to teachers, principals and district staff and parents.

2. Measure Problem Areas

Assessment results (specific and objective data as opposed to anecdotal or opinion-based information) assist in developing hypotheses regarding the following:

- ☐ Whether a problem represents a student's skill or performance issue
- ☐ Whether the problem is occurring in measurable and observable terms
- ☐ The factors that are associated with the occurrence of the problem

3. Establish Baseline Data

The use of curriculum-based measurements helps to identify the performance of each student on a specific skill measure. During the data analysis, previous benchmark data for the class, school and district should be reviewed to identify where the majority of the students appear. If no student "sticks out" the problem may be instructional or core curriculum related. The students who are not performing to the class norm are the students to identify for intervention.

4. Write an Accountability Plan

Once the problem is identified an intervention plan must be written that includes:

- ☐ Description of the specific intervention.
- ☐ Duration, schedule and setting of the intervention.
- ☐ Persons responsible for the implementation of the intervention.
- ☐ Measurable outcomes to use for adjustments as needed.
- ☐ Description of the skill measurement and recording techniques.
- ☐ A progress monitoring schedule.

5. Monitor Progress

Various data collection methods should be used to examine student performance frequently over time, such as academic, social and behavioral data.

6. ***Compare Data***

Comparing pre-intervention data to post-intervention data will inform whether the instruction has been effective and the decision-making rubric is applied

- *Describe how the school will document and report student data to students and parents.*

Documentation and Reporting of Student Progress and Data

Annual Standardized Test results (NMSBA, etc.) will be sent out to parents or given during our back to school orientation (depending on when they arrive from the state).

Short Cycle Tests results are given to families after each testing cycle during a parent conference. The student copy will also be used for students to set goals using the NWEA student goals setting worksheet. Additionally, a copy of scores will become part of the student's cumulative record. The school will also use the information to present overall trends to the governing council and in work with staff to make school-wide instructional decisions.

Communicating Assessment Results (from Stiggins, ATI)

Teachers…

- Identify long-term learning targets on which grades will be based
- Use assessment information to determine overall progress toward long-term learning targets
- Provide students with summative feedback connected to long-term learning targets
- Follow school-wide procedure for determining final academic grades

School…

- Provides report cards

Students use the following structures to communicate their progress toward learning targets…

- Portfolios
- Performances
- Parent Conferences
- Student-Led Conferences
- Presentations of Learning
- Passage Presentations

Passage Portfolios

RGS will be using a portfolio system in which students will collect and display their learning. Portfolios will be built throughout the school year and 4th and 8th grade students will participate in a "passage" process, in which they will use their portfolios to share with a group of community members their accomplishments and growth. Within the portfolios, observers will be able to identify where and how students have met targets / standards.

Working Portfolios will be presented to parents during bi--annual conferences.

Standards-based report cards will be sent home to families twice a year. The dates will be recorded on our annual state-approved calendar.

E) SPECIAL POPULATIONS

An educational plan must provide a description of the how the charter school's educational program will meet the individual needs of Special Populations and must address the following components:

- suggested modifications to the proposed educational program to meet individual student needs, such as bilingual, limited English proficient, and special education;
- a special education plan that demonstrates understanding of state and federal special education requirements including the fundamental obligation to provide a free, appropriate education to students identified with disabilities;
- how the charter school will provide access to ancillary services including, but not limited to, counseling and health.

Statutory & Regulatory Reference(s):
NMSA 1978 Section 22-8B-8D
6.80.4.9D NMAC

Differentiation of the program of instruction to meet individual students is a crucial piece of the educational plan at RGS. The special populations for which careful consideration is taken in writing curriculum and instruction includes bilingual, limited English proficient, and special education placement students. Part of the selection of the EL model was due to its success in serving at-risk populations, including students with ELP and students served by IEPs. The EL model includes active pedagogy, and incorporates many best-practice strategies for students with LEP (Limited English Proficiency). A main theme of the Expeditionary Learning model is inclusive classrooms and the inclusion model. As part of our minimum of 20 days of PD, teachers will receive training in differentiation strategies, which are part of the EL model of curriculum delivery.

Bilingual & Limited-English Proficiency (LEP) students

RGS will comply with all applicable federal laws in regard to services and the education of English Language Learners (ELL) relative to annual notification to parents, student identification, placement, program options, ELL and core content instruction, teacher qualifications and training, reclassification to Fluent English Proficiency (FEP) status, monitoring and evaluation of program effectiveness and standardized testing requirements.

Bilingual/Limited English Proficient students will be addressed utilizing a combination of the following: certified bilingual/TESOL teachers, English-speaking and bilingual peers and the school wide Spanish bilingual program. The RGS bi-lingual program has set goals and strategies outlined that change from year to year depending on the population. This plan details teacher training, instructional strategies, and clear annual goals to support bi-lingual students with LEP, and heritage speakers. Specific modifications can be found in the yearly Federal Bilingual Application.

Examples of how RGS may meet the needs of LEP students:

- Use immersion approaches and other research-based second language acquisition techniques to teach Home Language Arts.

- Use of the SIOP (sheltered instruction, observation protocol) model/gradual release of responsibility model to support second language learners.
- Provide continuous professional development to all staff on principles of language acquisition and Bilingual Multicultural Education.
- Provide continuous professional development to teachers of Bilingual Multicultural Education classes (conferences, workshops, university courses, etc.)
- Emphasize instruction in the five language domains (listening, speaking, reading, writing, and comprehension).
- Provide a research-based Bilingual Multicultural Education program (use of GLAD, Guided Language Acquisition Design, & SIOP strategies).
- Use team teaching to lower pupil-teacher ratio.
- Focus on instructional techniques for beginning language learners (Total Physical Response, Sheltered Instruction, vocabulary development)
- Focus on techniques to lower affective filter for the middle school age group by using motivating activities and interaction.
- Use ESL/ELD strategies and materials that cover cross-content material in all subject areas.
- Plan lesson activities for rich language use.
- In ESL/ELD classes, emphasize cross-content material via study of essential questions, themes, trends, concepts, vocabulary, positive interactions with students and high performance expectations, etc.
- Create experiences to build additional background knowledge for students - both directly, such as with trips, plays, performances, mentoring relationships; and indirectly, such as with instructional materials.
- Provide continuous professional development to all staff regarding principles of language acquisition and Bilingual Multicultural Education to relate to vocabulary development across all content areas.
- Provide continuous professional development to all staff to ensure that research-based ESL/ELD strategies are used in every subject area.

Additionally, at RGS time is devoted to the EL structure of Crew, essentially an advisory model to develop a safe environment for students to explore cultural differences and similarities, have support in goal setting and life-skills (organization, time management, positive communication).

Students with Special Education Needs

At RGS, the inclusion model, with emphasis on differentiated instruction, is the central service model. Students with disabilities as well as gifted students will be included in the general classroom setting as much as is educationally possible. They have access to general education curriculum in a manner consistent with federal and state laws and regulations, and consistent with the mission and vision set forth in the RGS Charter. However, if a special needs student requires more intensive or direct support, he or she will receive that service in a different way that could include small groups or one-on-one instruction. The San Miguel area also has several community-based partnerships to support students with special needs. Team builders have a history of working with the school to provide BMS workers (Behavioral Management Specialists) to support students. Students can include community partners and mentors as part of both their IEP and IEP team. Enhancement students may craft PLPs (Personalized Learning Plans) with projects that encourage them to explore areas of interest, develop higher level thinking, organizational skills, community connections and apply standard-based skills.

RGS will use key state manuals/documents to shape its policies:

- Developing Quality IEPs Technical Assistance Manual
- Student Discipline for Students with Disabilities
- Addressing Student Behavior
- Making Placement Decisions in the Least Restrictive Environment
- Section 504: Guidelines for Educators and Administrators for Implementing Section 504 of the Rehabilitation Act of 1973
- The Student Assistance Team (SAT)
- The Three-Tier Model of Student Intervention

- *Provide an outline of a special education plan (the final plan of which must be completed and submitted to the charter authorizer by the end of the planning year) that demonstrates understanding of state and federal special education requirements including the fundamental obligation to provide a free, appropriate education to students identified with disabilities.*

RGS Specific Special Education Plan

RGS will identify, locate, and screen students in need of special education services pursuant to Section 504 of the Rehabilitation Act of 1973, Title II of the American With Disabilities act of 1990 (ADA), and the Individuals with Disabilities Education Act 2004 (IDEA). Individualized Education Plans (IEPs) will be developed for those students who are identified as eligible for special education services. An initial evaluation has to be completed within 60 days. RGS will comply with the IEP process established by state and federal law to insure that all students are properly identified, assessed and services delivered. Students previously identified as qualifying for special education services will have their IEPs evaluated within the time period specified in the IEP (based on the annual and every 3 year evalaution) and receive the special education services outlined in their current IEP or have an updated IEP formed that emphasizes the inclusion model and the active pedagogy of the EL model. Each student will be reevaluated as determined by the student's current IEP. This process will assure:

- Equal access to all students
- Individualized Education Plan
- Free Appropriate Public Education (FAPE)
- Least Restricted Environment (LRE)
- Due process and parental involvement
- Nondiscriminatory evaluation

Student Assistance Team and Student Eligibility for Special Education

RGS will use the NM PED Student Assistance Team Manual as guidance for providing student support. As recommended in the manual, a three-tiered approach will be implemented.

TIER I

If a teacher recognizes that a student is struggling to learn the standard curriculum, either working beyond the standard curriculum, or having difficulty maintaining appropriate behavior in the general education classroom, then the teacher will conduct general screening and will implement classroom-based interventions. If the student does not respond to the interventions, then the student is referred to the Student Assistance Team (SAT).

TIER II

The Student Assistance Team (SAT), a school-based group of people whose purpose is to provide

student support, will recommend targeted individual interventions. It may be a specialized program that includes small group instruction. Tier II interventions are implemented in addition to the Tier I interventions. Should the student not demonstrate a positive response to intervention, then the student moves to Tier III.

TIER III Special Education Referral Process

Students referred to this tier have begun the special education referral process. RGS will follow the rule that informed parental consent must precede initial evaluation, and the parent's consent to initial evaluation will not be construed as consent for special education services. The initial evaluation will be completed within 60 days from the date of parental consent, as per IDEA 2004.

Determination of Eligibility and Educational Need

Upon completion of the initial evaluation, a Multidisciplinary Team Meeting (MDT) will be scheduled. A written notice to parents will be sent to inform them of, and invite them to, the meeting. Parents will be afforded sufficient time for response and opportunity to request another time in order to accommodate their schedules.

The MDT team is composed of the student's parents and educational professionals such as general and special education teachers; a diagnostician; related service providers, if they conducted an evaluation; and the school administrator. The purpose of the meeting is to determine that the student is a student with a disability and to determine the educational needs of the student. The team develops an Individualized Education Plan (IEP) at that point. The IEP team will meet annually to update and develop the IEP for the succeeding year.

INDIVIDUALIZED EDUACATION PLAN (IEP)

RGS will be responsible for developing, implementing, reviewing, and revising an IEP program in compliance with all applicable regulations and standards for each student with exceptionalities served by the school. At an IEP meeting, the individualized education plan for a student is developed by a team who, together, make informed decisions designed to provide the student with his or her best opportunity for success both in the present and future. RGS recognizes that the IEP is the written statement documenting a unique educational plan to assist a student with exceptionalities to receive a free appropriate public education, and is required for any student eligible for services.

The IEP team is composed of the parents, regular education teachers, special education teachers, the administrator, and other professionals with relevant knowledge or expertise, and individuals invited by the school or parents (such as an interpreter, mentor, or an advocate).

The following actions will have already occurred prior to the IEP meeting:

- Evaluation of the child through a variety of assessments, observations, and information gathering.
- Targeting all areas related to the student's eligibility.
- If this an initial IEP, have the MDT team examine the data and determine if the child meets
- the criteria to be considered eligible for special education and, if appropriate, related services.
- Record determination results. If a student is found eligible for special education because of a specific learning disability,
- The MDT must also compete the form "Determining the Existence of a Specific Learning Disability." This two-page form includes objective results (such as test data) and subjective assessments (such as observation and professional opinion) to make the determination. This form also requires each team member to agree or disagree with the findings. A team member who disagrees must submit a separate statement presenting his or her conclusions.
- A written notice of the meeting has been sent to the parents.

IEP CONTENT

IDEA 2004 requires that when developing a student's Individualized Education Plan, that the following information be considered:

- the strengths of the child;
- the concerns of the parents for enhancing the education of their child;
- the results of the initial evaluation or most recent evaluation of the child, and
- the academic, developmental, and functional needs of the child.

To this end, RGS will use a form based on the New Mexico Special Education Bureau's IEP form. RGS will follow the state's lead in the RTI & IEP process and formats, updating to reflect changes at the state or federal level.

STUDENT DISCIPLINE

IDEA 2004 states that school personnel may consider any unique circumstances on a case-by- case basis when determining whether to order a change in placement for a student with a disability who violated a code of student conduct, Section 615(k)(1)(A). Therefore, the School Administrator of RGS will consider each set of unique circumstances in deciding whether to seek a long-term disciplinary removal of a student with a disability. A long-term disciplinary removal is 10 or more school days.

MANIFESTATION DETERMINATION

Should the school recommend a change in the student's placement due to a disciplinary offense, the school, parents, and relevant members of the IEP will review all information in the student's file, including the child's IEP, any teacher observation and any relevant information provided by the parents to determine

- If the conduct in question was caused by, or had a direct and substantial relationship to the child's disability; or
- If the conduct in question was the direct result of the school's failure to implement the IEP.
- Should the manifestation determination conclude that the conduct in question was not caused by the child's disability; the IEP team is charged with determining an interim alternative education setting for the student. Section 615(k) (2).
- If it was determined that the child's behavior was related to the disability, the IEP team is to return the child to the placement from which the child was removed, unless the parent and the school agree to a change of placement as part of the modification of the behavioral intervention plan. Section 615(k) (1) (F) (iii).

FUNCTIONAL BEHAVIORAL ASSESSMENT (FBA) & BEHAVIORAL INTERVENTION PLAN (BIP)

A functional behavioral assessment is done when a student's behavior interferes with his or her learning or the learning of other. Its purpose is to identify why a behavior is happening so that the IEP team can develop appropriate interventions. TISA will use the FBA and BIP forms provided by the NM PED Special Education Bureau.

Regarding a manifestation determination finding that a student's behavior was related to his/her disability, and then the IEP team must conduct a functional behavioral assessment and implement a behavioral intervention plan for the child, unless a FBA was already conducted prior to the behavior in question. Section 615(k) (1) (iii). If the school already had developed and implemented a BIP for the student, the IEP must review the plan and modify it, as needed to address the behavior in question.

SUSPENSION AND EXPULSION

To ensure equal treatment, all students who are responsible for their conduct will be disciplined under the same due process procedures. The law provides students with disabilities a different status than that of non-disabled students. If the determination is made through a functional behavioral assessment, that

the misconduct of a student with a disability is not related to the student's condition or educational placement, then the student with a disability whose conduct may warrant suspension or expulsion will be provided appropriate due process in the same manner as all other students. If the apparent misconduct is determined through the same assessment, to result from the student's condition or educational placement, a behavioral intervention plan shall be developed and implemented.

TREATMENT OF STUDENT RECORDS

Assessments of IEPs and all other student records will be confidential, consistent with state and federal law. RGS will assure that all records and procedures pertaining to them will comply with the New Mexico Inspection of Public Records Act.

LEAST RESTRICTIVE ENVIRONMENT

Students who qualify for special education services will be placed in the least restrictive environment (LRE). Depending upon the student's needs this could be inclusion in regular programs, special speech and language services, and partial day special education classes specific to the student's needs. It can also extend to local district, regional services or school contracted private providers. Instructional support materials, computer programs, books on tape and other materials may be available to enhance and increase academic learning.

ALTERNATIVE ASSESSMENT

RGS understands that Alternate Assessment was developed for students with severe cognitive disabilities. It measures the performance of this relatively small population of students who are unable to participate in the general assessment system, with or without accommodations as determined by an IEP team.

In the event that a student is enrolled at RGS whose disabilities preclude him/her from valid and reliable participation in general assessments, an alternate assessment will be used to gather information on the standards-based performance and progress of the student. Eligible students will take the New Mexico Alternate Assessment as an alternate to state mandated testing in those grades. Teachers can use the results each year to identify goals, program needs, and student growth. The IEP team will complete the New Mexico Public Education Department Addendum for Determining Eligibility for the New Mexico Alternate assessment and provide documentation that the student meets participation or eligibility criteria. 34 CFR Sec 300.138(b) (1).

DUE PROCESS

Due Process Hearing Procedures may be initiated between parent and public education agency concerning the following circumstances:

1) A proposal or refusal to initiate or change identification, assessment, or educational placement of a child or the provision of a free, appropriate, public education to the child.

2) A parent refuses consent to assessment procedures.

A mediation conference may be requested at any point during the hearing process if both parties agree to mediate and are willing to extend the 45-day limit for issuing a hearing decision for a period equal to the length of the mediation process.

Section 504/American Disabilities Act

Section 504(Subpart D) is a civil rights law that is the responsibility of the comprehensive general education system. It requires students with disabilities be provided with a free appropriate public education (FAPE). As such, RGS will provide the a range of accommodations and services necessary for student with disabilities to participate in and benefit from public education programs and activities.

RGS recognizes that all individuals who are disabled under the Individuals with Disabilities Act

(IDEA) are protected, under Section 504/ADA. However, not all individuals who are disabled under Section 504 will meet the eligibility requirements of IDEA. These children require a response from the regular education staff, and a plan for the provision of accommodations and services may take the form of a written Section 504 Plan.

ELIGIBILITY

Section 504 protects all qualified students with disabilities, defined as those persons having a physical or mental impairment, which substantially limits one or more major, life activity; has a record of such impairment, or is regarded as having such impairment. (29 U.S.C. Sec. 706(8).

Major life activities are defined as: Functions such as caring for one's self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working. (34CFR Part 104.3)

EVALUATION PROCESS

The components of evaluation assessment for Section 504 are determined by the type of disability suspected, data required to define the impact of the disability in the education environment, and the type of services/accommodations that may be needed. There are no evaluation requirements as exist under IDEA. However, the evaluation will be sufficient to accurately and completely assess the nature and extent of the disability, and the impact of the disability on a specific major life activity.

SERVICES

A determination of needed services will be made in accordance with evaluation data by professionals knowledgeable about the student. The group will review the nature and presence of the disability, how it affects the student's access to the educational process, and whether accommodations are needed to prevent discrimination. The decisions about 504 eligibility and services will be kept in the student's file, and if services are provided, eligibility and the plan or services will be reviewed periodically, as determined by the group who developed the plan.

PARENT NOTICE

As required by law, the parent or guardian will be provided with notice of actions affecting the identification, evaluation or placement of the student. Parents/guardians will be invited to the meeting, and participate in the decisions made. Parents are entitled to an impartial due process hearing if they disagree with the school's decisions in these area. A Section 504 hearing will be made available by the school if requested by the parent. RGS understands that parents may choose to appeal directly to the Office of Civil Rights without notifying the school of their concerns or requesting a 504 due process hearing.

Special Education Director:

This individual shall possess appropriate New Mexico special education certification and have extensive administrative and delivery experience. The Special Education Director will also work to assist with the delivery of special education services in the classroom (s). Other special education need (OT, PT, etc) will be addressed by contracted services as needed at the school. All contracted providers will be qualified to perform such services and possess appropriate licensure in the state of New Mexico.

School Policies Manual Relating to Student Needs/At-Risk/Special Needs:

Promotion/Graduation Requirements:

RGS will develop an individualized course of study for all students receiving special education services per New Mexico Statutes and Federal Mandates.

- *Describe how the charter school will provide access to ancillary services for these special populations, when necessary.*

ACCESS TO OTHER SERVICES

RGS educational program will provide access to other services such as counseling and health, based upon the individual student's needs. The services may include, but are not limited to, the following types of modifications and services:

Counseling Services

RGS may provide counseling services on an as-needed basis. Students will be directed to group and one-on-one counseling as determined by the Student Assistance Team and/or staff. A counselor will be on site a couple times per week. Students may arrange to see the counselor, if needed. RGS will contract these services with local providers.

Health Services

RGS will provide details of its health services in its school safety plan. RGS will comply with all immunization and blood-born pathogen laws.

Handicap Accessibility

RGS will meet all Federal and State requirements for providing full handicap accessibility. The school's facility will be handicap accessible and all activities will be adapted to meet the need for access.

Diagnostic Services

RGS will employ the part-time services of a diagnostician as necessary.

Other Services

RGS will employ the part-time services of a psychologist, social worker, occupational therapist and speech therapist as specified in student IEPs.

VI. FINANCIAL PLAN

The Financial Plan should provide a description of how the school leadership intends to manage the school's finances, including assurances that public funds will be used appropriately and in compliance with all applicable federal and state requirements and laws.

FISCAL MANAGEMENT

- Provide a detailed plan indicating how the charter school manages its fiscal responsibilities. Plan must identify processes to be implemented to ensure compliance with state and federal financial requirements.

- Provide a description of the school's internal control procedures utilized to safeguard assets, segregate its payroll and other check disbursement duties, provide reliable financial information, promote operational efficiency, and ensure compliance with all applicable federal statutes and regulations and state statutes and rules relative to fiscal procedures.

Statutory & Regulatory Reference(s):
NMSA 1978 Section 22-8B-8F
NMSA 1978 Section 22-8B-8G
6.80.4.9G NMAC

MANAGEMENT AND PROCEDURES

Pursuant to New Mexico Statute 22-8B-4 Río Gallinas School exercises its rights and accepts its responsibilities for the operation of a public chartered school.

The school, to maintain internal control over all assets, has established and consistently follows the procedures below. The purpose of establishing internal controls is to provide a reasonable assurance that the district will accomplish its objectives of safeguarding assets, providing reliable financial information, promoting operational efficiency and ensuring compliance with laws, regulations, and established district polices and procedures.

The council has contracted with the West Las Vegas Schools to provide financial management, including bookkeeping, accounting, budget assistance, and state reporting. WLVS are paid 3% of the operating budget for this service. The WLVS business manager has demonstrated that she possesses and indeed exceeds the necessary qualifications and experience with federal and state laws and regulations to ensure that all practices comply fully with these laws and regulations. Under the contract with the district, the WLVS business manager shall be the school's Business Manager. The Business Manager trains staff regarding mutually agreed-upon financial policies and procedures.

Segregation of Duties:

Río Gallinas School limits staff access to the financial management system to the minimum necessary to perform the duties assigned, with the intent of limiting their ability to cause and conceal errors or irregularities. Added administrative review and oversight procedures increase security in the control system.

Transaction Authorization

All transactions are recorded at the time of authorization. The business manager is responsible for verifying amounts, classifications, and authorizations before posting them in the financial management

system. All source documents used to record transactions are school forms that are pre-numbered for accountability. Void documents are marked void and kept on file.

Safe-Keeping Assets

The school keeps an inventory of all assets valued at over $100. The director has access to the building, cash, and other assets.

Record Reconciliation

The Business Manager compares actual assets on hand with the amounts recorded in the financial system. Monthly/periodic reconciliation of bank statements and other financial records are prepared and verified during the monthly closing process. Immediately upon detecting any discrepancies found during the reconciliation process, Río Gallinas School director researches and corrects them.

Audit

An audit to determine whether the Río Gallinas School has successfully designed and implemented its financial controls and administrative operations is performed annually as part of the WLVS audit.

BUDGET

Budget Overview

Río Gallinas School adheres to all federal and State of New Mexico rules and regulations regarding the handling, reporting, purchasing, and auditing of funds and all other matters relating to the financial dealings of the School. The West Las Vegas Schools (WLVS) district business manager, overseen by the School Director and the Governing Council, handles all budget data entry and reporting, per contract with WLVS.

The Río Gallinas School receives 98% of the State Equalization Guarantee (SEG) Revenue based on student enrollment and applicable size adjustment units, as well as factors for special education. This amount does not include private grants, matching funds, or federal grants, all of which we regularly and actively seek. The remaining 2% of the SEG goes to WLVS to help defray the costs of hosting the charter school in their district.

Río Gallinas School's Governing Council uses the results of annual audit of the WLVS District to evaluate the handling of the school's financial affairs. The audit verifies the accuracy of the school's financial statement, revenue-related data collection, and reporting practices, and reviews the school's internal controls. The audit is conducted in accordance with generally accepted accounting principles applicable to a school. The Governing Council reviews any audit exceptions or deficiencies (to date there have been none) and must report to the WLVS District and the PED as to how any exceptions and deficiencies have been or will be resolved.

Proposed Five-Year Budget

Río Gallinas School parents, staff, and community members each year create a proposed budget which is then approved by the Governing Council, the WLVS Board of Education, and the PED budget analysis office. In the past year of operation, we have stayed within our budget, and our projections have come very close to actual final amounts received and expended.

Please see the proposed detailed budget in the Appendix to this Section. Assumptions in building this budget include remaining in our current facility for four more years before moving to a larger facility, increased enrollment when we do move, and relatively constant SEG figures ove the five-year period of the projection.

Preparation Of Budget

The Río Gallinas School prepares and adopts an annual budget in accordance with statutory requirements. The Río Gallinas School director and the Río Gallinas School budget committee prepare

the Operating Budget. The Río Gallinas School ensures that the budget committee has representation from the staff, students, parents, and community members.

WLVS reviews and approves the Operating Budget and includes it separately in the budget submission to the State Public Education Department, pursuant to the Public School Finance Act.

Revenue generated independent of the public school funding formulas for items such as, but not limited to, State funding for instructional materials and technology, federal funding for special and compensatory education, and local revenues is estimated by the State Public Education Department (PED) and/or West Las Vegas Schools with the input of the Río Gallinas School Director and Governing Council.

Upon completion of each fiscal year, Río Gallinas School determines the actual cash balances for all funds and reports them WLVS and the PED by the designated deadline.

Increases, decreases, and adjustments to the finalized budget are presented to the PED for approval in the form of a Budget Adjustment Request (BAR). Once all approvals are in place, the change is recorded in the financial management system and the adjustment is made to the original budget.

Budget adjustments that do not alter the total amount of the budget are processed as follows:

- Transfers between expenditure codes within the same function are presented to the Governing Council for approval. Once all approvals are in place, the change is recorded in the financial management system as an adjustment to the original budget.
- Transfers between expenditure codes outside of the same function are presented to the PED for approval. Once all approvals are in place, the change is recorded to the financial management system as an adjustment to the original budget.

PAYROLL

The Río Gallinas School Director is responsible for monitoring the hiring of employees, authorizing salaries, initiating employment contracts, and maintaining the staffing levels approved in the annual budget. Río Gallinas complies with state minimum salary levels for administration and teacher salaries.

The Río Gallinas School is responsible for reporting staff absences and the use of substitute employees. The school submits absentee reports on Friday of each pay period. The Business Manager uses these reports to update employee leave balances. The Business Manager docks leave taken without sufficient leave balances from the employee's pay.

The Business Manager collects all insurance and other deductions on the proper forms. Records of these deductions are kept at the school site.

PURCHASING

The School Director is responsible for assuring that all purchases against assigned budgets are appropriate and necessary. Submitting the required pre-numbered purchasing documents to the director for review and approval is the first step in the purchasing process.

Whenever it is cost-effective for the charter school, purchases are made from the WLVS warehouse. In these instances, the school follows the bookkeeping requirements and purchasing process of the district. The school pays the same costs and is required to use similar procedures as the other schools in the district.

School policies and procedures meet all of the requirements of the procurement code as dictated by New Mexico State Statutes, including the Public School Code.

ENCUMBRANCES

The Business Manager forwards documents to the Río Gallinas School director. The School Director verifies that sufficient budget exists for the purchase and that the expenditure is correctly classified and coded to the appropriate account.

Upon completion of the required verifications, the purchase document is recorded as an encumbrance on the financial management system. The Business Manager keeps a copy of all purchase requisitions and holds same until the order is complete and ready for payment.

RECEIVING

The Río Gallinas School office staff signs a copy of the purchase order to document the receipt of goods and to authorize the release of payment to the vendor. The Business Manager for processing then retains a copy of the purchase order.

ACCOUNTS PAYABLE

The Business Manager retains all vendor invoices. The vendor is matched to the encumbrance copy of the purchase order and the receiving copy to the purchase requisition. Once the documents are matched, the items invoiced are matched to the items listed on the approved copies of the purchase order. The account distribution is verified and any necessary changes are noted on the invoice.

The financial management system generates a check register, a schedule of checks to be written, and a remittance advice report. A check register by find is generated.

The Business Manager assembles the check back-up documents and presents them to the authorized signer. The check is then initialized and authorized for release of payment. The Business Manager reviews and initials the check back-up for bank reconciliation purposes.

All bank accounts are reconciled on a monthly basis. The Business Manager verifies and approves the bank reconciliation and makes any adjustments necessary to the general ledger.

TRAVEL

Employees and council members of the school are entitled to reimbursement of registration fees, mileage, per diem, and other costs associated with authorized trips for official school business.

All in-state and out-of-state trips must have administrative approval before traveling.

All reimbursements are processed in accordance with the per diem and mileage Act. All receipts for out-of-pocket expenditures for transportation, registration, and miscellaneous expenses are required for reimbursement.

All school employees are eligible for reimbursement of travel-related expenses upon return from their trip. Prepayment of airline tickets is allowable. A purchase requisition is required and must be properly approved before departure on the trip.

CASH RECEIPTS

All funds received go directly to WLVS for deposit and credit toward the Río Gallinas School account. There are no cash receipts accepted by the school, since there are no fees or other charges to attend, and the school does not provide services for payment. When students organize fund-raising events as part of their Learning Expeditions, those funds go into a separate escrow account managed by the Amigos de Río Gallinas not-for-profit support group, and they are disbursed directly to the appropriate charity.

The original receipt is given to the payer, a designated copy is forwarded to the Business Manager, and another copy is retained by the person initiating the receipt.

ACCOUNTS RECEIVABLE

The Business Manager is responsible for billing and monitoring the collection of all amounts due from outside agencies. The Business Manager is responsible for tracking and verifying the cash balances for all federal, state, and other grants and contracts awarded to the school. The business manager prepares the required cash receipt, reimbursement reports and invoices necessary for collection of amounts due for various programs.

PETTY CASH

The School Director authorizes issuance of petty cash funds. The petty cash fund is intended for small purchases of $30.00 or less. A petty cash voucher is required for all payments made from the fund. Persons making purchases on behalf of the school submit the petty cash vouchers and receipts documenting all purchases to the business manager with a purchase order to replenish the petty cash fund. The director returns the petty cash fund to the business manager in cash or invoices before the end of each fiscal year and may request a new petty cash fund for the next fiscal year.

INVESTMENTS

Río Gallinas School will account for all monies placed in interest-bearing accounts by fund. Excess cash balances in the interest-bearing bank account generate interest, which is credited by the financial institute on a monthly basis. The amount of interest earned is receipted and recorded to the financial management system when the credit is received. As of the date of this charter renewal application, the school does not maintain any such fund.

Río Gallinas teachers, who are responsible for facility management, maintain fixed asset inventory records. The database includes asset number, a description of the item, the serial number, and purchase number, and acquisition date, the fund code, and the location number.

The staff takes an annual physical inventory and the director signs the inventory sheets.

The director must approve all requests for removal of surplus property, deletions, and discards.

INSURANCE

Personal insurance for school employees is provided to the school through the New Mexico Public School Insurance Authority (NMPSIA). Property and Liability insurance is also covered through NMPSIA. Memoranda of coverage are provided to NMPSIA each year.

CONTRACTS

New Mexico law and PED regulations govern the issuance of contracts. The issuance of contracts will comply with State and Federal laws regarding non-discrimination.

REAL PROPERTY DISPOSITION

New Mexico law and PED regulations govern the leasing, selling, or otherwise disposing of real property belonging to the school.

SUBSTITUTE SERVICES

The Río Gallinas School will maintain a substitute services program under the School director.

FUNDING

Río Gallinas School receives funding pursuant to the New Mexico Charter School Act of 1999 and its successors, and may opt to receive its funding directly from the state or through any other available mechanisms.

LEGAL SERVICES

Río Gallinas School will retain a law firm as legal counsel from time to time if the Governing Council deems it appropriate to do so.

VII. GOVERNANCE/MANAGEMENT PLAN

The Governance/Management Plan should provide an understanding of how the school is governed and managed. It should present a clear picture of the school's governance and management practices, what roles and responsibilities various groups and individuals have, and how those groups relate to one another. The Plan should outline how decisions are made at the school site and provide a convincing picture of the school leadership's capacity to successfully operate the school. In addition, the governing body of a charter school is, first and foremost, publicly accountable for student academic performance and the expenditure of public funds.

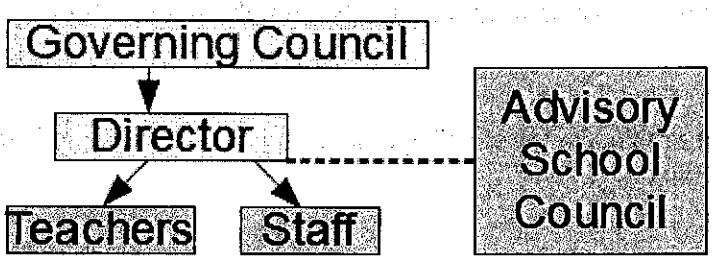
A. GOVERNANCE/MANAGEMENT STRUCTURE

- Describe the over-all school governance and site-based management structure.
- Provide an organizational chart for the school to illustrate the proposed school site-based personnel reporting structure to the governing body and the relationship of the governing body to the school's leader and administration. Include on the chart all proposed administrative/staff positions, parent councils, advisory committees and community groups (if any).
- Provide a narrative description of the chart.

Statutory & Regulatory Reference(s):
NMSA 1978 Section 22-8B-8I(3)
NMSA Section 22-8B-8J
6.80.4.9H & 6.80.4.9I NMAC

The Governing Council is the single governing authority for the school, by law. It sets policy, is responsible for budget and expenditure propriety and legality, and for the success of the performance of the school academically. It hires the Director, who manages the school guided and limited by set policy and the oversight of the Council. The Director shall be held accountable by the Governing Council.

We use what is known as "Principal-directed site-based management." The director is ultimately responsible for all management decisions and activities. All faculty, office staff, and maintenance staff are to be supervised by the Director of the school.
As a charter school, we intrinsically use site-based budgeting.



The chart shows that the only reporter to the Council is the Director. All other employees report to the Director. There is an Advisory School Council which advises the Director.

B. DESCRIPTION OF THE GOVERNING BODY

- Provide policies and procedures by which the governing body will operate in compliance with all applicable statutes and regulations, including the Open Meetings Act. Policies and procedures must address:
    - board powers and duties as a whole, individual members, and officers of the governing body;
    - governing body member recruitment and selection, including the orientation process for new members and ongoing professional development;
    - description of governing body committees; including a Finance Committee and an Audit Committee;
    - the criteria and the process that will be used to select the school's head administrator;
    - budgeting and operation of the school; and
    - how decisions will be made.
- List each of the members of the school's governing body.
- Explain the nature and extent of staff, families, and the community involvement in the governance of the school, and how they will be notified of the opportunity to participate in the school governance.

Statutory & Regulatory Reference(s):
NMSA 1978 Section 22-8B-8I
6.80.4.9H(1-5),(8) NMAC

The Rio Gallinas School Governing Council is the governing body of Rio Gallinas School. It consists of at least five members who support the philosophy of the school, including at least one parent or guardian of a student currently enrolled in the School and at least four at-large members from the community. No members of the Rio Gallinas School staff, nor members of their immediate family, may serve on the Governing Council. In addition, there shall be at least one student currently enrolled in the School as a non-voting member. The Governing Council shall determine, from time to time, the number, designations and qualifications for the Members and will include such membership information in the Council by-laws.

The Council meets monthly and all meetings and minutes are subject to the Freedom of Information act and Open Meetings statutes of the State of New Mexico. Committees meet and study sessions are scheduled in the interim.

The Governing Council determines the strategic direction for the school to fulfill its mission, promotes the mission of the school, sets and enforces policies, and ensures the academic, fiscal, and legal health of Rio Gallinas School. The council will have primary responsibility for the development and review of all major policies, approval of budget and contracts.

The Governing Council is ideally composed of members who are enthusiastic and interested in education, have strong roots in the community, and are willing to learn how to be effective members of the Governing Council.

Policies and procedures by which the governing body will operate are fully prescribed in the Río Gallinas School Governing Council By-Laws, as modified from time to time, attached as an appendix.

Finance and Audit committees have been established in accordance with statute by formal action of the Governing Council, but do not yet appear in the By-Laws as printed.

Governing Council Membership:

Kim Kirkpatrick, community, Chair (term ends June 2012)
Naomi Swinton, community, Vice-Chair (term ends June 2012)
Pat Leahan, community, Secretary (term ends June 2012)
Tito Chávez, community (term ends June 2013)
Sally Flores, community (term ends June 2013)
Diane Moore, community (term ends June 2012)
Christine Ludi, member from West Las Vegas School Board
TBA, parent/guardian (term ends Fall 2011)
TBA, parent/guardian (term ends Fall 2011)
TBA, student non-voting (term ends May 2011)
TBA, student non-voting (term ends May 2011)

Community Involvement in Governance:

Because the Governing Council is statutorily responsible for the governance of the school, there is no "participation" by others in governance. The community is involved directly through the membership of the Council, which has five members from the community; families are involved directly through the two parent members. In advisory role, the community and parents are also involved through the Advisory Council.

C. PARTNERSHIPS (optional)

IF the school has a partner organization that is essential to the existence of the charter school, its governance, key instructional, and/or management functions, provide the following information:

- Name of the partner organization.
- Name of the contact person at the partner organization and that person's full contact information.
- A description of the nature and purpose of the school's partnership with the organization.
- An explanation of how the partner organizations will be involved in the governance of the school, if applicable.
- Evidence (in the form of a letter of support or intent to partner) that the school has a formal partnership agreement with the partner organization.

Statutory & Regulatory Reference(s):
NMSA 1978 Section 22-8B-8P

None.

D. SCHOOL ORGANIZATIONAL STRUCTURE

- Based on the organizational chart provided under subsection *A. GOVERNANCE/MANAGEMENT STRUCTURE* above, provide job descriptions that identify key roles, responsibilities and accountability for each staff position listed on the organizational chart.

Statutory & Regulatory Reference(s):
NMSA 1978 Section 22-8B-8P
6.80.4.9F(2) & 6.80.4.9I(5-7) NMAC

All such job descriptions are in the Rio Gallinas School Personnel Handbook in the Appendix.

E. EMPLOYEE RELATIONS

- Provide an explanation of the relationship that exists between the school and its employees, including evidence that the terms and conditions of employment are addressed with affected employees and their recognized representatives, if any.
- Provide a description of the school's personnel policies and procedures that comply with all applicable federal statutes and regulations, including the School Personnel Act.
- Provide salary schedules for all employees that comply with the minimum salary requirements as identified in the School Personnel Act.
- Describe the evaluation process for staff that includes evaluation of teachers by a licensed school administrator.
- Explain the school's staff discipline process that provides for due process.

Statutory & Regulatory Reference(s):
NMSA 1978 Section 22-8B-8K
6.80.4.9.I(1-3), (5) NMAC

Rio Gallinas School complies with Chapter 22, Article 10 of the NMSA 1978 "School Personnel Act." Rio Gallinas School has created a comprehensive governing policy and procedures manual which aligns specifically with the New Mexico School Personnel Act. Rio Gallinas School adheres to all personnel policies and procedures contained in the manual. All employees may negotiate the conditions of employment directly with the administration.

See Rio Gallinas School Personnel Handbook in appendix.

F. STUDENT ENROLLMENT PROCEDURES AND DISCIPLINE POLICY

- Describe the school's lottery process that is in accordance with applicable law.
- Describe the school's enrollment policies and procedures.
- Provide the student discipline policy that complies with the Student Rights and Responsibilities set forth in the Public Education Department rules and regulations [6.11.2 NMAC]. (Note: Include the proposed student discipline procedures in the Appendices.)

Statutory & Regulatory Reference(s):
NMSA 1978 Section 22-8B-8K
6.80.4.9J & 6.80.4.9O NMAC

From Río Gallinas School Program and Policy Handbook, page 74.

ENROLLMENT LOTTERY POLICY

Each year the director, working with the staff, will determine the number of students to be accepted for each grade level combination. In accordance with statute (22-8B-4.1 NMSA 1978), applicants will be offered enrollment by lottery, except that preferential enrollment will be given to pupils returning to the charter school from the immediate previous year and to siblings of pupils already enrolled in the school, if such students have applied prior to the holding of the lottery. (To apply, a returning student's parent need only affirm the intent to attend.)

A lottery will be held during the month of April. During the preceding three weeks, the school will advertise widely, in such places as the local newspaper, the radio, the school website, the library, local grocery stores. In addition, the school will hold one publicly advertised enrollment information meeting at the school site during the week before the lottery. The advertisements will give full information about the lottery and how to apply, and will give the date and place of the enrollment meeting. Records of advertisement, fliers, and articles will be kept on file at the school.

Families interested in their child or children attending Río Gallinas School will fill out a lottery application for each child. The application will contain the applicant's name, grade level, mailing address, and, optionally, email and phone number, and the application's school year.

Upon the announced date of the lottery, all applications that have been received for the upcoming school year will be placed onto an entry list for the following year in an order determined by lot. This lottery process will be witnessed by the Director and one member of the Governing Council and shall be carried out in a manner to avoid the possibility of favoritism.

Vacancies in each grade level combination will be filled by offering enrollment to students in the order of their placement on the list. Within two days after the lottery, applicants will be offered enrollment, with a deadline for acceptance, or notified of their location (within grade combination) on the list. As offerees reject enrollment, or fail to reply by the deadline, or fail to appear at school as required, their position will be lost, and will be offered to another from the list in order of placement.

If at any time after the lottery there are no students on the entry list to fill the vacancies in certain grade combinations, then the school will hold another lottery, following the process as specified above for the initial lottery. Upon the announced date of the lottery, all applications that have been received since the previous lottery will be placed onto the end of the entry list in an order determined by lot.

In order that Río Gallinas School treat the winners and losers of the lottery with equal consideration and respect, the director will develop appropriate deadlines for response to offers of enrollment and rules for initial attendance, which, if not met, will result in the offer of enrollment being withdrawn and

given to the next waiting applicant. The communication offering enrollment shall clearly state this deadline and attendance requirement.

From time to time during the year, the director will review the enrollment numbers with the staff to determine if the enrollment needs of the grade combinations have changed. This review may determine vacancies to be handled as above.

The current year's entry list shall be discarded at the end of the school year. If still interested, applicants on that list must reapply for the April lottery, and shall be given no preference.

Students entering grades 1-8th grade are eligible for Río Gallinas School.

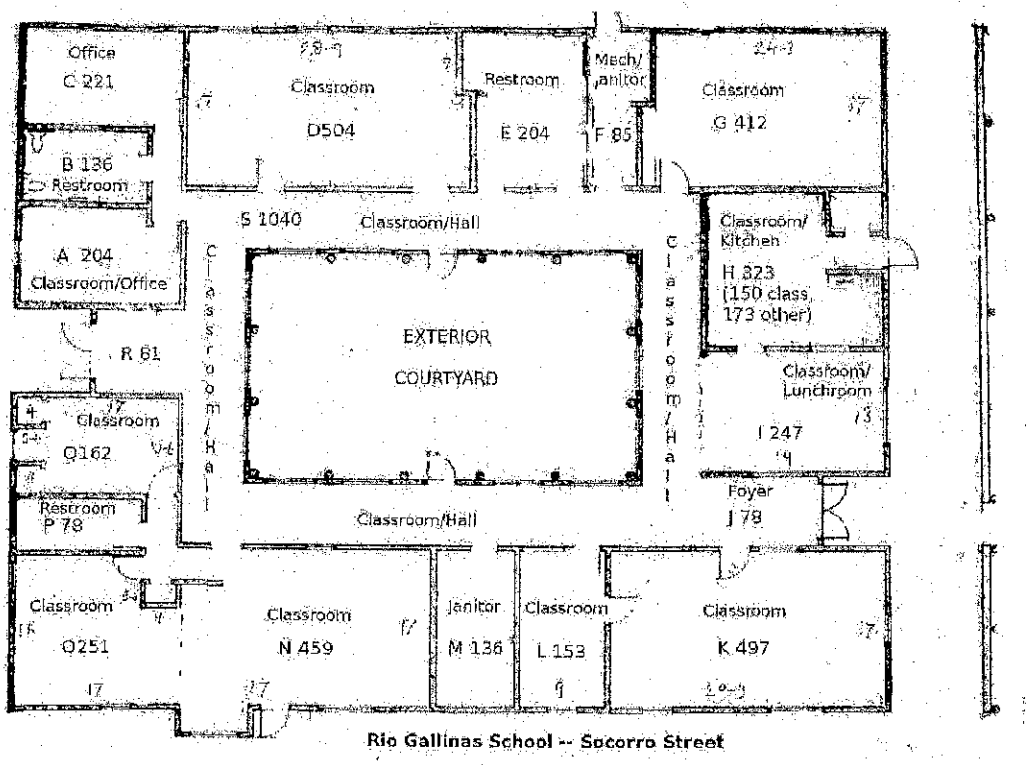
Río Gallinas School will not discriminate based on ethnicity, religion, gender, economic status, disabilities, and limiting conditions. Río Gallinas School will not charge tuition or have admission requirements, except as otherwise provided in the Public School Code.

G. FACILITIES

- Describe the school facility, including location, size and layout of space.
- Provide an E-occupancy certificate for the proposed renewal term.
- Explain the capital outlay needs for the facility, including projected requests for capital outlay assistance for the school.

Statutory & Regulatory Reference(s):
NMSA 1978 Section 22-8B-8O
6.80.4.9N NMAC

"Lower campus":
301 Socorro St Grades 1-4 – private building, leased



E-occupancy certificate in appendix No 011680, permanent

"Upper Campus":
Montezuma St Grades 5-8 – school building owned by and leased from West Las Vegas Schools

H. OTHER STUDENT SERVICES

- Describe the school plan for meeting the transportation needs of its students and plans for contracting services for transportation, if applicable.
- Describe the school plan for meeting the food services needs of its students and plans for contracting services for food services, if applicable.
- Describe the school plan for providing student access to counseling services and plans for contracting services, if applicable.
- Describe the school plan for providing student access to health services and plans for contracting services, if applicable.

Statutory & Regulatory Reference(s): *NMSA 1978 Section 22-8B-8M* *6.80.4.9D(3) & 6.80.4.9L NMAC*

TRANSPORTATION POLICY

As required by law, Rio Gallinas School will negotiate with the WLVS district for transportation services as needed. The Rio Gallinas School will arrange for special education student if transportation is in the student's Individualized Educational Plan (IEP).

Parents / guardians have responsibility for arranging transportation of their students to Río Gallinas School.

Rio Gallinas School annually budgets funds for fieldwork and extracurricular activities.

Rio Gallinas School staff member may transport students in their own car following West Las Vegas Rules and insurance policies.

FOOD SERVICES POLICY

Rio Gallinas School is dedicated to teaching students healthy nutritional practices. There is an existing kitchen in the school building, which we use to create and supplement meals. Students are also free to bring food to consume at breakfast, lunch, and snacks, subject to approval of specific items by the School Director.

All food services, internal and externally-contracted, meet or exceed state and national standards for health, nutrition, safety, and food service.

VIII. REQUIREMENTS

The Requirements section of the application addresses the necessary arrangements that school leaders must make to define the respective legal liability and responsibility of the governing body and the District. These requirements include, but are not limited to, securing appropriate insurance coverage and identifying waivers that will be sought by the school from the Public Education Department.

WAIVERS

- List the specific waivers that will be requested from the department's requirements, rules, and provisions of the Public School Code pertaining to individual class load, teaching load, length of the school day, staffing patterns, subject areas, purchase of instructional material, evaluation standards for school personnel, school principal duties, driver education, and graduation requirements.

- If any waivers will be requested that are not pertaining to those listed above, cite the applicable statute and/or state rule that the school is requesting to be waived.

NOTE: All current waivers will expire on 6/30/2012. If waivers are being requested for the renewal term, the required NMPED waiver request forms must be completed for approval by the Secretary of Education. For complete information, reference the following webpage: http://www.ped.state.nm.us/admin.personnel/waiver_requests.html

Statutory & Regulatory Reference(s):
NMSA 1978 Section 22-8B-8N
6.80.4.9M NMAC

Río Gallinas School has established its own policies. For any matter for which Río Gallinas School has not set policy, until the School does establish a policy the West Las Vegas District policy shall be followed.

PART C–THE RENEWAL CHARTER

WAIVERS TO BE REQUESTED FROM
NEW MEXICO PUBLIC EDUCATION DEPARTMENT

Río Gallinas School will submit Waiver Requests to the State Public Education Department (PED) to cover the following topics, for the following reasons:

Length of school day	Río Gallinas School's schedule provides for a school day slightly longer than most schools
Staff patterns	Río Gallinas School is a small school requiring flexible staff patterns determined by need
Subject areas	Río Gallinas School will meet or exceed state requirements for core courses and graduation requirements
Purchase of instructional materials	Río Gallinas School has a non-conventional curriculum which de-emphasizes textbooks and therefore needs to purchase material wherever available
Evaluation standards	Río Gallinas School will adopt its own rigorous evaluation standard for staff which emphasizes team teaching observations
School principal duties	Río Gallinas School has a director but no principal

Río Gallinas reserves the right to request additional waivers or to adopt waived policies, as identified and directed by its Governing Council.

IX. APPENDICES

The contents of the appendices will be reviewed as they pertain to the appropriate sections IV through VIII of the application.

Please provide each of the following documents as an appendix:

- The School's personnel policies: Río Gallinas School Personnel Handbook
- The School's student discipline procedures: Río Gallinas School Program and Policy Handbook, page 34
- Governing Council By-Laws
- E-Occupancy Certificate

STATE OF NEW MEXICO

REGULATION AND LICENSING DEPARTMENT

CONSTRUCTION INDUSTRIES DIVISION

CHRIS BACA
GENERAL CONSTRUCTION INSPECTOR

LAS VEGAS, NEW MEXICO 87701
TELEPHONE (505) 425-9441

E-MAIL CHRIS.BACA@STATE.NM.US

OUR WEBSITE WWW.LANDRU.STATE.NM.US

STATE OF NEW MEXICO

Nº 011680

REGULATION AND LICENSING DEPARTMENT

CONSTRUCTION INDUSTRIES DIVISION

GENERAL CONSTRUCTION BUREAU

THIS BUILDING HAS BEEN OCCUPIED BEFORE A FINAL INSPECTION HAS BEEN CONDUCTED.

X PERMANENT

X TEMPORARY, 10-16-04
EXPIRATION DATE

CHRIS BACA 8-25-05
Chief

~ CERTIFICATE OF OCCUPANCY ~

THE FOLLOWING BUILDING OR PORTION THEREOF HAS BEEN INSPECTED FOR COMPLIANCE WITH THE REQUIREMENTS OF OCCUPANCY GROUP E AS SPECIFIED BY THE NEW MEXICO BUILDING CODE.

301 Socorro St. Las Vegas N.M.
BUILDING ADDRESS

John McLeod,
NAME AND ADDRESS OF OWNER

Knutson Const.
NAME(S) OF LICENSED NEW MEXICO CONTRACTOR(S)

N/A.
IF NO LICENSED CONTRACTOR, NAME(S) OF OWNER-BUILDER(S)

2004023278
BUILDING PERMIT NUMBER

Remodel
PORTION OF BUILDING

Chas J. Mann
INSPECTOR'S NAME

9/16/04
DATE

ADA CORRECTIONS
COMMENTS

State of New Mexico
Public School Facilities Authority

Robert A. Gorrell, Director
Tim Berry, Deputy Director

Santa Fe Office
2019 Galisteo, Suite B-1
Santa Fe, NM 87505
(505) 988-5989
(505) 988-5933 (Fax)

Albuquerque Field Office
1312 Basehart Drive, SE
Suite 200
Albuquerque, NM 87106
(505) 843-6272
(505) 843-9681 (Fax)

Website: www.nmpsfa.org

MEMORANDUM

To:	**Kim Kirkpatrick, Rio Gallinas Charter School**
Cc:	**Martica Casias, PSFA Planning & Design Manager**
	Dennis Schneider, Facility Assessor
From:	**Richard A. Romero, Facilities Specialist**
Date:	**July 1, 2010**
RE:	**Facility assessment – 301 Socorro Street, Las Vegas, New Mexico 87710**

At your request, I visited the referenced address on June 21, 2010. I was accompanied by Martica Casias, Planning & Design Manager, and Facility Assessor Dennis Schneider. The purpose of our visit was to conduct an adequacy assessment based on the Statewide Adequacy Standards and the exemptions to those standards that were approved by the Public School Capital Outlay Council for charter and alternative schools.

The following assessment is based on a visual inspection of the premises and no testing of any kind was conducted and no invasive or destructive inspection methods were employed.

BACKGROUND

According to its website, Rio Gallinas Charter School (RGCS) has been in operation for ten years. Their charter was most recently renewed in 2006. Instruction is based on an expeditionary learning model that focuses on education through discovery and experience. RGCS currently serves 104 students in grades 1 through 8. Currently the school operates out of two relatively adjacent facilities. The facility that is the subject of this report serves 51 children in grades 1 through 4. This facility has been in use by RGCS since the school's inception and is currently classified as an 'E' Educational Occupancy building in accordance with the International Building Code.

FACILITY DESCRIPTION

The subject building is a single-story building that is approximately 6,300 square feet in size. The building appears to sit on a continuous footing/stem wall foundation system. The floor is a slab-on-grade finished with laminate flooring, carpet and vinyl composition tile in various locations. The building is assumed to be of wood frame construction and is finished with stucco on the exterior. The roof is pitched and covered with asphalt shingles over a previously existing cover. The age of the roof is unknown, but estimated to be at least 15 years. Roof and wall insulation is unknown.

The buildings HVAC system consists of two roof-mounted evaporative coolers and two gas-fired furnaces. The age of the units is unknown. One of the furnaces appears to have been installed recently, but the other one is reported to be an older installation. The evaporative coolers appear to be well maintained.

The building is not fire sprinkled, but is not required to be sprinkled based on the applicable provisions of the International Building Code.

The age of the building is unknown, but estimated to be approximately 50 to 60 years.

ADEQUACY ANALYSIS

The Public School Capital Outlay Council has waived many of the requirements of the Statewide Adequacy Standards for charter schools in recognition of the fact that charter schools, by there very nature, deliver education in a non-traditional manner. As such, this analysis is based only on those areas of the Standards that have not been waived.

GENERAL REQUIREMENTS

Based on visual inspection, only, the building appears to be structurally sound. The exterior stucco finish exhibits cracking in several areas. These cracks are most likely attributable to the age of the stucco system, weather exposure and normal settling of the structure. The building does not exhibit visual evidence of differential settling or of other structural problems.

The exterior envelope is reported to be weather tight. However, there is evidence of past roof leaks. Significant past damage to the drywall ceiling finish is apparent, but has been repaired. The repairs, though not accomplished in a workmanlike manner do not show evidence of continued leaks.

Interior surfaces appear to be in fair to good condition,

The building systems were in operation and appeared to be in good condition.

Fire detection systems were evident in the building. The systems were not tested, but were reported to be operational.

I did not observe evidence of a two-way communication system between potential classroom spaces and other remote spaces and a central point in the facility. It was reported that cell phone or a telephone intercom system are used. This is acceptable.

SITE

There is the ability to provide a student drop-off pedestrian pathway on site.

Site drainage appears, overall, to be adequate to protect the structural integrity of the building. The exterior doors, especially on the west side of the building, exhibit water damage that may be due to inadequate site drainage away from the building, but may also have been caused by prolonged exposure to the elements.

There is erosion occurring under the entry steps and sidewalk on the eastern side of the building where there is a significant grade change between the building and the adjacent street. This may result in future structural problems if not addressed.

The building roof drainage is controlled with a gutter system. Some of the downspouts were missing and those that were present do not have splash blocks to help direct the water away from the building and provide erosion control.

ACADEMIC CLASSROOMS

The following table lists the required general classroom square footage per student.

GRADE LEVEL	REQUIRED NET SQUARE FT./STUDENT
Kindergarten	50
1st Grade – 5th Grade	32
6th Grade – 8th Grade	28
9th Grade – 12th Grade	25

For 51 children in grades one through four, 1,632 net square feet (NSF) of general classroom space is required. This facility contains 2,870 NSF of classroom space.

Lighting must be provided at 50 foot-candles of well-distributed lighting. This is to be measured at a work surface at the center point of the classroom between clean light fixtures.

Classroom temperatures must fall between 68 and 75 degrees Fahrenheit at full occupancy. The temperature shall be measured at the approximate center of the classroom.

Classroom acoustics shall not exceed a one-hour A-weighted level of 55 decibels measured at a work surface at the approximate center of the classroom.

The HVAC system must provide continual air movement and shall maintain a CO_2 level of not more than 1,200 parts per million.

CONCERNS

The roof is in questionable condition, but appears to be weather tight at this time.

The cracking in the exterior stucco finish should be repaired in order to ensure the building remains weather tight and to protect the construction from further damage.

Given the age of the facility, a survey should be conducted to determine if friable asbestos, lead, or other harmful materials are present. If so, these materials should be abated or addressed in an acceptable manner so as to render them as harmless as possible.

There is erosion occurring at the entry steps and sidewalk on the eastern side of the building where there is a significant grade change between the building and the adjacent street.

Missing downspouts should be replaced and splash blocks provided at each downspout.

CONCLUSION

This building has some condition issues including those mentioned in the "CONCERNS" section. The facility complies with the Statewide Adequacy Standards as applicable to charter schools and is classified as an 'E' Educational occupancy. Special attention should be paid to the concerns stated above.