A.3 Program of Instruction

FRAMEWORK OF THE CURRICULA

The Montessori Method provides the guideline for the program of instruction. The curriculum includes areas in language, math, culture, history, geography, science, and practical life. The core content areas are typically woven into many areas of the curriculum and are addressed in multiple ways. The following scope and sequence chart easily lays out how to use the framework for the multiple age levels, and the sequence for presenting specific concepts, subject areas, and The Great Lessons.

The Great Lessons set the stage for the presentation of the integrated curriculum. The stories deal with the development of the universe, solar system, and earth. They give enough information for the child to want to research more, yet not too much. Science experiments accompany the stories to help them understand the whys of the world. Key Lessons are subtopics of the Great Lessons and give further details. It is the teacher's goal to get groups of children researching for the answers to their questions and doing their work together. Key lessons are not all given to every child or in any particular time frame.

6-9 Scope and Sequence: Three Year Cycle

	first-years	second-years	third-years
physical geography	basic land- and water forms (10)	advanced land- and water forms	review basic and advanced land- and water forms
	parts of a river	parts of a river	design an island using as many land- and water forms as possible – make a map of it
	parts of a mountain	parts of a mountain	land- and water forms of the world (i.e., bays of Asia)
political geography	globes and maps, geography book	color and label world map as a review of continents and oceans, geography book	color and label world map as a review of continents and oceans, geography book
	punch out and label world map	flags	flag of me
	puzzle maps and pin maps (make own of continent studying if funds available)	puzzle maps and pin maps (make own of continent studying – if funds available)	puzzle maps and pin maps (make own of continent studying if funds available)
more geography	**FIRST YEAR ALL**	**SECOND YEAR ALL**	**THIRD YEAR ALL**
(for everyone)	Sun and Earth	Work of Air	economic geography
(three-year cycle)	Composition of Earth	Work of Water	maps unit (not in album)
	North America *	Australia *	South America *
	Asia *	Europe *	Africa *

	first-years	second-years	third-years
biology	Who-am-I? cards of animals (1st Knowledge)	body functions of vertebrate animals	Who-am-I? cards of plants
	external parts of vertebrate animals	review external parts during impressionistic lesson of body functions	external parts of plants
	classification of vertebrate animals	classification of invertebrate animals	body functions of plants
		review classification of vertebrates	classification of plants
			Who-am-I? cards and classification of prokaryotes, protoctista, and fungi
physical science	**FIRST YEAR ALL**	**SECOND YEAR ALL**	**THIRD YEAR ALL**
(for everyone)	light, experiments from creation	magnetism	electricity (simple) **
(three-year cycle)	Sound	simple machines ** not in album	measurement ***
	first-years	**second-years**	**third-years**
history	from beginning of album up to and including BC/AD timeline	review BC/AD timeline	review BC/AD timeline and centuries
(start in November)	fundamental human needs – 1st two lessons, make collage	fundamental human needs – repeat 1st two lessons, make collage	fundamental human needs – repeat 1st two lessons, make collage
	calendar work	independent work on BC/AD timeline and fundamental human needs (lay out cards on blank timeline)	independent work on BC/AD timeline and fundamental human needs (lay out cards on blank timeline and make own)
	first-years	**second-years**	**third-years**
geometry	geometric cabinet, area and perimeter	intro to regions and polygons	congruency, similarity, and equivalence
	point/line/plane	triangles	advanced angle work (two lines crossed by a transversal, etc.)
	Lines	quadrilaterals, including trapezoids, then circles	constructive triangles (2nd series)
	Angles	constructive triangles (1st series)	area and perimeter, volume
Great Lessons ALL	1. Creation Story – early in year with experiments (September)	**MISC. ALL**	spelling lesson – once a week (can base on phonics)
(everybody, every year)	2. Time Line of Life – soon after (mid-September)	(everybody)	Writer's Workshop – min. twice a week, includes writing the

			following types of poetry: acrostic, diamante, limerick, haiku
	3. Time Line of Humans – by Christmas (Dec.)		Novel Study – once a week
	4. Time Line of Math – spring semester		silent reading – daily
	5. Time Line of Writing – spring semester		be read aloud to - daily
			comprehension work – once a week
	first-years	**second-years**	**third-years**
grammar	noun (September) +	review parts of speech	grammar boxes
miniature environments, sentence building, symbolizing all eight ALL EVERY YEAR	article (October)	grammar boxes	independent work on parts of speech (i.e., marking sentences with proper symbols)
	adjective (November)	skyscraper work++ (Towers)	skyscraper work++ (Towers)
	noun family (November)		sentence analysis
	verb (December)		
	adverb (January)	Notes:	+ Some people only teach nouns and verbs to the 1st-years. If so, then proceed with the rest in 2nd year.
	verb family (January)		
	preposition (February)		
	pronoun (March)		
	conjunction (April)		
	interjection (May)		
	grammar boxes, Towers		
	first-years	**second-years**	**third-years**
Math (individual or small groups)	up through all four operations on the stamp game, then keep going if they finish this	from wherever they left off to however far they get (varies widely)	From wherever they left off through abstract long division, if possible. It's important that they can at least do up through abstract multiplication with a two-digit multiplier by the end of the year
	memorization work/math facts	memorization work/math facts	memorization work/math facts
	mult/div boards, stamps w/golden beads	group lessons on multiples, factors	binomial, trinomial
	chains, snake, hundred	problem solving (not in	group lessons on

	board	album) – work in small groups of varied ages	decanomial in fall and on decimals in spring; area and perimeter in late spring
	Beginning word problems, flowers, shells, pearls	the squaring and cubing work with the chains	problem solving (not in album) – work in small groups of varied ages

METHODS OF INSTRUCTION

Montessori model schools are based on the individual needs and capabilities of each child. Dr. Montessori said to "follow the child." Children are allowed to choose what interests them. They are, however, guided in their education by teachers and develop a well-rounded education. The basis for a high functioning Montessori classroom includes the teacher and the classroom environment.

Montessori teachers strive to guide the children by making the lessons they offer impossible to resist. The teachers, who have a degree, often in education, additional are trained and certified through a recognized program that gives those credentials in the area in which they are specialized to teach. A lower elementary teacher has training specific for the child of 6-9 years old. The responsibility of the teacher is such that he is responsible for the curriculum development and classroom management. In a society where knowledge is both complex and specialized, it is the responsibility of the teacher to create opportunities for children to be inspired to want to know more, give them the tools to help them gather the information further, then allow them to relate it to their own world experiences, and see how it fits into the whole.

Montessori teachers present lessons to students in many different ways. There may be individual lessons given, small group, or at times, large group lessons. It is crucial that the environment be prepared well so the children are organized to work on other materials when not getting direct instruction from the teacher. The environment itself also has special materials in facilitating the student's learning. Materials within an area, such as math for instance, relate to each other beautifully, and although there is a sequence to how the materials are taught, they do not have to be taught in a linear way, but rather to overlap in ways so when a child is ready, or has discovered a correlation to concepts, it may be introduced sooner. Montessori Education allows for teachable moments quite often, moments in which the child chooses what is to be learned. A child learning about the history of writing may be interested enough in the Babylonians to decide to research further the people. A trained Montessori teacher has a belief that the child constructs his or her own knowledge while the teacher provides the necessary support and resource for this self-directed task.

An elementary Montessori teacher begins newly introduced concepts with impressionistic lessons. These lessons often include a story paired with props or objects that relate to the story. This way of introducing a new concept helps the child to experience it prior to practicing the work to accomplish mastery.

METHODS OF ASSESSMENT

The role of the teacher is crucial to providing a balance to a child led curriculum and assuring that the required state and core standards are met. Teachers can monitor that the

standards are being met, and can adjust the environment appropriately as needed. This may be especially true in the areas such as science and culture. The classroom is an evolving, ever changing, living environment that while has the fundamentals in materials, the enrichment areas are maintained by the students and teacher. The tools put in place by GMS as ongoing assessments and evaluations as mentioned in the PMP allows the classroom to function with balance of allowing the students to lead their own individual learning, and still being accountable to the standards by which they will be assesses by the state.

Assessments are given more often and less formally in Montessori Education. A Seguin three period lesson is a way of assessing a child while teaching a new concept. The first period is showing the child how. The second period asks the child to practice, and the third is to check for mastery. Just as in most schools, the methods of assessment can vary depending on the skill being checked mastery for. Montessori classrooms include but are not limited to assessment such as paper and pencil tests, performance based, cumulative projects, or writing assignments. When reading the curriculum samples, there will be an impressionistic lesson, which is considered Seguin's first period. The first period shows the student what is to be learned. The second period is practice. The child is given many different ways of practicing this concept until they master it. Some practice material need further explanation of use, but most are self explanatory, auto didactic and similar in format to other works so the student may be familiar with it.

Record keeping by the Montessori teacher is more than keeping grades. It is a record of the work the child has been doing. The observations made by the teacher daily give her insight into what the student's strengths and weaknesses are. If a child has not worked in the math area consistently at a pace that will allow him to move on to a more complex work, the teacher notes it and is able to address it with the child. Montessori Records Express, a hosted software program will be used to quickly and accurately record classroom activities on each child. Monthly meetings between the teacher and the director are realistic in a small school and will help monitor student development.

It is easy to align the state standards with Montessori work. Recognizing that the students do have to adhere to state testing and the standards, the teacher is familiar with them and is able to check a child's grade level growth by relating the work they are advanced to and how it correlates to the standards. Montessori students do have to write math equations and solve word problems, and write papers, and know the parts of speech, just as all students do. Sometimes it is a misconception that "to follow the child" as Maria Montessori said is meant that if they don't feel like doing something, they don't have to. They are required to stay on task and progress academically, only the Montessori classroom goes about it differently. In the Montessori environment, the student is able to practice a skill in numerous ways using various materials, at their own pace, rather than with limited choices at the pace of the class.

FORMATIVE AND SUMMATIVE ASSESSMENT PLAN

Formative assessments are ongoing in a Montessori classroom and can be as simple as documenting when a student practices lessons, or is presented new content area. These observations allow the teacher to gage where a child is in various content areas, and where he may need to focus more attention or be directed by the teacher. The Literacy Assessment Toolkit for Reading is a summative assessment that follows the child through third grade and is

documented at quarter increments. Current teachers are responsible for providing accurate data as a tool for monitoring and documenting student proficiency in reading.

The Performance Management Plan for reading includes ongoing formative and summative assessments that document a student's progression in reading core content continuum of phonemic awareness, blends, digraphs, rimes, reading fluency, reading comprehension and spelling. These areas collectively help to build strong readers, and can provide information for early intervention if needed.

The PMP is designed to be used as a tool to record data as a student moves through the curriculum and evaluate the rate of growth. Students who are improving scores with each portion of the Literacy Toolkit for Reading, will be well on their way to achieving the ultimate Target of scoring 80% or higher on the reading portion of the AIMS. A student who is not showing growth can get the intervention and additional help needed within a reasonable timeframe that will reteach the concept before moving forward. The benefits of an early intervention apply to not only the PMP for reading, but also to the rest of the curriculum .

With the use of software by Montessori Records Express (MRX), teachers are able to easily input student data reflecting the works or lessons the teacher has planned for them, those in which they are practicing, and those which have been mastered. The program allows the administrator to input lessons according to how she sees best will allow the standards to be met, while still tracking progressions within all content areas. The lessons entered will maintain stability within the school, while still allowing teachers to add content to areas that may not have a specified Montessori material to accompany that standard.