



Urban Montessori

CHARTER SCHOOL

Charter Petition

For a term of July 1, 2012 - June 30, 2017

Submitted by:

Hae-Sin Kim Thomas and Peter Laub

Lead Petitioners

Submitted on:

May 25, 2011

Submitted to:

OAKLAND UNIFIED SCHOOL DISTRICT

AFFIRMATIONS/ASSURANCES

As the authorized lead petitioners, we, Hae-Sin Kim Thomas and Peter Laub, hereby certify that the information submitted in this petition for a California public charter school to be named Urban Montessori Charter School (the "School" or "Urban Montessori") to be submitted to the Oakland Unified School District ("OUSD" or the "District") is true to the best of our knowledge and belief; we also certify that this petition does not constitute the conversion of any private schools to the status of public charter schools; and further, we understand that if awarded a charter, the School will follow any and all federal, state, and local laws and regulations that apply to the School, including but not limited to:

- The School shall meet all statewide standards and conduct the student assessment tests pursuant to Education Code Section 60605, and any other statewide standards authorized in statute, or student assessments applicable to children in non-charter public schools. [Ref. Education Code Section 47605(c)(1)]
- The School shall be deemed the exclusive public schools employer of the employees of Urban Montessori Charter School for purposes of the Educational Employment Relations Act. [Ref. Education Code Section 47605 (b)(5)(O)]
- The School shall be nonsectarian in its programs, admissions, policies, governance, employment practices, and all other operations. [Ref. Education Code Section 47605(d)(1)]
- The School shall not charge tuition, fees, or other mandatory payments for attendance at the charter schools or for participation in programs that are required for children. [Ref. Education Code Section 47605(d)(1)]
- The School shall not discriminate on the basis of the characteristics listed in Section 220 (actual or perceived disability, gender, nationality, race, color, or ethnicity, religion, sexual orientation, or any other characteristic that is contained in the definition of hate crimes set forth in Section 422.55 of the Penal Code or association with an individual who has any of the aforementioned characteristics). The School shall further not discriminate on the basis of creed, ancestry, athletic performance, special need, proficiency in the English language or a foreign language, or academic achievement. [Ref. Education Code Section 47605(d)(1)]
- The School shall admit all pupils who wish to attend Urban Montessori Charter School, and who submit a timely application, unless Urban Montessori Charter School receives a greater number of applications than there are spaces for children, in which case each application will be given equal chance of admission through a public random drawing process. Except as required by Education Code Section 47605(d)(2), admission to Urban Montessori Charter School shall not be determined according to the place of residence of the student or his or her parents within the State. Preference in the public random drawing shall be given as required by Education Code Section 47605(d)(2)(B). In the event of a drawing, the chartering authority shall make reasonable efforts to accommodate the growth of the Charter Schools in accordance with Education Code Section 47605(d)(2)(C). [Ref. Education Code Section 47605(d)(2)(A)-(B)]
- The School shall adhere to all provisions of federal law related to children with disabilities including, but not limited to the Individuals with Disabilities in Education Improvement Act of 2004 ("IDEIA"), Section 504 of the Rehabilitation Act of 1973 ("Section 504"), and Title II of the Americans with Disabilities Act of 1990 ("ADA").
- The School shall meet all requirements for employment set forth in applicable provisions of law, including, but not limited to credentials, as necessary. [Ref. Title 5 California Code of Regulations Section 11967.5.1(f)(5)(C)]

- The School shall ensure that teachers in Urban Montessori Charter School hold a Commission on Teacher Credentialing certificate, permit, or other document equivalent to that which a teacher in other public schools are required to hold. As allowed by statute, flexibility will be given to non-core, non-college preparatory teachers. [Ref. California Education Code Section 47605(l)]
- The School shall at all times maintain all necessary and appropriate insurance coverage.
- The School shall, for each fiscal year, offer at a minimum, the number of minutes of instruction per grade level as required by Education Code Section 47612.5(a)(1)(A)-(D)
- If a pupil is expelled or leaves Urban Montessori Charter School without graduating or completing the school year for any reason, Urban Montessori Charter School shall notify the superintendent of the school district of the pupil's last known address within 30 days, and shall, upon request, provide that school district with a copy of the cumulative record of the pupil, including a transcript of grades or report card, and health information. [Ref. California Education Code Section 47605(d)(3)]
- The School shall maintain accurate and contemporaneous written records that document all pupil attendance and make these records available for audit and inspection. [Ref. California Education Code Section 47612.5(a)]
- The School shall on a regular basis consult with its parents and teachers regarding the School's education programs. [Ref. California Education Code Section 47605(c)]
- The School shall comply with any jurisdictional limitations to locations of its facilities. [Ref. California Education Code Section 47605-47605.1]
- The School shall comply with all laws establishing the minimum and maximum age for public school enrollment. [Ref. California Education Code Section 47612(b), 47610]
- The School shall comply with all applicable portions of the No Child Left Behind Act.
- The School shall comply with the Public Records Act.
- The School will adhere to all applicable provisions of federal law relating to children who are English Learners, including Title VI of the Civil Rights Act of 1964; and the Equal Educational Opportunities Act of 1974.
- The School shall comply with the Family Educational Rights and Privacy Act.
- The School shall comply with the Ralph M. Brown Act.
- The School shall meet or exceed the legally required minimum of school days applicable to charter schools. [Ref. Title 5 California Code of Regulations Section 11960]

Hae-Sin Kim Thomas, Lead Petitioner

Date

Peter Laub, Lead Petitioner

Date

INTRODUCTION

The Mission of Urban Montessori Charter School

Urban Montessori Charter School's mission is to develop self-directed and engaged learners who are academically, socially and emotionally prepared to succeed in any high school. Nurturing the innovators of tomorrow to creatively meet the challenges of today's world with confidence, compassion and grace, Urban Montessori cultivates individual curiosities and strengths, while holding children to a high standard of excellence. At Urban Montessori, children deepen their understanding of what it means to live responsibly in a diverse urban community.

Whom will we serve?

Urban Montessori Charter School will be a public charter school serving K through 8th grade children located in Oakland Unified District to maximize the diversity and beauty of our vibrant urban community. We seek to serve a socio-economically, racially and culturally diverse community of children because we believe that children learn about different backgrounds and perspectives by living and working with people from those backgrounds and perspectives. In addition, our long-term goal is to open a Montessori preschool program that allows us to provide a free and public Montessori preschool option to families who currently cannot access a private school option. In this way, we will provide a complete Montessori experience to our children.

What will children experience at Urban Montessori Charter School?

Children who attend Urban Montessori will be well educated and be able to use their knowledge flexibly in novel contexts. They will have effective teachers, trained in Montessori methods, state standards, current research and best practices. Urban Montessori children will enjoy learning to think creatively and critically through all subject areas, including math, language arts, science, history/social studies, world language, physical education, music, arts and design. Children will have extended blocks of uninterrupted learning time that allow for concentration and practice. Moreover, they will collaborate with other children regularly on Design Challenges¹ that make problem solving and creative thinking an integral part of the Urban Montessori experience. Other characteristics of Urban Montessori include:

- Multi-age classrooms that enhance peer tutoring and modeling opportunities, provide the developmental time to master learning goals, and build strong learning communities
- Individualized lessons that support differentiated instruction and opportunities for practice in a carefully prepared classroom environment
- Use of proven learning materials and manipulatives that drive curiosity, teach respect, and provide opportunities for children to engage in authentic tasks
- Low adult-to-child ratio to maximize opportunities for differentiation and self-directed learning
- Visual arts integrated across the curriculum and into Design Challenges
- Instruction about the disciplines of music and visual arts, including techniques and history
- Authentic and varied assessments, including state-mandated tests
- Curriculum and assessments designed to foster and evaluate deep understanding of content and ideas
- Technology integration that sets children up for success in the 21st century
- World language learning opportunities
- Teacher collaboration that facilitates improved learning for children

¹ Design Challenges are explained in greater detail on page 18 of the charter.

What is Montessori?

Montessori is a comprehensive pedagogy, curriculum, and philosophy intended to maximize the potential of every child's academic, social, emotional and intellectual development based on the research of Dr. Maria Montessori. The Montessori philosophy supports a differentiated, self-directed program for each child, embracing his or her natural curiosity and love of learning. In a Montessori classroom, children are given the freedom to work actively with concrete, sequential materials within a carefully prepared environment. The curriculum is designed to meet the needs of every child – from special-needs children to high-achievers. Teachers provide enough guidance to help children work toward independence and self-discipline, which translates into an environment that encourages self-direction and personal responsibility. A multi-age classroom provides maximum opportunities for developing the social and academic skills of all learners.

Dr. Montessori was a constructivist in close alignment with child development experts like Jean Piaget and Lev Vygotsky². Constructivism is a philosophy of learning based on the premise that by reflecting on our experiences, we construct our own understanding of the world we live in. We individually generate our own “rules” and “mental models,” which we then use to make sense of our experiences. Learning is then a process of adjusting our mental models to assimilate and incorporate new experiences. Both Piaget and Montessori believed children develop in a progression sequence. Both recommended children learn through hands-on, multi-modality activities where they are focused on creating mental models versus rote memorization of facts, where there are multiple measures of assessing learning, and where children' prior knowledge is incorporated into the curriculum.³

The Montessori method is in close alignment with child development and current brain research⁴, but unlike the contributions of Vygotsky or Piaget, Montessori provided more than just research or beliefs about how children learn. The Montessori program is a comprehensive instructional system which comes with extensive teacher training and certification, specific instructional materials and assessments covering all disciplines, proven instructional strategies and methods, clear goals and standards for mastery, and aligned curriculum and materials around classroom culture and management – all developed from a strong theoretical foundation.

□ [See Appendix A-2 for a more detailed explanation of the Montessori method](#)

□ [See Appendix A-3 to see two research studies on the effectiveness of the Montessori approach](#)

Who are Urban Montessori's founders?

Our founding team and Board consist of community leaders and parents with the following experiences: charter school start-up, finance, and operations, Montessori expertise, K-12 instruction, administration, curriculum design and development, special education, school leadership, teacher development, educational technology, child psychology, innovative school design, new school development, educational research and evaluation, arts integration, fundraising, real estate, business planning, public relations, and marketing. The chart below summarizes the expertise of the founders:

□ [See Appendix B for biographies of the founding team](#)

² Bodrova, E. (2003). Vygotsky and Montessori: One Dream, Two Visions. *Montessori Life*.

³ Elkind, D. (1967). Piaget and Montessori. *Harvard Educational Review*. 37: 535-546.

⁴ Mariale M. Hardiman. *Connecting brain research with effective teaching: the Brain-Targeted* (Lanham, MD: Rowman and Littlefield Education, 2003).

Founder	Educational Program	Start up School Experience	Charter School Finance	Charter School Facilities	Governance and Law	Development/ Fundraising	School Administration & Operations	Educational Technology and Innovation	Montessori	Community Outreach
Pamela Briskman	x							x		
Sibyl Buckner	x	x							x	
Bernadette Chi	x	x	x		x	x				x
Nadia Comiso				x		x				x
Junko Green						x		x		x
Erin Hennigan	x								x	
Tana Johnson	x							x		
Amanda Klein	x	x				x	x			
Peter Laub		x	x	x	x	x	x			x
Rebecca Reynolds			x			x				x
Hae-Sin Thomas	x	x	x	x	x		x			x
Parker Thomas			x					x		
Lisa Truong								x		x
Mara Benitez	x	x			x		x			x
Randy Weiner	x						x	x		
Susie Wise	x					x		x		x

Urban Montessori Charter School is also thrilled to have several strong collaborative relationships that will enable our schools to leverage the many assets in the Bay Area and to share our best practices with the larger education community. Urban Montessori is working with Grand Lake Montessori, a pre-school in Oakland that has been a strong Montessori pre-K through 5th grade program for over 30 years. The founding team is working with the Arts Learning leadership at the Alameda County Office of Education to build capacity of our teachers around arts integration. The School also intends to work with St. Mary's College's Montessori Teacher Education Program to ensure there is a strong pipeline of Montessori-trained, California state-credentialed teachers at the School and to recruit more Montessori-trained teachers to public education. Additionally, the Henry Ford Learning Institute and the Design School at Stanford University will collaborate in developing the design curriculum.

Why a Public Montessori?

Montessori has become an educational option primarily for those who can afford private education. Because the Montessori method utilizes individualized learning plans designed to take each child with his or her unique gifts and challenges to success and independence, Urban Montessori believes it to be the ideal model and approach for children living in diverse and urban settings.⁵ Dr. Montessori designed her approach based on observations and research in schools serving high-poverty communities. In alignment with her research, she developed an approach, a set of aligned materials and teacher training that provide children opportunities to learn using multiple modalities driven by their own curiosity. Urban Montessori Charter School believes that the Montessori model is a powerful model for 21st century learning and that it should be a public school option for all families and their children.

⁵ Lillard, A, Else-Quest, N (2006). "Evaluating Montessori Education: *Science*: 1893-1894.

INTENT OF THE CHARTER SCHOOLS ACT

The Charter Schools Act of 1992 states that:

It is the intent of the Legislature...to provide opportunities for teachers, parents, pupils, and community members to establish and maintain schools that operate independently from the existing school district structure, as a method to accomplish all of the following:

- a. *Improve pupil learning.*
- b. *Increase learning opportunities for all pupils, with special emphasis on expanded learning experiences for pupils who are identified as academically low achieving.*
- c. *Encourage the use of different and innovative teaching methods.*
- d. *Create new professional opportunities for teachers, including the opportunity to be responsible for the learning program at the school site.*
- e. *Provide parents and pupils with expanded choices in the types of educational opportunities that are available within the public school system.*
- f. *Hold the schools established under this part accountable for meeting measurable pupil outcomes, and provide the schools with a method to change from rule-based to performance-based accountability systems.*
- g. *Provide vigorous competition within the public school system to stimulate continual improvements in all public schools.*
 - o *California Education Code Section 47601*

Urban Montessori Charter School fully embraces the Legislative Intent of the Charter Schools Act and its mandate. It is the School's mission to ensure all children graduating from Urban Montessori Charter School are prepared to be successful academically, socially, and emotionally at any high school of their choice, and the School will monitor its own efforts towards this commitment by developing and implementing a comprehensive student growth and monitoring system in alignment with a performance-based assessment system that creates school-wide accountability for every child's performance (Education Code 47601(a) and (f)). The Montessori model thoughtfully combined with arts integration, design thinking, and a comprehensive student growth monitoring and intervention system (Response to Intervention) will provide the scaffolding, differentiation, acceleration, and monitoring that low-achieving children may require (Education Code 47601(b)) and a unique public school option generally only available to those who can afford private school (Education Code 47601(e)). The founding team is particularly invested in creating both a replicable model and a demonstration site for teacher learning, where teachers can become masters of blending the Montessori model with arts integration and design thinking and create a truly innovative approach that they can share as teacher leaders across Oakland Unified School District (Education Code 47601(d)).

The Charter Schools Act of 1992 provides that a petition must contain reasonably comprehensive descriptions of the elements described in California Education Code Section 47605.6(b)(5)(A)-(Q). These subsections of law and the required descriptions are discussed below. This document is presented in the order and format suggested by the State Board of Education's recommended "Model Application."

1. EDUCATIONAL PHILOSOPHY AND PROGRAM

Governing Law: A description of the educational program of the school, designed, among other things, to identify those whom the school is attempting to educate, what it means to be an “educated person” in the 21st century, and how learning best occurs. The goals identified in that program shall include the objective of enabling pupils to become self-motivated, competent, and lifelong learners

- California Education Code Section 47605 (b)(5)(A)(i).

MISSION OF URBAN MONTESSORI CHARTER SCHOOL

Urban Montessori Charter School develops self-directed and engaged learners who are academically, socially and emotionally prepared to succeed in any high school. Nurturing the innovators of tomorrow to creatively meet the challenges of today’s world with confidence, compassion and grace, Urban Montessori cultivates individual curiosities and strengths, while holding children to a high standard of excellence. At Urban Montessori children deepen their understanding of what it means to live responsibly in a diverse urban community.

TARGET POPULATION – WHOM THE SCHOOL IS ATTEMPTING TO EDUCATE

School Year	Grade Levels Served	Approximate # of Children ³
2012-2013	K-2	252
2013-2014	K-3	318
2014-2015	K-4	394
2015-2016	K-5	468
2016-2017	K-6	540
2017-2018	K-7	610
2018-2019	K-8	681

At its full size, Urban Montessori Charter School plans to serve 681 K-8 children during the 2018-2019 school year, the school’s seventh year of operation. Urban Montessori will structure its classes in alignment with Maria Montessori’s planes of development, with 3-6 year olds in “primary” classrooms, 6-9 year olds in multi-age “lower elementary” classrooms, 9-12 year olds in multi-age “upper elementary” classrooms, and 12-14 year olds in a multi-age “secondary” program. The Urban Montessori team will explore the development of a pre-Kindergarten program with ambition to eventually offer the full Montessori Primary program, but in the interim, the School will use the Kindergarten year to transition children into the Montessori environment since so many children will come to the School without primary Montessori experience. Urban Montessori will open with seven multi-age classes comprised of Kindergarten, First, and Second grade children, a slight variation from the traditional Montessori planes for the first year. The following year, all of these classrooms will advance together as multi-age classrooms serving First, Second, and Third grades, in alignment with the Montessori planes of development. Kindergarten children will be served in the primary program, and the Kindergarten program will intentionally be designed as a bridge for children new to Montessori classrooms. Every year following, the School will recruit for the primary program, bringing in approximately 72 Kindergarteners annually until the school is full-sized. Urban Montessori’s multi-age

³ Grade size is expected to decrease through attrition.

classrooms will have approximately 36 children each. A lead teacher and a support teacher will be assigned to every classroom.

Within the boundaries of Oakland, there are no public Montessori options. Since Urban Montessori Charter School could be the first and only Montessori public school, and certainly the first that integrates the arts and design thinking, the founders are committed to being an option to as many families across Oakland as possible. The School's target location is the downtown/Lake Merritt area for two reasons –

1. The area is home to an incredibly diverse cross-section of Oakland linguistically, socio-economically and ethnically
2. It is very accessible by public transportation

Urban Montessori aims to enroll children whose diversity is representative of Oakland's population. According to the 2010 US Census, the city is 27.3% Black or African American, 25.9% White (non-Hispanic), 16.7% Asian. Hispanics or Latinos (of any race) make up 25.4% of the total population. The data show that Oakland is one of the most ethnically diverse cities in the country. There have been numerous studies demonstrating that children who attend schools with children and families from different backgrounds, cultures, races, and religions, from alternative family structures, and who speak different languages are better prepared to successfully negotiate today's increasingly global society academically, economically, and socially⁶. Urban Montessori believes that diversity in a student population is an asset, one that powerfully and authentically engages children in productive discourse around what makes us different and what brings us together and exposes them to the many perspectives, values, traditions, and ideas in our multicultural community.

The founders believe that the Montessori model is the ideal model to serve such a diverse population of children. At its core, the Montessori approach is individualized and differentiated to ensure all children receive an educational program and an educational experience that builds upon their strengths and addresses their areas of growth, that takes them from where they are and accelerates their learning so they get where they need to be. The Montessori materials and the Montessori prepared environment provide visual, auditory, kinesthetic, and tactile learning experiences, tapping children's multiple modalities to both present information and assess their understanding. The multi-age classroom allows children to progress at a natural pace and provides both the student who is academically under-performing and the student who is academically high-performing opportunities to learn in their zones of proximal development. Using a more traditional model to serve the needs of Special Education children, English language learners, gifted children, children academically behind, and children whose backgrounds, learning styles and interests vary widely can be challenging, but this diversity is not only not a challenge in a Montessori classroom, this diversity is an asset that the Montessori teacher uses to enhance the learning of all children in the class.

As required by law, the School will conduct outreach to attract a student body reflective of Oakland's general population. This will include extensive outreach to preschool programs both public and private, parent groups, churches, neighborhood groups, community organizations, and youth service organizations. All materials will be translated into multiple languages, and materials will be posted at various community public spaces.

[□ See Appendix C for Outreach Plan](#)

⁶ Crain, R. & Mahard, R. (1978): School racial composition and black college attendance and achievement test performance. *Sociology of Education*, 81-101;

Boozer, Krueger, and Wolkon(1992). Race and School Quality Since Brown vs. Board of Education. *Brookings Papers on Economic Activity: Microeconomic*, 269–326.

WHAT IT MEANS TO BE AN EDUCATED PERSON IN THE 21ST CENTURY

The Founding Team believes there are three central attributes that describe an educated person in the 21st Century, particularly when technological advances have provided the world's citizens with the simultaneous ability to easily engage and disengage with each other more than ever before. An educated person in the 21st century is:

- A self-directed learner
- Emotionally intelligent
- Creatively confident

Before detailing each of these attributes, the founders would like to state unequivocally that, above all else, Urban Montessori children will achieve academically at high levels and be expected to meet or exceed the standards set by the state of California. However, increasing numbers of children around the globe are finding themselves able to excel on the international stage, and they are raising the bar and re-defining what we can expect of future generations. Urban Montessori's children must be no different. They will work hard, be held to very high standards and perform on a wide range of assessments, regardless of format or purpose.

The Self-Directed Learner

Self-directed learners are children and citizens of their community, country and world who are intrinsically motivated to understand the world around them. They are capable of forming their own questions and are adept at assessing the broad range of available resources to uncover answers. Their ability to think flexibly means there is no challenge they cannot dissect, no data out of their grasp and no results they cannot effectively share with others.

Urban Montessori children are:

- High performers, driven to succeed through their love of learning;
- Natural innovators, empowered to seek and find answers to their own questions; and
- Capable communicators, excited by and effective in their presentation of knowledge.

Emotional Intelligence

The importance of self-direction, however, is not an endorsement of individual learning in a vacuum. The opportunities and challenges that the 21st century presents to its children demand a very well developed ability to collaborate with others – and not just others who may live on the same street. Today, children on their way to becoming valuable members of our local and global societies must be capable of respectfully interacting and engaging with the most diverse cohorts, and in every conceivable category, from geography to religion to politics.

Urban Montessori children are:

- Model collaborators, equally able to deliver results on their own and as part of a team;
- Representative and respectful of the diversity of ideas that drives the betterment of all societies.

Creative Confidence

The previous attributes combine to create individuals who are poised to recognize the supremely interconnected nature of all things in the 21st century. Having creative confidence means children have a process to tackle challenges they are confronted with in and out of school. They know that defining the right problem to work on is as important as solving it and that mindfully collaborating with team members with different skills and interests will yield better results. They flexibly use the tools and techniques of innovators, are optimistic that change is possible and believe that they can be part of that change.

Urban Montessori children are:

- Expert problem-solvers who routinely make unexpected connections across all aspects of their

learning;

- Active community members who constantly work for change; and
- Ethical advocates who turn creative insight into creative action.

HOW LEARNING BEST OCCURS

Urban Montessori Charter School:

**** Provides all children multiple entry points to learning and authentic assessments that enable them to demonstrate mastery of their learning***

Guided by highly trained teachers, children will engage with Montessori's spiral curriculum in the following ways: via self-directed learning, peer teaching, small group instruction, whole group instruction and Design Thinking Challenges that deeply integrate arts education and design thinking skills into children's day-to-day education. The Montessori materials are a powerful curriculum that allow children multiple entry points to learning a single concept or skill, ensuring children are able to access the lesson and learning regardless of their learning style or processing preferences.

All children will be assessed against individualized work plans rooted in the California State Standards. Teachers will conduct formal and informal assessments in alignment with the school's assessment and student monitoring and growth plans. The School will use criterion-referenced standards-aligned benchmark assessments, diagnostic growth assessments and the more formative assessments in alignment with the Montessori approach. Urban Montessori's comprehensive assessment system ensures that all children will be able to demonstrate their understanding through a variety of measures.

**** Give children opportunities to learn by solving real world problems within the context of their classroom and community***

In the Montessori classroom, Integrated Comprehensive Curriculum is specifically designed to provide children with a real world context to understand how what they learn today is relevant beyond the classroom. Leveraging the structures for creativity that are implicit in arts education and design thinking skills, Urban Montessori's projects are engineered to bring change to the school's community in order to connect children's learning with how that learning can improve another's life. Urban Montessori children come to recognize that the impact of their work on their community may be the most authentic of assessments.

****Integrate arts into the larger curriculum and strategically leverage the arts to teach specific habits of mind and to ensure children have multiple ways of accessing content and presenting their understanding***

Urban Montessori created its schedule to ensure all teachers collaborate to integrate arts education into daily learning. There are no "art projects" that suggest art is a disconnected field of study from all others. There are instead interdisciplinary Design Challenges that integrate the arts and ensure children experience the separate disciplines as part of a single toolkit for addressing real world challenges. Urban Montessori Charter School see arts education and art materials as invaluable for stimulating thinking through an appreciation of the joy of creating art, for addressing academic, social and emotional challenges and for demonstrating mastery of the state standards (and Urban Montessori's Schools' goals) by employing of a range of media.

[□ See Appendix A-5 for a draft school schedule and Appendix A-6 for a draft school calendar](#)

**** Encourage children to learn by working in a variety of collaborative settings***

At Urban Montessori, collaboration is the norm. Peer teaching and small and large group settings regularly provide children with opportunities to experience the joy of helping and being helped by others. Design Challenges will present children with authentic opportunities to collaborate on real problems that push them to listen to each other, understand others' perspectives and to present the complexity behind possible solutions.

**** Develop empathetic children who apply their education to better the lives of others.***

Montessori's Integrated Comprehensive Curriculum, which includes the five Great Lessons and Key Lessons, frame children's interactions and perspectives by recognizing the gifts that all cultures have given to the world. Multi-age classrooms provide varied opportunities to develop understanding of what it means to collaborate with children of different ages. Projects explicitly focus on understanding others and others' needs that are different from oneself within the context of the school's community and the specific problems that exist within that community. Children will also reflect on their process, recognizing that how they do their work impacts the quality of that work.

**** Require children to share their work inside and outside of the classroom***

In Montessori education, children are given the freedom and power to pursue their own curricular interests. At Urban Montessori Charter School, this is enhanced by contextualizing learning with meaningful and relevant Design Challenges meant to impact the school and school community. As such, a critical aspect of the children's education is learning to share their processes, findings and reflections with the broader community and to develop presentation skills to do so. Children will understand that a large part of the product of learning is in fact the process of learning.

**** Value teaching as an inquiry into children's needs where data drives the development of solutions***

Urban Montessori teachers place children at the center of their efforts and will demonstrate this commitment by regularly conducting inquiries into their practice. Often a collaborative undertaking, the Schools' teachers' inquiries will inform all aspects of a student's education, from how individualized plans are created to how to improve upon the school's assessment offerings. The School's Design Thinking curriculum helps teachers to structure their own research. Also, the School will ensure that teachers, children and parents access student growth data via modern technological tools.

HOW THE MONTESSORI CURRICULUM IS ORGANIZED

The Urban Montessori design team is in the process of developing an instructional framework that provides a high level of specificity with respect to the design of our instructional program. It is the tool that teachers and school leadership will use to fully implement our program. Many components of this charter and the accompanying appendices will be pulled together into this framework document.

[□ See Appendix A-1 for the UMCS Instructional Framework Table of Contents](#)

Many people, including educators, do not have extensive knowledge of the Montessori approach. The following presents a brief overview of the Montessori curriculum and its organization. Most do not realize that the Montessori approach is in fact a fairly "scripted" curriculum in that specific materials are to be used in specific ways to teach a student specific skills and that specific lessons and themes are to be presented in a given multi-age grouping. Unlike her colleagues Piaget or Vygotsky, Montessori moved from theory and research to practice and implementation. There is tremendous consistency across Montessori classrooms as a result. Montessori teachers are required to be Montessori-certified by an approved teacher training program and are required to use Montessori materials in the implementation of their instructional programs. Particularly in the public education sector, Montessori schools supplement with additional curricular resources, but certain foundational elements and materials are consistent across most classrooms.

The Montessori schedule requires that children have a continuous uninterrupted three-hour core work period where they are not pulled for elective classes, for recess, or other activities. Maria Montessori observed that children could remain on-task and engaged in learning activities for long periods of time. She theorized that most classes were designed on the assumption that children were unable to remain on-task for long periods of time and aligned transitions and schedules accordingly. In a Montessori elementary program, children are provided three hours of uninterrupted work time.

□ [See Appendix D for a description of the Montessori Elementary Education credential program at St Mary's College](#)

□ [See Appendix A-4 for a list of the Montessori K-6 materials](#)

Based upon her observations and research as a doctor and educator, Dr. Maria Montessori designed her curriculum to reflect the natural states of child development. These Planes of Development reflect the natural ebb and flow of cognitive and emotional development and take into account what the mind and body are able to absorb at various stages of growth. Montessori connected the Planes of Development with Integrated Comprehensive Curriculum, a curricular organizational strategy that unifies children's education.

Mapping the Planes of Development

The Planes of Development divide children's growth into four six-year cycles, ranging from birth to 24 years of age. For the purposes of this application, though, the founding team would like to demarcate the five relevant three-year stages that reflect traditional Montessori student organization between birth and 15 years of age:

- 0-3 Years Old: The Infant Program—not supported by Urban Montessori Schools
- 3-6 Years Old: The Primary Program
- 6-9 Years Old: Lower Elementary Program
- 9-12 Years Old: Upper Elementary Program
- 12-15 Years Old: Adolescent Program

In each plane, there are three organizing concepts that describe the intersection of the child's development and education:

- There is a specific development goal
- A clearly defined direction is in place to drive attainment of the goal
- There are specific sensitivities in each plane that facilitate obtaining the goal

This notion of sensitivities is critical to a Montessori education. Sensitivities may be thought of as times when a child is primed to achieve particular goals. Sensitive periods may last days, months or years, depending upon the child.

The First Plane of Development: Birth to Age 6

Characterized by significant physical and psychological growth, exploration and development, this plane is a time of unconscious development, or the time of the "Absorbent Mind". According to Montessori, more learning takes place at this time in life than during any other. Language, cognitive and motor skills begin to develop and children imitate and begin to create expectations of the world around them. Emotionally, children in the First Plane have a strong need for love, acceptance and security, in addition to as much freedom as they can safely handle.

The prepared environment in a Montessori classroom reflects the needs of the First Plane child. Exploration and experience with purposeful activities is central to taking advantage of the natural sensitive periods that typically occur during this plane.

The Second Plane of Development: Age 6 to Age 12

The Second Plane houses what most typically think of as the heart of childhood and it is served at school by the lower (ages 6-9) and upper (ages 9-12) elementary programs. The absorbent mind is behind the child now and the conscious mind takes its place. Learning occurs more slowly though more steadily. Repetition is less appealing without increased task variation.

Children are increasingly social, culminating in a preference to work with others rather than individually starting at age 6. They have an insatiable appetite for knowledge and a great capacity for concentration. They are interested in learning everything and put forth an intense effort in doing so. Montessori recognized children's interest in the social networks of their immediate environment and in the larger world. Thus, community and cultural awareness are at the core of this plane's sensitive periods and are reflected in the Montessori curriculum via study in history, geography, language arts and the sciences.

Additionally, Montessori identified the Second Plane as a sensitive period for imagination and thus, at this time the curriculum introduces the Integrated Comprehensive Curriculum, which includes the Five Great Lessons and other Key Lessons. Montessori's Integrated Comprehensive Curriculum leverages children's developing creativity and links it to all disciplines in a manner that holistically connects the children to each other and through their learning, to all other things. The curriculum also leverages children's budding sense of right and wrong to develop their growing ability to reason.

The Third Plane of Development: Age 12 to Age 18

Children in these years (not unlike their peers in the upper end of the Second Plane) can be egocentric, require much food and sleep to fuel their rapid growth and benefit from time on their own. As a result of children addressing their basic developmental needs, Montessori observed that learning might slow down during this plane.

In the third plane, children are drawn to opportunities to contribute to causes that support higher ideals. They exhibit a growing ability to impact their community and world, so curriculum in this phase includes more impactful projects such as taking the gardens started in the lower levels and transforming them to resemble farming businesses that serve not just the school, but society. To combat the natural emotional turmoil that occurs in human development during this plane, Montessori emphasized the importance of linking learning to the children's emotional state. Without such a connection, learning will be greatly inhibited by the overwhelming needs of the developing child during this time.

Integrated Comprehensive Curriculum, The Five Great Lessons and Key Lessons

As was the case with the Planes of Development, Montessori arrived at the concept of integrated comprehensive curriculum as a result of her extensive global research. Although her research took place years ago, the philosophy, approach, and results of Montessori are perhaps even more relevant today as we prepare our children for the 21st century. Integrated Comprehensive Curriculum provides children with a global vision. It presents a picture of the unity of the universe, which helps each child to organize their intellect, to understand their place in the world and to develop an appreciation and gratitude for the universe. The Five Great Lessons and the Key Lessons provide the path through the Integrated Comprehensive Curriculum.

The Five Great Lessons, as well as the Key Lessons, convey the interrelationship of all facets of the universe and its inhabitants. Since children in the Second Plane of Development have a burgeoning interest in the world around them and are just beginning to recognize their own imaginative and creative abilities, Montessori opted to introduce these concepts with stories. The stories ignite children's sense of wonder and effortlessly prompt explorations that are carried out across all curricular areas and place great emphasis on the interconnectedness of all life and learning.

More specifically, the Five Great Lessons:

- Ignite intellectual curiosity
 - Spark the imagination of children
 - Initiate children's explorations of important questions
 - Stimulate children's desire to discover and learn
 - Give children an awareness of the natural world and its laws
 - Inspire children to explore history, geography, mathematics, the sciences and language arts
 - Lead children to contemplate the future
 - Instill in children reverence and gratitude for the people and accomplishments of the past
- A breakdown of the name of each Great Lesson and its corresponding high-level associated curriculum that is strengthened through the Key Lessons follows.

The First Great Lesson: The Beginning of the Universe and Earth	The Second Great Lesson: Life Comes to Earth	The Third Great Lesson: Humans Come to Earth
<ul style="list-style-type: none"> • The Universe • The Solar System • Composition of the Earth • Volcanoes • Rocks • Chemistry: The Three States of Matter • Creation Stories 	<ul style="list-style-type: none"> • Bacteria • Plants (classification and parts of: ferns, conifers, and flowering plants) • Fossils • Trilobites • Dinosaurs • Living and Nonliving • Classification Work • Kingdom Animalia (Classification and parts of: insects, amphibians, reptiles, birds, mammals) • Oceans and Ocean Life • Supercontinents (Pangaea, Laurasia, Gondwanaland) • Continents • Mountains • Oxygen & Carbon Dioxide 	<ul style="list-style-type: none"> • Ancient Civilizations • Fundamental Needs <p>The History of:</p> <ul style="list-style-type: none"> • Tools • Food preparation and Storage • Clothing • Shelter • Transportation • Medicine • Defense • Art • Religion/Spirituality

**The Fourth Great Lesson:
How Writing Began**

- History of Writing
- Hieroglyphic and Cuneiform Writing
- Different Alphabets
- Different Writing Systems (letters and characters)
- Ancient Civilizations
- The Printing Press

**The Fifth Great Lesson: How
Numbers Began**

- History of Numbers
- History of Mathematics
- Different Number Systems
- How 'zero' came to be
- The invention of the Calendar
- Systems and Units of Measurement
- Economic Geography

Summary of the Five Great Lessons

The stories presented by the Great Lessons are intentionally geared toward children's interests and natural states of development and serve as a central organizing framework for student learning. In addition, there is nothing about how Montessori curriculum is organized that is at odds with Urban Montessori's desire and requirement to teach to the California State Standards.

In upcoming sections of our application, the School will present specific curriculum maps to demonstrate exactly how Montessori curriculum and the California State Standards will be aligned.

THE ROLE OF THE PREPARED ENVIRONMENT IN THE MONTESSORI CLASSROOM

The Montessori prepared environment warrants additional attention because the classroom and the materials within play such an important role in student learning. Most important to understand is the fact and requirement that the entire classroom is intentionally designed for children based upon the science of child development. Because of this, Montessori classrooms across the globe will look very similar -- they all draw upon the same 100+ year body of knowledge that leverages children's natural inclination to learn regardless of race, culture, gender and socio-economic status.

The prepared environment is wholly geared to maximize children's independent learning and exploration. Given individualized learning plans, children may choose what they want to work on, with whom they'd like to work and where they'd like to work, and may do so at their own pace as teachers observe, teach, and guide them to master learning outcomes. The environment, which includes both the physical space and the multi-age class groupings, directly shapes the children's experience and their ability to be successful. The physical space is very intentionally organized to enable children to work productively with the materials in the classroom. All materials are set out in a very orderly and intentional manner throughout the classroom on low shelves enabling children to access the materials (and the curriculum) without teacher support.

There are four aspects of the prepared environment that illustrate its impact:

□ [See Appendix E for photos of an elementary Montessori classroom and see the front pocket of the binder for videos selected to further illustrate the Montessori approach](#)

Freedom

A central tenet of Montessori's pedagogy and philosophy holds that children must be free to follow their natural interests, leading to opportunities to develop their potential and increasing their knowledge of the world. Within the prepared environment, the child must experience freedom in a number of ways, including: movement, exploration, ability to interact socially, and the freedom to learn and grow without interference from others.

Structure and Order

On the surface, structure and order may seem at odds with the importance of freedom in the prepared environment. The prepared environment is meant to reflect the considerable structure and order of the real world and presents an organized system that children must learn to understand in order to make sense of their surroundings and, ultimately, the world. The ordered environment supports children's ability to reason and provides consistent opportunities for children to validate their expectations and interactions with the world around them in predictable and consistent ways.

Social Environment

The multi-age classroom groupings provide tremendous benefit to children as part of the prepared environment. Any number of benefits accrues to children as a result of learning within the Montessori social environment. The opportunity to be the youngest, middle and oldest student cohort over time affords children unique perspectives and experiences at each stage. At different times they receive help from older children or aspire to do things that older children do, they serve as role models or mentors for younger children and they have regular opportunities to develop compassion and empathy for others. In addition, children's ability to work and play in a variety of group settings is explicitly supported by the social environment that is intentionally created as part of Montessori's methodology.

Intellectual Environment

The prepared environment ultimately aims to develop the whole child --not just the intellect-- but intellectual development will not occur without the previously mentioned aspects of the environment in

place. The above aspects of the prepared environment, coupled with the Montessori curriculum and unique Montessori materials, support children in moving from simple to complex ideas and from concrete to abstract understanding and manages to do so in a way that is truly individualized and differentiated.

INTEGRATING DESIGN THINKING INTO MONTESSORI

Urban Montessori Charter School defines design thinking as the ability to use a systematic process to understand people and situations, define problems, and come up with innovative solutions. Design challenges are integrated learning projects where children go through the steps of the design thinking process. They can be short, designed to introduce all phases of the process quickly, or they can be long to allow for in-depth investigation into integrated curriculum components.

There are two primary types of design challenges:

- Process-focused: primary learning is on the steps of the design thinking process and how it can be applied to novel contexts

- Curriculum-integrated: design thinking process integrated with the great lessons or other subject matter content

Phases of the Design Process

Understanding and Research

The first phase of the design thinking process is to understand the problem. During this phase, children immerse themselves in learning about issues related to the Design Challenge. They access a wide array of resources, research and dive deep into the content and context of the challenge. One must be aware of what is already out in the world in order to know whether one's ideas are innovative or not.

Observation

Children observe users as they interact with objects or other people as a key part of the design process. Designers use these observations to drive question generation and interviews and practice active listening and curiosity. They collect notes, sketches, photographs, videos, and artifacts to help with later analysis and synthesis of needs.

Synthesis

Children reflect on what they learned in the understanding and observation phases and synthesize the needs of users. Then, they make inferences about the meaning that underlies those needs. Designers develop a point of view based on a specific user that helps establish parameters for the active design work. Building insight through synthesis is a key driver of the design process.

Ideation

Children generate large numbers of ideas fluidly using brainstorming rules and other techniques. In a supportive classroom environment, children are challenged to become silly, savvy risk takers, wishful thinkers and dreamers of the impossible...and the possible. They work on their Design Challenges open to unexpected ideas and new possibilities as a team where everyone contributes, defers judgment and builds on others' ideas. Collaboration, while a part of the entire design process, is emphasized here.

Prototyping and Testing

Children create prototypes -- two- or three-dimensional low-resolution representations -- of ideas that have been generated. Many children build to think as new and different ideas are inspired with materials in hand. Building skills are also taught so that prototyping can proceed from low-resolution to higher resolution as children advance. Via prototyping, children learn to convey ideas quickly. Every prototype is created with the purpose to learn something specific by testing it, often with users. Through testing designers learn what works and what doesn't and then iterate. This means going back to their prototypes and modifying them based on observations of users interacting with their prototypes and user feedback.

Examples - Design Challenges	Focus	Children Experience
Redesign your buddy's backpack (K-2)	Introduce design thinking process and vocabulary	All phases of the design thinking process: interview buddy, state likes/dislikes, brainstorm ideas, build prototype, share with buddy and get feedback
Where do chairs come from? (2-3)	Introduce the concept of designer	Using designed objects in the world children study how things are made: They investigate chairs at home and at school. They read and study pictures of chairs from different times and places noting how local materials impact design. They put together chairs for their classroom. They meet a designer who has worked on chair design. They come up with things that they would like to design.
Build a model home (K-2)	Focus on empathy and prototyping	As part of a larger unit on basic needs, children focus on shelter. They interview family members about their homes or wish for a home. They infer and map needs. They brainstorm materials they would like to use to build model homes. They build models and write about the experience.
Understanding waste (4-5)	Focus on understanding systems and identifying local problems within systems	Children who are learning about systems that function in their community are introduced to the waste management system. They track and map waste as it moves through their community. They identify waste-related issues they would like to work on. They brainstorm and prototype solutions. They share prototypes with adults in the waste management system to learn more. They revise their prototypes to integrate into the systems they have learned about.

Presentations and Implementation

Children understand that sharing is an integral part of the design thinking process as it allows for everyone to learn from each other's work. Developing focused and coherent presentations that convey their perspectives with solid reasoning may be included in the process. Acquisition of multi-media presentations skills will be developed so that children use the selected media skillfully, editing appropriately and monitoring for quality. Where appropriate children work with community partners to implement design projects.

At Urban Montessori Charter School, teachers will utilize a structured approach to develop design cognition and design learning that enables children to build creative confidence and enact positive change in the world. Children will engage in hands-on projects that focus on building empathy, promoting a bias toward action, encouraging ideation and fostering active problem solving. Using one's imagination is central in this process as is building competency in learning-to-learn skills such as working in groups, following a process, defining problems and creating solutions.

The Power of Design

Big Picture

- Children in Oakland should grow up knowing they can be innovators and have the power to change the world around them
- Purposeful, service-oriented, creative-action projects will be a hallmark of Urban Montessori
- The human-centered design process is symbiotic with tenets of the Montessori Method and the integrated, project-based curriculum of Urban Montessori Charter School

Specific Capacities

- Build to Think
- Develop Empathy
- Learn to Collaborate
- Pursue Interests
- Interact with Wider Community
- Foster Action/Change-Oriented Creative Disposition

All Design projects integrate

- Core curriculum components
- Design-thinking skills (empathy, collaboration, process)
- Hands-on building skills (low-resolution, high-resolution, digital)

Preliminary educational research indicates that design thinking skills aid children in core subject areas and deepen academic content learning while building cognitive and social skills.⁷ Further, as we move into the 21st century, the ability to be an adaptive Design Thinker who can respond flexibly to complex problems, communicate effectively, manage information, collaborate and produce new knowledge is increasingly essential for success. Thus, bringing design thinking to K-12 is, at its core, an issue of equity. At Urban Montessori, our interdisciplinary Design Thinking curriculum helps us deliver on our vision of developing children who can confidently identify and address real challenges facing their peers, families, community, city and world. Additionally, the human-centered design process is symbiotic with tenets of the Montessori method and the integrated, project-based curriculum of Urban Montessori Charter School.

□ [See Appendix A-7 for a sample Design Challenge Unit](#)

INTEGRATING THE ARTS INTO MONTESSORI

At Urban Montessori Charter School, the Arts play an integral role in the Montessori classroom. Artistic concepts, processes and materials are presented daily in the prepared environment in order to engage children's multiple intelligences. The Urban Montessori arts curriculum builds artistic skills in visual arts, music, movement and theater, while nurturing artistic habits of mind in all children ages K-8. Arts Integration provides children with opportunities to demonstrate understanding of science, language arts, math, history or cultural topics through creative and expressive projects, while 'Art for Arts' Sake' helps children begin to explore and eventually master artistic skills like cutting, drawing, color mixing, rhythmic patterning, or choreographing dance scores. Both trajectories help Urban

⁷ Carroll, M., Goldman, S., Britos, L., Koh, J., Royalty, A., Hornstein, M., (2010) *Destination, Imagination, and the Fires Within: Design Thinking in a Middle School Classroom*, International Journal of Art and Design Education. Volume 29, Issue 1, pp. 37-53.

Kolodner, J. L., Camp, P. J., Crismond, D., Fasse, B., Gray, J., Holbrook, J. & Ryan, M. (2003) Promoting deep science learning through case-based reasoning: rituals and practices in learning by design classrooms, in N. M.Seel [Ed.] Instructional Design: International Perspectives. Mahwah, NJ : Lawrence Erlbaum Associates, pp. 89-114.

Montessori children develop a full sense of their artistic and intellectual strengths given this integrated, multi-faceted approach to learning, creating and communicating.

Arts Integration

Arts integration provides children creative opportunities to express their understanding of a specific topic or content area, and to develop artistic habits of mind that span academic disciplines. For example, children might mimic a scientist by observing plants and seeds closely, and depict their observations in a field journal. With this new scientific knowledge, children might then create an imaginative project where they sculpt seeds and create seed packets of 'power plants' that heal a social ill. Or, children might research immigration and migration by conducting an interview with an immigrant. To express the immigrants' journey they might create a metaphorical suitcase filled with stories, maps and objects expressing the immigrant's journey. By integrating art with core disciplines, children make stronger connections to the world, their culture, the culture of others, and themselves.

Arts for Arts' Sake

Creating art for the pure joy of self-expression is important to the intellectual, social and emotional growth of every child. Montessori curriculum validates every child's right to express and communicate his or her ideas non-verbally. Be it visual, musical, theatrical, or kinesthetic, mastery of artistic materials in service of personal expression is important to each child's ability to define self, communicate, and engage and persist through problems.

Art History and Cultural Context

Art History and Cultural Context provide children with perspectives on what and how art is used in different cultures, as well as how art has changed over the course of history. By studying art from around the world as well as contemporary art that deals with current issues, Urban Montessori children gain a sense of understanding of how art is a vehicle for meaning-making in our diverse culture.

Artistic Habits of Mind

All art in the Montessori classroom focuses on the process of making over the finished product. The eight Studio Habits of Mind, drawn from Harvard's Project Zero Studio Thinking Framework, put equal emphasis on seven, disposition-oriented habits of mind in addition to the more traditional habit 'develop craft' or artistic skill. This framework helps children articulate their thinking and tap into their own strengths as learners. The eight Studio Habits of Mind are: Develop Craft, Observe, Stretch and Explore, Envision, Express, Engage and Persist, Reflect and Understand Art World (or History World, Science World, Literary World, etc). The Studio Habits of Mind give teachers and children a common language to discuss artistic process as well as learning strategies. These habits dovetail with Design Thinking processes of Research (Observe, Understand Art World), Observation (Observe), Synthesis (Reflect, Question and Explain), Ideation (Envision, Express, Develop Craft, Stretch and Explore), Prototyping and Testing (Reflect, Engage and Persist, Develop Craft), and Presentations (Reflect, Understand Art World). In both subject areas, children are specifically taught to be 'mindful of process'—that is, meta-cognitively aware of the core steps they must practice in order to achieve the results they desire.

THE PRIMARY ELEMENTARY CURRICULUM (SERVING CHILDREN AGES 3-6)

Overview

The Montessori Primary Curriculum spans three years of development. For the purposes of the charter, the last year of the Montessori Primary Curriculum is the Kindergarten year for most children. The founding team, however, feels strongly that the Primary Program is the foundation program for the Montessori approach, so it is important to describe the entire program in some detail. The Urban Montessori team will explore the development of a pre-Kindergarten program with ambition to

eventually offer the full Montessori Primary program, but in the interim, the School will use the Kindergarten year to transition children into the Montessori approach.

The Montessori Primary Curriculum is composed of six interwoven curricular areas, each of which is described below. In addition to imparting core academic skills in math and language, the Montessori Primary Curriculum is designed to foster independence, coordination, problem solving, scientific thinking, socio-emotional development, and creative arts skills. However, the fundamental goal in the first plane of development is for children to develop themselves as individual beings and to master the process of learning, thereby creating a solid foundation for personal and academic success.

Areas of Curriculum

Practical Life Overview

Practical Life activities encourage the development of independence and foster each child's adaptation to the social context of his or her environment. At the primary level, practical life activities include care of self, care of the environment, exercises of grace and courtesy, and control of physical movement.

Goals

Although the activities are largely skill oriented (e.g. learning how to wash a table), their purpose is not that children master these tasks for their own sake. Rather, the primary goal is to aid each child's inner construction of discipline, organization, independence, and self-esteem through concentration on precise and full cycles of activity.

Objectives

Development of sense of order, independence in navigating classroom, fine and gross motor control, ability to concentrate

Instructional Strategies & Materials

Care of the Self

- Dressing Frames: buttons, zippers, snaps, hooks and eyes, buckles, bow tying, safety pins, lacing
- Personal Care: nose blowing, getting a drink, hand washing, dressing and undressing, taking off a coat, hanging up a coat, putting on a coat, putting on an apron, using the bathroom
- Grooming: hand washing, clothes washing, shoe polishing, hair combing, hair brushing, braiding, nail buffing, nail clipping

Care of the Environment

- Setting up for an activity: Rolling/unrolling/carrying a rug, carrying a tray, carrying a bucket, using a book, sitting at a table, carrying a chair, carrying a table, opening/closing a door
- Cleaning: Wiping up spills, crumbing a table, sweeping, table scrubbing, dish washing, cloth folding
- Polishing: mirror, wood, and metal polishing
- Plant Care: Plant watering, leaf polishing, flower arranging
- Pet Care: pet feeding, environment cleaning

Food Preparation

- Cutting: fruit, vegetable and bread cutting
- Juicing: fruit juicing
- Spreading: butter, jelly, cream cheese spreading
- Measuring: measuring spoons, measuring cups
- Grating

Movement

- Pouring, squeezing, twisting, pinching, pincer grasp, sorting

Social Interaction Skills

- Introducing yourself, greeting, saying goodbye, how to ask for help, how to get a teacher's attention, how to say "Excuse me," how to observe someone who is busy, how to walk indoors, how to talk indoors

Sensorial Overview

The Sensorial Curriculum consists of concrete manipulatives that enable young children to discriminate, order, and classify sensory impressions in relation to length, size, color, pitch, smell, weight, texture, etc. The addition of language gives children a beginning "scientific vocabulary" to describe and compare qualities of objects. The materials are divided into eight subcategories, detailed below.

Goals

The Sensorial Curriculum has two primary goals, one direct and one indirect, both of fundamental importance. The direct goal is to educate and refine each child's sense perceptions and to provide vocabulary to describe those perceptions. The indirect goal is to assist children in the development of their intelligence, which is dependent upon the organizing and categorizing of their sense perceptions into an inner mental order.

Objectives

Development of visual discrimination of dimension, ability to concentrate, ability to place objects in seriated order, problem solving skills, hand-eye coordination, stereognostic sense, discrimination of shape and form, understanding of geometric shapes, fine motor skills, visual discrimination of color and shade, auditory discrimination, tactile discrimination, baric sense, thermic sense, olfactory sense

Instructional Strategies & Materials:

- Visual Sense, Cylinders: Knobbed Cylinders, Knobless Cylinders
- Visual Sense, Block Materials: Red Rods, Broad Stairs, Pink Tower
- Visual Sense, Geometric Shape: Geometric Solids, Geometric Cabinet and Cards, Constructive Triangles
- Visual Sense, Algebraic Materials: Square of Pythagoras, Binomial Cube, Trinomial Cube, Power of Two Cube
- Visual Sense, Colors and Patterns: Color Tablets, Patterned Fabric Squares
- Auditory Sense: Sound Cylinders, Bells
- Tactile Sense: Rough and Smooth Boards, Tactile Tablets, Tactile Fabric Squares
- Complex Senses – Baric, Thermic, and Olfactory: Baric Tablets, Thermic Tablets, Smelling Bottles, Tasting Bottles

Mathematics Overview

Through the manipulation of concrete materials, the child internalizes concepts of number, symbol, sequence, memorization of basic facts, and basic operations. The materials simultaneously reveal arithmetic, geometric, and algebraic correlations. The materials are divided into nine categories, detailed below.

Goals

As with the other curricular areas, the Mathematics Curriculum has two primary goals, one direct and one indirect. The direct goal is for each child to learn concepts of numeration, counting, number formation, basic math operations, decimal system, place value, fractions and the memorization of math facts in addition, subtraction, multiplication and division. The indirect goal is to assist children in the development of their intelligence by refining and expanding their ability to concentrate, follow a process, work independently, problem solve, and complete the full cycle of a task.

Objectives

Introduce and associate quantities and numbers 0-9,999, develop ability to place objects in seriated order, introduce concept of number as a symbol for a collection of separate objects, develop ability to count independently to 9,999, develop ability to follow verbal directions, introduce the decimal system, introduce process of exchanging in decimal operations, introduce and develop ability to perform addition, subtraction, multiplication, and division operations, memorize basic math facts, provide a concrete introduction to the concepts of squaring and cubing, introduce skip counting, provide concrete introduction to fractions, introduce fraction vocabulary.

Instructional Strategies & Materials

- Counting Materials: Number Rods, Sandpaper Numerals, Spindle Boxes, Counters and Numerals, Colored Bead Stair, Memory Game
- Golden Beads: Introduction to the Golden Beads, Nine Tray, Ten Tray, Quantity Layout, Numeral Layout, Full Decimal Layout, Composition of Quantity and Symbol
- Teens and Tens: Teen Boards, Ten Boards, Hundred Board
- Simple Counting: Positive Snake Game, Negative Snake Game, Multiplication Board, Division Board
- Simple Operations: Addition Strip Board, Subtraction Strip Board, Memorization Charts, Multiplication Bead Bar Layout
- Operations with the Golden Beads: Static and Dynamic Addition, Subtraction, Multiplication and Division, and Long Division
- Bead Cabinet: Squaring and Cubing Sensorial Activities, Linear Counting, Skip Counting
- Decimal Operations: Stamp Game, Small Bead Frame, Dot Board Game
- Fractions: Fraction Skittles, Fraction Circle Insets

Language Overview

Language is interwoven throughout all aspects of the classroom curriculum. Specific language activities include oral language, written expression, and reading. The primary Language Curriculum builds upon oral language to discover the relationship between sound and symbol. This discovery enables the child to make his or her own thoughts visible (writing) and to decipher the thoughts of others (reading). Further activities spark conscious awareness of the order and function of words (grammar).

Goals

As with the other curricular areas, the Language Curriculum has two primary goals, one direct and one indirect. The direct goal is for each child to learn concepts of oral communication, written expression, and reading. The indirect goal is to assist children in the development of their intelligence by refining and expanding their ability to concentrate, follow a process, work independently, problem solve, and complete the full cycle of a task.

Objectives

Development of phonetic awareness, letter/sound recognition, spoken vocabulary, handwriting ability, letter and sentence formation skills, grammar skills, and reading skills including phonetic words, puzzle words, phonograms, reading analysis, and early reader books.

Instructional Strategies & Materials

- Expansion of Language: enrichment of vocabulary through spoken language (naming of objects in classroom environment, classified cards, etc.), language training (storytelling, poetry, etc.)
- Writing: Sound games, Sandpaper Letters, Moveable Alphabet, Metal Insets, handwriting materials
- Reading: Phonetic Object Game, Phonetic Reading Activities, Phonograms, Word Study, Puzzle Words, Reading Classification, First Books

- Function of Words: Grammar Symbols Box, Noun Games, Articles, Adjective Labels, Logical Adjective Game, Detective Adjective Game, Conjunctions, Prepositions, Verbs, Adverbs, Logical Adverb Game, Commands
- Reading Analysis: Simple Sentences, Arrows with Questions, Extensions, Attributes and Appositives

Cultural Studies and Science Overview

An ecological perspective highlights the interrelationships of the earth, its flora and fauna, and human life. The Cultural Studies and Science Curriculum materials allow children to order simple classifications of non-organic and organic forms and to identify basic parts of plants and animals. Each child discovers the richly varied way in which people meet the same basic needs in relation to differences in topography, climate, and natural resources. Simple experiments with magnets, electricity, etc. allow children to explore the physical sciences with concrete manipulatives.

Goals

The goals of the Cultural Studies and Science Curriculum are to provide children with a basic scientific vocabulary for understanding and communicating about the world around them and to engender an understanding of the earth as a unified system.

Objectives

Introduce the scientific method, support the development of a global perspective, introduce basic scientific vocabulary, develop an understanding of basic needs of living things, and develop an understanding of parts/whole relationships

Instructional Strategies & Materials:

- Geography: Land and Water Forms, Colored Globe, Political Maps and Labels, Geography Pictures, Flags of the World, Days and Months, Directions, Hemispheres
- Biology: Botany (care of classroom plants, plant stories, botany cabinet, leaf materials, nomenclature materials), Zoology (classroom animals, animal stories, nomenclature, books), Classification Exercises (living/non-living, plant/animal, etc.)

The Arts (Visual Arts, Music, Drama, Movement) Overview

The arts are integrated into the daily life of the classroom. Fundamental techniques (pitch, rhythm, use of specific artistic media, movement patterns) are presented in isolation to assist each child in developing a personal repertoire of skills. The children then use these skills to express their own ideas and feelings, to more deeply explore other content areas in the curriculum and to join with others in communal celebration and expression. Children are also introduced to a wide variety of styles of artistic expression, developing an appreciation for the contributions of artists both known and unknown.

Goals

The goal of the Arts Curriculum is to introduce children to the concepts of artistic expression and to develop basic techniques as a vehicle for their own expression.

Objectives

Develop basic art expression techniques, develop a basic arts vocabulary, refine fine/gross motor control, develop an appreciation for aesthetic beauty, refine auditory discrimination, and develop rhythm

Instructional Strategies & Materials:

- Visual Art: There are no prescribed art materials. However, art materials are kept on their own section of shelving in the classroom. The materials are available as a choice just as are the rest of the materials in the classroom environment.
- Music: bells, rhythm instruments, teacher-led songs and activities
- Drama: teacher-led games and activities
- Movement: teacher-led games and activities

Character and Peace Education Overview

Character and Peace Education, while arguably the core of the Montessori Primary Curriculum, is also the least visible. There are little or no physical materials devoted to the development of good character and peace education. However, the threads of this curriculum area are present and interwoven throughout the classroom. It begins in Practical Life, where each child learns to care for him or herself as well as their shared environment. The exercises of Grace and Courtesy explicitly teach social interaction skills, creating the means for a harmonious classroom culture. The Sensorial, Mathematics and Language curriculum enhance children’s abilities to understand the world and to communicate effectively with the people in their community. The Cultural Studies, Science, and Arts materials complete the curriculum by providing a global perspective and an understanding of the world as a unified whole.

THE ELEMENTARY MONTESSORI CURRICULUM (CHILDREN AGES 6-9 AND AGES 9-12)

Elementary Program Overview

The academic program at Urban Montessori Charter School integrates Montessori methodology, state standards and assessment, arts integration, design thinking and research-based instructional best practices. The result is a highly differentiated learning environment that facilitates accelerated learning and achievement across the curriculum. Our elementary program, like most Montessori elementary programs, is divided into two groups, lower elementary which includes ages 6 to 9 and upper elementary, which includes ages 9 to 12. The curriculum is composed of interwoven subject areas, which are described below. The core academic subjects of mathematics, language, and cultural studies are initially introduced through the Five Great Lessons. Urban Montessori’s curriculum is designed to address the psychological characteristics of children in the second plane of development, which include a stronger capability of effort and concentration, an immense desire for knowledge, a stronger need for intellectual curiosity, development of the powers of imagination and heightened social exploration.

Accountability in this differentiated model is assured through use of Work Plans and Record Sheets. Teachers meet with each child weekly to develop a Work Plan (Individualized Learning Plan), for the following week, which includes a checklist of activities the child should complete. These activities are selected based on the child’s interest, ability, and age, within the context of the state standards for that grade level. The Work Plans ensure that each child knows which activities s/he is expected to complete. Depending on the child’s age, the activity may be teacher checked or self-checked and the recording format varies from a teacher-provided sheet to one that the children create themselves (e.g., journaling). Once this process is complete, each child records his completed work on the Record Sheet. In this way, children develop specific skills in collaboration with their teachers and a classroom environment that is prepared for them. The goal of Urban Montessori Charter School’s elementary program is for children to develop themselves as individual beings and to master the process of learning, thereby creating a solid foundation for personal and academic success.

[□ See Appendix A-8 for a description of the Core 3-hour Instructional Block](#)

[□ See Appendix A-9 for a sample Elementary Work Plan](#)

Areas of Curriculum

Urban Montessori Charter School's Elementary Program includes 11 key curricular areas: Language Arts, Mathematics & Geometry, History/Social Science, Cultural Studies and Science, the Arts (Visual Arts, Music, Drama, Movement), Character and Peace Education, World Language, Health and Physical Education, Practical Life, Design Thinking, and Technology. All grade level state standards in English Language Arts, Mathematics, History/Social Studies, Science, Physical Education/Health, World Languages and the Arts are taught to mastery. Of the remaining four curriculum areas, two come from the Montessori methodology: (1) Character and Peace Education and (2) Practical Life. Finally, Design Thinking (from Stanford) and Technology round out our work to develop creative thinkers, prepared for a future in the 21st Century.

□ See Appendix A-10 for K-6 English Language Arts standards aligned with Montessori goals

□ See Appendix A-11 for K-6 Math standards aligned with Montessori goals

**Note – there are no formal Montessori materials or curriculum for grades 7-8; so there is no map of Montessori materials to standards for grades 7-8 provided; grades 7/8 will use Common Core standards*

Language Arts Overview

Language in the Urban Montessori's elementary classrooms is connected to all curricular areas and serves as a tool for exploration, communication, and self-expression. Children of this age are interested in exploring beyond the immediate environment and in knowing why things are the way they are. The Montessori language arts curriculum caters to these characteristics by enabling children to investigate the origin and structure of words and the growth of language in relation to the development of culture. At Urban Montessori Charter School, the language arts curriculum is introduced with the Fourth Great Lesson, "*The History of Language.*"

Goals

- *Read:* By the end of lower elementary, all children will be fluent readers who comprehend grade level text. By the end of upper elementary children are accomplished readers who use reading strategies and skills appropriately according to the genre of the text.
- *Write:* By the end of lower elementary, all children will be able to analyze sentences, including parts of speech and grammatical forms and functions. As a result, the six year old can express their ideas in writing. By the end of upper elementary all children are able to organize their ideas into coherent forms, including persuasive essays, narratives, and other types of creative writing.
- *Communicate:* By the end of lower elementary all children will be able to articulate themselves in speaking and writing using complete and coherent sentences. By the end of upper elementary all children will be able to articulate a point of view in speaking and writing in a variety of settings using grade appropriate academic language and Standard English.

Instructional Strategies & Materials

Children are provided manipulative materials in the prepared environment that advance their understanding of the concepts above. Detail is provided here to illustrate some of Urban Montessori Charter School's instructional strategies.

The history of language is the concept at the center of the Fourth Great Lesson story. This story introduces the history of language over time.

- *Fourth Great Lesson story:* Children are invited together to hear an oral retelling of this story. The story is meant to pique their interest and provide the jumping off point for further study. It provides the framework for continued learning, including various stories of how languages developed throughout the world and how that led to the development of different cultures.

- *Language Timeline*: A graphic representation of the history of language provided to children when the Fourth Great Lesson story is introduced and for some time afterwards as a reference and example of how to organize historical thinking).
- *Four part cards*: These are sets of four cards that provide content explanations for children to study. For example, the first card on hieroglyphics would include the title, Hieroglyphics, an illustration of hieroglyphics and a definition, or explanation of the term or concept. The other three cards of the set break up the title, illustration and definition. The cards are mixed up with other card sets and children demonstrate their understanding by matching them correctly and checking to ensure their accuracy. This is a demonstration of the Montessori control of error (self-checking assessment). Once the children complete their checks, they invite the teacher to review their work. To close, and depending on their age, children record their findings in writing.
- Other important tools may include materials like cave drawings, clay tablets and carving tools that further develop the children's understanding of the history of language.

Grammar: In Montessori elementary, grammar is systematically and explicitly taught. Multi-sensory instruction includes linking each part of speech with a key experience (a mini lesson), objects (realia), etymology (history of word), and a symbol. Children apply their understanding through use of a compartmentalized wooden grammar box with cards to sort parts of speech. For example, after the key experience and exploration of objects, a child may work with the grammar box to sort and match articles and nouns. Below is an example of how nouns are introduced and explored in the Urban Montessori's prepared environment:

- *Key Experience with objects*: Children are invited to join a lesson. The teacher dramatically writes the name of an object, hands the label to a child and asks the child to bring the object to the rug. For example, she may hand the child a label, "book," and the child retrieves a book. She continues with each child, with children placing their objects on the rug next to the label that names it. The teacher states that all of these objects have a name; everything has a name. She continues that names are nouns; a noun is a naming word. This builds on the child's prior knowledge of objects in the classroom and connects it to a new concept, nouns as parts of speech.
- *Etymology*: Next the teacher gives the etymology of the word "noun." Children learn that a noun is a naming word deriving from the Latin word *nomen*, which means a naming word. This exploration of the word "noun" connects with their work in the Fourth Great Lesson that words are the building block of language and each has a history.
- *Grammar Symbols*: The symbol for the noun is a large, black pyramid because pyramids are old, stable foundational structures, as are nouns.
- *Grammar Boxes*: Children apply their knowledge of the parts of speech to sort and match.
- *Sentence Analysis Charts*: Children diagram the structure of sentences by cutting apart the written sentence itself and by using symbols to represent the parts of speech and the relationship between parts of a sentence. This type of work demonstrates concrete understanding of the concepts that are foundational for coherent writing and speech.

Word Study: Similar to how grammar is taught, word study includes a key experience lesson with objects, an introduction to etymology and application. Word study includes, but is not limited to, the study of compounds, antonyms, synonyms, affixes (prefixes and suffixes), word families, homophones, homonyms and homographs. As above, children are invited to a lesson with the teacher, participate by manipulating objects, learning about etymology, recording (independent practice). The teacher assists with control of error, and collaboration with the teacher allows for checking for understanding and assessment.

Mechanics: This includes capitalization and punctuation and is explored as described above. For example, the lesson on a question mark includes the use of an object to illustrate the concept. In this case, a question is like fishing. You throw out a fishing hook hoping to catch a fish. You ask a

question hoping to generate an answer. In this demonstration, the teacher uses a real fishing hook and line. Conceptual understanding of the purpose of a question mark is reinforced through use of this analogy.

Reading: Grade level reading standards are assessed and taught to mastery using the Rigby Reader Program. The state frameworks inform a balanced approach, which includes phonemic awareness, systematic and explicit phonics instruction, the use of leveled reading groups and independent reading to develop fluency, vocabulary, and comprehension. Children learn grade and content specific reading strategies and skills. In addition, children are taught to read for specific purposes: for pleasure or to get information. Specific reading genres are introduced and may include: picture books, fairy tales, legends/myths, folktales, chapter books, reference books, non-fiction, biography, autobiography, etc. Children also learn to read tests as a genre.. They receive instruction in learn how to read and understand the format of tests, including how to follow the directions given, how find and interpret key words, and how to respond to different question types.

Spelling: Spelling rules are explicitly taught through the use of the San Mateo Spelling Program. A spelling diagnostic is administered in the beginning of the school year and children receive small group instruction, according to the results of that assessment. Spelling instruction is provided weekly in these small groups and is focused through exploration of that week's spelling rule. Children use the Montessori Movable Alphabet to manipulate the letters to exemplify the rule. They have a list of the words for the week and Command Cards that support their continued learning and reinforce the rule they're studying.

- *Moveable Alphabet:* A visual, tactile, and auditory tool for exploring graphemes and phonemes, while learning rules for spelling. For example, children studying what traditional schools might call "Silent E" would be shown a decorative box, which has a decorative E hiding inside. After building up how magical the E is, the E is revealed, and placed at the end of a three letter short vowel word, such as /c/ + /a/ + /p/. The teacher explains that the E is magical because it changes the short vowel /a/ to Long A. The word *cap* becomes *cape*!
- *Command Cards:* Children have access to a basket full of Command Cards, from which to choose. The Cards provide the children with activities to do to strengthen their spelling skills. The Cards require children to apply their spelling skills and knowledge of spelling rules in multiple ways. For example, a Command Card might ask a child to use two different colored pencils – one color for consonants and one color for the vowels or it might hone in on that week's rule by having children transform words like *cap* into words like *cape* using the Magical E.

Writing: Communication using the written form is a central part of the curriculum in traditional and Montessori schools. At Urban Montessori Charter School, writing is integrated across subject areas in Montessori with grade level standards introduced and reinforced throughout the lower and upper elementary programs. Grade level writing standards are assessed and taught to mastery. The state frameworks inform a balanced approach to writing instruction, which includes journal writing, creative writing instruction, research, and genre-based writing instruction. This instruction exemplifies all aspects of the traditional school's writing instruction, including: modeled writing, shared writing, guided writing, independent writing, and assessment. Children learn grade and content specific writing strategies and skills through small group and one-on-one instruction.

- *Journal Writing:* Journaling is common to both lower and upper elementary. Children write to record information and their original thoughts. This is free form writing and each child decides the extent to which the writing is shared or private.
- *Creative Writing Instruction:* Children are provided explicit instruction about how to organize their sentences into paragraphs and how to stay on topic through the 4-Square approach. The 4-Square structure is introduced at the beginning of lower elementary and is developed through upper elementary. Children begin by using the structure to develop their ideas with

cut-and-paste pictures and then progress to writing sentences and paragraphs. For example, in lower elementary, if a child is using the 4-Square structure to record his favorite foods, he would start with the topic, *Favorite Foods*. In the four surrounding boxes, he would paste pictures of his four favorite foods. A child in upper elementary would use the same 4-Square structure to organize and develop a multi-paragraph essay. For example, a child may be exploring *How Access to Healthy Foods Would Decrease the Obesity Epidemic*. The upper left part of the 4-Square would organize the introductory paragraph(s), while the upper right and lower left would organize ideas for the supporting paragraphs. The bottom right would organize ideas for the concluding paragraph(s). Consistent use of the 4-Square structure throughout lower and upper elementary enables children to focus on the writing itself, rather than a new structure each year. The 4-Square is introduced and reinforced in small age (grade) level groups. For example, in a multi-age class of approximately 36 children, 12 six to seven year olds (first graders) would meet with the teacher together on using the 4-Square to explore grade level state standards. Similarly, 12 seven to eight year olds (second graders) would meet and 12 eight to nine year olds (third graders) would meet. This approach meets children's developmental needs, while also meeting state standards. Other creative writing, including monologues, plays, and poetry is also explored.

- **Research & Technology:** Children are provided instruction about how to conduct research. Most often, this research is guided by the child's interests, but is linked to age appropriate learning objectives and state standards. For example, the lower elementary child writing about his favorite foods might draw his own pictures, look in magazines to find pictures to cut out, or look on the computer to find pictures to print and cut. Additional information will be of interest to the lower elementary child able to write his ideas, and therefore more research would be done through the use of classroom computers and other reference materials. The upper elementary child conducts research almost exclusively through classroom computers. For example, she might do a Web Quest or use other research tools to learn more about obesity rates in the United States, or other related topics. Large sheets of paper are made available for the children to mount their work and children self-publish books about their research to include in the classroom library. Further, children in upper elementary engage in a special kind of field trip called "Going Out," which requires them to research and plan the group trip. "Going Out" for the children researching obesity might involve interviewing medical practitioners and visiting community gardens before completing their writing.
- **Genre-based Writing Instruction:** Children are provided instruction on a variety of writing genres. These may include, but are not limited to: descriptive, narrative, expository, and persuasive writing. Children are introduced to the writing genres in their first year of elementary and go on to develop their ability to craft a narrative with sophisticated dialogue, a response to literature, or an expository essay by the time the fourth grade state writing test is administered. Descriptive and narrative writing are taught and reinforced through journaling and through use of the 4-Square. By the age of nine and ten years old, upper elementary children have more advanced writing skills and the ability to craft an articulate persuasive essay. For example, children develop their abilities to craft expository and persuasive essays by conducting research on topics they're pursuing (see above).
- **Work Plans:** Teachers meet with each child weekly to develop a Work Plan for the following week. In lower elementary, teachers provide an individualized Work Plan, which includes a checklist of activities the child should complete. These activities are selected based on the child's interest, ability, and age, within the context of the state standards for that grade level. The Work Plans ensures children know which activities they are expected to complete. Depending on the child's age, the activity may be teacher checked or self-checked. Once this process is complete, each child records his completed work on the Record Sheet. In upper elementary, children journal to record their completed work.

Handwriting: Children write using D'Nealian manuscript and then cursive. They learn about the development of written language through the Fourth Great Lesson, The History of Language, which includes consideration of writing as an art form. Children in upper elementary further their skills by learning calligraphy.

Mathematics & Geometry Overview

Mathematics in the elementary classroom continues to focus on the use of manipulative materials that lead the 3 to 6 year old child toward abstraction, but differs according to the developmental characteristics of the 6 to 12 year old child. Elementary aged children are socially oriented and enjoy using their ability to reason and to complete large, challenging projects. To cater to these characteristics, the Montessori mathematics curriculum encourages children to collaborate on activities and to derive for themselves the formula, algorithm, or rule necessary for abstractly completing a mathematical procedure. Many exercises allow for the possibility of extensive work while the flexible structure of classroom time enables children to complete large projects and investigations.

The mathematics curriculum is introduced with the Fifth Great Lesson, *The Story of Numbers*. It is divided into 13 primary areas of work: numeration, multiplication, division, fractions, decimals, squaring and cubing, square root and cube root, powers of numbers, negative numbers, non-decimal bases, word problems, ratio and proportion, and algebra.

The study of geometry forms a separate curricular area in the Montessori methodology. However, geometry concepts are introduced and examined in the same manner as general mathematical ideas and the two curricula are explored concurrently throughout the school year. The study of geometry at Urban Montessori Charter School focuses on leading children from a sensorial foundation in two and three-dimensional forms to the discovery of geometrical relationships and abstractions based on their explorations. Concrete materials (manipulatives) help develop each child's conceptual understanding of geometry and stimulate mental development by providing experience with logical reasoning, problem solving, deduction, and synthesizing. Geometry at the elementary level can be divided into six areas of work: the study of line, the study of angles, polygons, equivalence, area of plane figures, and solid geometry. Just as children's elementary mathematics work is initiated by a story outlining the history of mathematics, the geometry curriculum at the elementary level also begins with an historical account of the development of geometry. Once a story describing the history of geometry has been presented, work in all other areas of the curriculum can be undertaken.

Goals

- *Conceptualize (Mathematics)*: By the end of lower elementary, all children understand computations, procedural skills, and problem solving via sequential exposure to manipulatives that develop abstract understanding. By the end of upper elementary children are skilled at performing mathematical computations, procedural skills, and problem solving abstractly.. They maintain strong conceptual understanding through the continued use of manipulatives.
- *Conceptualize (Geometry)*: By the end of lower elementary, all children further develop abstract understanding of geometric relationships through use of manipulatives. By the end of upper elementary, all children understand geometry abstractly, and are able to use manipulatives to model the concepts.
- *Compute (Mathematics)*: By the end of lower elementary, all children have developed basic computational and procedural skills to automaticity in: numeration, multiplication, division, fractions, decimals, squaring and cubing. By the end of upper elementary all children can further compute and perform procedural skills in: powers of numbers, negative numbers, non-decimal bases, ratio and proportion, and algebra.
- *Compute (Geometry)*: By the end of lower elementary, all children can perform basic geometric computations (e.g., area, perimeter, equivalence). By the end of upper elementary, all children can perform more complex geometric computations (e.g., volume, formulations).
- *Solve Problems (Mathematics & Geometry)*: By the end of lower elementary all children can apply their computational and procedural skills to solve word problems. By the end of upper elementary all children will be able to apply skills, understandings, and experiences to resolve challenging mathematical situations.

Instructional Strategies & Materials

Children are provided manipulative materials in the prepared environment that advance their understanding of the above concepts. Again, detail is provided to illustrate the instructional strategies Urban Montessori Charter School will use.

Story of Numbers: The concept at the center of the Fifth Great Lesson story. This story introduces the history of numbers over time.

- *Fifth Great Lesson story*: Children are invited together to hear an oral re-telling of this story. The story is meant to pique their interest and provide the jumping off point for further study. It provides the framework for continued learning, including various stories of how numerals developed throughout the world and how that led to the development of different major systems of counting to fulfill basic human needs. The relevance of mathematics in human society is emphasized in the story and a connection between the study of mathematics and other curricular areas is established. Later presentations on the history of measurement and the history of geometry provide further details in relation to the whole study of numbers and continue the child's exploration of historical mathematics.
- *Math Timeline*: A graphic representation of the history of counting systems provided to children when the Fifth Great Lesson story is introduced and for some time afterwards as a reference and example of how to organize historical thinking.
- *Four part cards*: These are sets of four cards that provide content explanations for children to study. These cards are explained above, in the Language Arts section.

Example Concepts	Example Kinesthetic Mathematics Materials
Numeration-introduction to hierarchical numerals	Wooden Hierarchy Material
Multiplication	Large Bead Frame, Checker Board Of Multiplication, Flat Bead Frame, Bank Game
Division	Long Division with Racks and Tubes, Group Division with the Stamp Game
Fractions	Introduction to Quantity, Symbol and Language, Equivalence, Fractions Operations
Decimals	Decimal Fractions, The Decimal Checker Board, Squaring and Cubing Material

Geometry Materials

As described above, geometry at the elementary level is divided into six areas of work: the study of line, the study of angles, polygons, equivalence, area of plane figures, and solid geometry. The first is described in detail below to illustrate the type of instructional strategies and use of materials used at Urban Montessori Charter School. Just as the elementary mathematics work is initiated by a story outlining the history of mathematics, the geometry curriculum at the elementary level also begins with an historical account of the development of geometry. Once a story describing the history of geometry has been presented, work in all other areas of the curriculum can be undertaken. The sequence of geometry presentations will differ according to the interests of each child and not all areas need to be introduced with each student so long as the appropriate state adopted grade level standards are taught.

The Study of Line

In the study of line children are introduced to the concept and language of lines through the use of concrete materials and various naming activities. No more than three concepts are introduced at a time and terminology is always given in conjunction with a concrete visual impression. For example, to present the idea of a line segment, a piece of string is marked, then cut, in two places to demonstrate that a line segment has two end points. The four areas covered in this section include:

1. Concept of Lines: straight line, ray, line segment
2. Line Position: vertical, horizontal, oblique
3. Positions of Two Straight Lines: parallel, divergent, convergent
4. Intersecting Lines: perpendicular, oblique

The Study of Angles

The child's study of angles includes eight exercises introducing and exploring the characteristics of angles and a set of activities that sensorially prepare the student for the theorems of angles. The geometric sticks, which consist of colored sticks of different lengths that can be connected through holes at the ends of each stick, are used to demonstrate different kinds of angles and are connected to illustrate the application of angles to the naming of different kinds of triangles, e.g. obtuse, scalene triangle; acute, isosceles triangle. The measurement of angles is introduced through a metal frame, calibrated in 360 degrees, into which fraction pieces can be placed and measured accordingly. Angles can be added and subtracted using the Montessori instrument for measuring angles, and eventually the student can be shown how to use a protractor to measure and draw angles of a particular size. The terminology for interior and exterior space of line is presented using the geometric sticks and a cutting and matching exercise during the sensorial preparation for theorem of angles activities.

Polygons

The concept and nomenclature of both polygons and circles is explored in the polygon area of the geometry curriculum. In the first activity the terminology of various polygons is presented to the child as each shape is constructed using the geometric stick material. Various exercises are undertaken to acquaint the student with the different forms, including the special names given to quadrilaterals, and a second set of lessons that examines the nomenclature of polygons (side, perimeter, angle, area, vertex, base, altitude, etc.) is presented. A similar presentation is given to introduce the nomenclature of a circle and two additional activities can be initiated to investigate the relationship between a line and a circle, and the relationship between two circles. These activities provide experience in the construction and analysis of plane geometric figures and establish a foundation for the student's later work in area and solid geometry.

Equivalence

In the elementary Montessori classroom the student explores equivalence through three groups of activities. In the first series, equal, similar, and equivalent figures are examined using two sets of divided squares--one containing rectangles and squares of different sizes, the other, triangles. Once the child is able to identify equal and similar figures, equivalence is demonstrated by placing first a rectangular half over a whole square, then a triangular half over the same square and noting that the halves are equivalent because they have the same size despite their different shapes. In the next sequence of activities, the child further explores equivalent figures using the constructive triangle material first introduced in the early childhood class. After experience in this area, equivalence with the Pythagorean theorem is introduced using a set of three metal plates containing insets that demonstrate different applications of the theorem. Work in this area is extended through a number of activities illustrating the theorem with the constructive triangles. The student's experience with equivalence directly prepares her for the study of area and the abstract geometry she will encounter at the middle school and secondary level.

Area of Plane Figures

The area of plane figures, including the circle, is explored through a sequence of activities that move from purely sensorial exercises to those where the formula for determining the area of different geometric forms is derived. In the first set of activities, the child is prepared for finding the area of plane figures through a study of the relationship of lines (base and height) in equivalent figures. Thirteen metal plates containing interchangeable insets are used to demonstrate the equivalence between geometric forms and to help the student discover the rules governing these equivalencies. In the next set of exercises the concept of area of plane figures is introduced through the yellow area material which consists of a collection of movable figures that can be assembled into a parallelogram and three kinds of triangles and then converted into rectangles to demonstrate in concrete form

different formulas for calculating area. Further experience with deriving the formulas for area are obtained by analyzing the metal plate material used to show equivalence.

The circle is introduced in the next set of activities. To help the student discover pi, the circumferences of various sized circles from the polygon drawer of the geometry cabinet are recorded each on a separate line. The number of diameters that fit into each circle's line is then counted and the child is helped to see that for every circle, the diameter fits three times and a little more. A second exercise is then given to demonstrate how to find the area of a circle using two circles divided into equal parts that are fit together to resemble a rectangle. By associating the height and base of the rectangle with the radius and circumference of the circle the student is provided with a concrete bases for determining the formula necessary for calculating the area of a circle.

Solid Geometry

The child's exploration of solid figures continues at the 6 to 12 year old level through a study of volume and total area. The formula for calculating the volume of solid figures is arrived at through a series of exercises beginning with ample experience analyzing forms constructed with small cubes. The procedure for computing the volume of a solid prism is investigated in a subsequent lesson and an activity focusing on the equivalence between prisms with different bases is presented to help the student calculate the volume for a variety of prisms. A set of hollow solids that can be filled with sand are then used to help the child discover the formula for finding the volume of a pyramid. The study of volume culminates in an activity where the child is lead to determine the volume formula for the cylinder and cone of the geometric solids. The area of solids is examined by drawing the outline of figures from the geometric solids on large sheets of paper. Once the surface area has been laid out in two dimensional form, the child can apply what she knows about calculating the area of plane figures to determining the formula for finding the total area of solids. Both series of exercises in the solid geometry area of work enable children to discover the necessary formulas themselves and to apply these formulas to three-dimensional forms found in the environment.

History/Social Science Overview

At Urban Montessori, History/Social Science will be called social studies. Classroom activities and materials will be drawn from Montessori materials used in geography, history, and anthropology. Because the evolution of human societies is examined as part of the whole unfolding of life on earth, there is much intersection between the science and social studies curricular areas.

For children in the lower elementary program, history and geography are presented from a global perspective, beginning with stories from various cultures about the beginning of the world. Children explore political geography through the use of maps and picture folders. They learn more about how time is measured (daily calendar, the clock, etc.), as preparation for reading timelines of history. Next, children study early human beings, and using the Chart of the Basic Needs and Tendencies, see how all peoples, even from earliest times, have had the same basic needs, and have met these needs through interaction with the physical environment. This connection is made throughout the child's studies – that history is shaped, in part, by geography. The child begins the systematic study of his/her own country, then other countries, through a map series that isolates various physical and cultural features: capitals, borders, rivers, cities, etc.

In the second and third years of lower elementary, the study of early human beings becomes the focus of cultural history, using the prepared timelines and the Chart of the Basic Needs and Tendencies. The Migration Charts are introduced, especially those of early peoples. In Geography, the Classified Nomenclature provides a guide to further exploration of the physical world, parts of the earth, parts of the atmosphere, climate zones, and more specific land and water forms. Whenever possible, the children are taken to natural sites where they can actually observe a marsh, a cliff, etc. When this is not possible, models made of clay and sand are constructed so that the child has the kinesthetic experience of these various configurations. Political geography continues through the use of picture folders, stories, literature, songs, and celebrations from various cultures.

In the first year of upper elementary, the child integrates history and geography, seeing how the particular geographical and biographical features affect the development of a civilization. S/he continues the study of human migrations through the impressionistic charts. The classified history questions offer a more detailed framework for research of a given culture. The child now begins to construct timelines of his/her own, integrating the various skills necessary to execute such a project: collaboration, setting the scale, selection of material, calligraphy, and artwork. When completed by a child or small group, timelines are then presented to the other children in the class. The other dimension that begins at this age is economic geography. Here the child discovers the interdependencies within our economic system. S/he sees we are all interdependent, each giving something to the whole and each taking something. Various systems of exchange are studied, from barter to the use of credit cards.

In the second year of upper elementary, the child continues the study of civilizations, with concentration on the Middle Ages and Renaissance. Instead of working with prepared timelines, the child (usually working with several other children), constructs his/her own timelines, using the Chart of the Basic Needs and Tendencies and the History Questions as guides. In these studies, s/he comes across other forms of human migration, which are crystallized on the Migration Charts. Economic geography expands to include studies of population density and imports and exports.

In the third year of upper elementary, the emphasis in history and geography is on recent and current events – exploring African history, the age of Exploration, and the development of the United States of America. In particular, the child researches and constructs timelines on the history of California and Oakland. S/he makes a study of different political systems and investigates the structure and function of national, state, and local governments. Finally, the child studies the steps in world unification, both economically and ideologically, through an investigation of world trade agreements and peace efforts.

Goals

- Children will develop knowledge and cultural understanding. This includes incorporating lessons from history and the other humanities, geography, and the social sciences.
- Children will develop an understanding of democracy and civic values. This includes an understanding of our national identity, constitutional heritage, civic values, and rights and responsibilities.
- Children will develop skills, which include basic study skills, critical thinking skills, and participation skills that are essential for effective citizenship.

Instructional Strategies & Materials

To achieve the above, children do activities using Montessori materials specific to history and geography. These are listed below. In addition, teachers develop thematic standards-based units for any concepts in state standards for History/Social Science that are not taught to mastery by the end of the corresponding year. Further, children are provided with opportunities to learn about social studies through primary sources, guest speakers, inquiry-based research projects, and “going out” on field to learn and share.

Activities and materials in the elementary history program include:

- Natural history
 - The Black Strip
 - Clock of the Eras
 - Timeline of Life
- Timeline of Life
- The Linear Measurement of Time
 - The Clock
 - Days of the Week
 - Months of the Year
 - Class Diary

- History of Children's Names
- Personal Timelines
- The B.C. and A.D. Timeline
- Pre-History
 - The Hand Chart
 - The First Timeline of Human Beings
 - Fundamental Needs Charts
 - Second Timeline of Human Beings
 - History Question Charts
- Written History
 - The Growth of Culture
 - Study of Other Civilizations
 - Study of Child's Own Civilization

Activities and materials in the elementary geography program include:

- Preliminary Exercises
- The Beginning
 - Great Lesson
- Economic Geography
 - Production and Consumption
 - Imports and Exports
 - Interdependencies
- Nomenclature
 - Mountains
 - Rivers
 - Coastlines
 - Inland Land Formations
- Experiments

Note that Urban Montessori classifies the study of The Nature of the Elements, Sun and Earth, The Work of Air, and Work of Water as science. In addition to the categories of activities listed above, all grade level state standards for History/Social Studies are taught to mastery.

Science Overview

No longer content with sensorial experiences, the elementary child's interests extend beyond the immediate environment to the world and include questions of where, when, how, and why. As a result, children study the Earth as a part of its universe and explore the origin of the Earth and the interdependence of plants and animals.

Biology is viewed through a lens of the Earth's creation and explores the needs of plants and animals, ecology, and classification. Lessons are given to small groups of children and incorporate factual information as well as myths and fairy tales. Illustrative charts, demonstrations, and experiments are also used during presentations to make an impression on children and to help them visualize how the world functions. Each child then has the possibility to explore topics of interest on his or her own or may repeat the experiments individually using written instructions referred to as command cards. The command cards help children organize their thoughts clearly and sequentially, and provide them with a format for making up and writing their own experiments. Accurate scientific terminology is used within the presentations in both curriculum areas and, where possible, is linked to its etymology to help children make sense of the language. Nomenclature booklets in the elementary classroom serve as a reference and as a source from which terms that facilitate understanding of scientific concepts can be memorized.

Goals

- Children will learn facts, skills, concepts, principals, and theories specified in grade level content standards.
- Children will learn investigation and experimentation skills essential for inquiry at Urban Montessori Charter School, through high school, and beyond.
- Children will raise questions, follow their curiosity through scientific inquiry, and develop analytical skills in the process.

Instructional Strategies & Materials

At Urban Montessori Charter School, the elementary science curriculum can be divided into five broad units of study: the Creation of the Earth, Nature of the Elements, The Sun and Earth, The Work of Air, and The Work of Water. Each unit serves as a follow-up to the story of the earth's creation and will be presented as details set in the framework of the whole rather than as facts to be learned and memorized. The units are closely related and may be presented according to the interests of the children once the story of the earth's formation has been given.

Creation of the Earth

The story of the Earth's creation is presented to the entire class early in the school year and serves as the new elementary child's introduction to both the study of science and history. The entire story is given at one seating and can be based on a printed story given to Montessori teachers during their training or developed by the teacher himself. Fairy tales symbolizing facts are used within the story to catch the student's interest, and emphasis is placed on the idea that laws affecting all particles have achieved order within our universe. A number of large, impressionistic charts are displayed during the story to help the child visualize phenomena, such as the relative size of the earth to the sun, and seven different experiments representing basic laws of nature are demonstrated during the presentation. For example, to illustrate that matter settles according to its weight, water, oil, and mercury are poured into a test tube and observed as they form three distinct layers. Books about the solar system and the universe should be made available in the classroom following the presentation, and portions of the story can be retold in more detail if children express an interest in hearing it again. Various follow-up activities, such as swinging a bucket of water over our heads to demonstrate why we don't fall off the earth, can be presented before specific details about the earth are explored more formally.

The unit's remaining lessons examine the composition of the Earth. The Earth's spheres, the concept of gravity, the layers of the Earth, and various pressures influencing the surface of our planet are sequentially explored through the use of charts, demonstrations, and materials allowing children to investigate attributes of our Earth on their own.

Nature of the Elements

In this unit, basic principles of nature are explored through factual lessons that use personification and imagery to engage the student's interest and assist her understanding. For example, in one presentation particles are said to be "very stubborn in solids" and "more obliging in liquids" in an attempt to describe the phenomena in terms that the student can relate to. Teacher demonstrations, such as melting wax to illustrate particles becoming loose when heated, are used to illustrate basic laws of nature, and children are encouraged to repeat the experiments themselves using corresponding command cards. The lessons serve as a means for organizing the information and only as much as well will make an impression on the child should be presented at one time. The main topics and subtopics examined in this unit include:

- a. Properties of the Three States of Matter
- b. Further States of Matter
 1. Solids: Rigid, Elastic, and Plastic
 2. Liquids: Fluid and Viscous
 3. Solids Can Have Elasticity
- c. Different Ways of Combining
 1. Solutions

2. Noncombining Particles
 3. Mixing Particles
 4. Precipitated Reactions
 5. Chemical Reactions
 6. Saturation
- d. Attraction of the Earth and Gravity
1. Magnetic Pull
 2. Heaviest Particles Settle Towards the Center
 3. Gravity
 4. Heavy Objects Sink

The Sun and Earth

The Sun and Earth unit explores how the sun influences the earth. The unit consists of four lessons and includes presentations on four different work charts that are manipulated in some manner by the student to reinforce particular concepts introduced during the lessons.

The first lesson, referred to as "The Rotation of the Earth and its Consequences", uses a globe, a lamp, and a number of charts to illustrate how the earth is affected by its own rotation and by its rotation around the sun. The lesson explores why we have night and day, and examines how the earth is heated and cooled in a 24-hour period. Follow-up activities include an introduction to AM and PM and to longitude and latitude.

A second lesson in the unit explores the influence of the sun's perpendicular and oblique rays on the earth. Toothpicks are placed in both a flattened piece of clay and a spherical ball of clay to demonstrate how the curve of our planet's surface causes the sun's rays to fall obliquely on specific areas of the earth. A flashlight is then shone on a piece of paper both perpendicularly and obliquely to show how the perpendicular rays are more intense. The lesson continues by discussing why it is warmer at the equator than at the poles using a variety of charts to illustrate the different explanations.

The next lesson presented in this unit, entitled "The Seasons", explores how the earth's tilt influences the length of our days and the different seasons we have within our year. A story intended to excite the student's curiosity is used to introduce the idea that our days change in length during the year. A clay sphere on a pointer stick is then rotated around a lamp in a tilted position to demonstrate how the sun's perpendicular rays hit the earth at different points during the earth's rotation around the sun causing some areas to get more sun at certain times of the year than other areas. A connection between the length of day and the season is made during the lesson and the student is introduced to the terms solstice and equinox. Follow-up exercises further explore the effects of the planet's tilt through the use of factual charts. Four work charts (a work chart of zones, a time zone chart, a protractor zone chart, and a work chart for the seasons) are introduced at this point to reinforce ideas presented in the seasons lesson.

The last lesson presented in the Sun and Earth unit examines our atmosphere and how rain occurs. Impressionistic charts are used to show how our atmosphere absorbs radiated heat and simple experiments, such as placing a cold lid over a pot of boiling water so that the moisture turns back into liquid, help the child to understand why it rains. Extensions to this lesson are open-ended and could include a study of cloud formations, precipitation, the geography of deserts, etc.

The Work of Air

The Work of Air unit focuses on the planet's winds and how these have influenced our earth's climate. The unit begins with a demonstration of three experiments showing that air occupies space, rises when heated, and moves to replace heat that has risen. Six lessons are presented in the unit using a combination of charts, demonstrations, and experiments, and three of the charts introduced are also

used as work charts through the addition of a moveable sun and some arrows. Topics and subtopics explored in this unit include:

- a. Winds
 - 1. Simple Cycle of Winds
 - 2. Introduction to Pressure Zones
 - 3. Slanted Movement of Winds
 - 4. Steady and Variable Winds
- b. The Effects of Heat on Land and Water
 - 1. Absorption of Heat by Land and Water
 - 2. Sea and Land Breezes
- c. Seasonal Changes
 - 1. Perpendicular Rays of the Sun
 - 2. Effects on Wind Directions
 - 3. Effects on Rain
- d. Local Winds
- e. Oceanic Currents
 - 1. The Wind's Effect on Currents
 - 2. Vertical Motion of Currents
- f. Erosion by Wind (or Wind as Sculptor)

Work of Water

Lessons examining how water in its various forms has helped to shape the surface of our planet are presented within the Work of Water unit. Clay models representing land formations are used in many of the lessons to demonstrate how rivers, rain, and waves have altered the earth's exterior, while both factual and impressionistic charts are used throughout the unit to illustrate the concepts being introduced. Children should be taken to places in nature showing the phenomena introduced when possible, and can follow-up the lessons by building their own models. The unit's topics and subtopics include:

- a. The Work of Rivers
 - 1. Carving a River
 - 2. River Deposits
 - 3. Introduction to Highlands and Lowlands
 - 4. Rivers of North America
 - 5. Rivers of the World
 - 6. Introduction to Cities on Rivers
 - 7. 'V' Valleys and Canyons
- b. Work of Rain
- c. Work of Waves
- d. Work of Ice
 - 1. Breaking Rock Apart
 - 2. Glaciers
 - 3. Results of Glaciers
- e. The Cycle of Water
- f. Spread of Vegetation
- g. People in Different Zones
- h. Composition of the Earth

Biology

The subject of biology in the Montessori classroom is closely related to the child's history work and focuses on the immense variety of ways plants and animals have fulfilled their needs. Biology is viewed as an essential factor in the story of the earth's creation, and the curriculum's main concern is to foster an appreciation for the diversity of life and to instill an awareness of the importance of preserving the balance of our planet.

At Urban Montessori Charter School, the biology curriculum is divided into four areas (botany, zoology, classification and ecology) and caters to the elementary child's ability to reason and her desire to know the how and why of things. Lessons incorporating allegory and personification are used to arouse the child's curiosity, and charts and experiments are used within the talks to engage the child and to help clarify the information presented. Observations of plants and animals both in the classroom and nature are an important part of the biology work, and relevant books should be made available to children within the classroom. Either botany or zoology can be given first, or both may be explored simultaneously. Classification activities may be started once the child has attained a store of information about the variety of features in plants and animals.

Botany

The botany portion of the Montessori biology curriculum begins by introducing the primary needs of plants through three experiments. During the first experiment seedlings are placed under different conditions to emphasize that plants need water, light, and heat in order to grow. The second experiment demonstrates that plants have a tendency to grow toward the sunlight, while the third exercise shows that plants need a variety of minerals for optimal health. A chart illustrating the needs of plants can be presented to summarize the experiments and to interest the child in how plants function.

Each part of the plant, which includes the leaves, roots, stem, flower, fruit, and seeds, are then individually explored through a series of lessons incorporating experiments, demonstrations, and charts. The first lesson presented for each part examines the function or contribution that part makes to the plant and frequently uses a story format. Subsequent lessons investigate the plant part in more detail and how different varieties of the part have assisted plants in adapting to their environments.

The main lessons included in this unit are as follows:

- a. The Leaf and Its Functions
 1. Function of Leaves
 2. Plants Give Out Oxygen
 3. Parts of Leaves
 4. Varieties of Leaves
 5. Varieties According to Function
- b. The Root and Its Functions
 1. Experiments Showing Roots' Attraction to Water
 2. Roots Absorb Water
 3. Other Functions of the Root
 4. Two Main Types of Roots
 5. Other Sensitivities of the Root
 6. Varieties of Roots
- c. The Stem and Its Functions
 1. General Function of Stems
 2. Two Main Kinds of Stems
 3. Names of Tubes
 4. How Water is Moved Up the Stem
 5. Varieties of Stems
- d. The Flower
 1. Introductory Story to the Flower
 2. Parts of the Flower
 3. Varieties of Flowers
 4. Specialization to Assure Pollination
- e. Fruit
 1. Main Function of Fruits
 2. Kinds of Fruits
 3. Parts of Succulent Fruits
 4. Other Varieties of Fruits

f. Seeds

1. Kinds of Seeds
2. Function and Parts of Seeds
3. Seed Dispersal
4. Botany Experiments
5. Nomenclature Materials
6. Classification Chart
7. Classification Material – Kingdom Vegetalia
8. Botany books for additional research

Accurate scientific terms are given throughout the presentations and botany card material, consisting of picture, name, and definition cards for botany concepts, can be introduced to help familiarize children with the terms and their definitions. Command cards providing directions for repeating the experiments demonstrated in the presentations can also be made available to children.

Zoology

The zoology component of the Montessori biology curriculum focuses on the needs of animals and how these needs explain the animal's features and behaviors. Animals kept in the environment help children to become aware of the special needs animals have and provide opportunities for detailed and systematic observations. Two sets of materials, the story material and the body function material, are used in the classroom to help guide the child's explorations and to introduce different ways for classifying animals.

- **Story Material**

The story material consists of a set of envelopes each dealing with a different animal and containing a picture of the animal, a card of text, picture cards showing how the animal meets her needs and text cards relating to these. Various exercises using the materials are presented to small groups of children to help them become aware that all animals have the same needs but that they satisfy these needs in different ways. Question and answer cards pertaining to how the animal meets her needs, e.g. how do they move? (walk, crawl, swim, etc.), are then introduced as a simple means for classifying the animals and to start the children thinking about the immense variety of animals that exist.

- **Body Function Material**

The body function material, consisting of booklets, picture cards, and definition cards, are used to synthesize the knowledge the student already has about animals and to introduce the five classes of vertebrate. Various matching exercises provide the child with opportunities for exploring both the external and internal functions, which define a group or class of vertebrate and prepare the child for working with the animal classification material.

Classification

The Montessori plant and animal classification material enables children to develop their analytical abilities by providing them with opportunities to decide whether to place a specimen in one particular group or another. The material, which is composed of picture cards, text cards, and circular cards indicating the level of the subdivision it represents, is organized into envelopes by group with each envelope varying in size in such a way that subdivisions can fit inside of it. Children are introduced to the subdivisions of classification by either working down from each of the kingdoms or by working up to the kingdom beginning with a particular subdivision. Various activities allow children to become familiar with the characteristics for different subgroups and prepare the child for creating a tree of classification which progresses from kingdom to families using the classification circle cards and cardboard branches corresponding to the number of groups being laid out. Children are also shown how to use books to trace a plant or animal's genealogy.

Ecology

The study of ecology in the Montessori elementary classroom focuses on viewing the world as an ecosystem and on the delicate balance existing between organisms and the environment. The idea of interrelatedness is emphasized and is introduced by exploring the physical and biological factors existing in our world and how these factors relate to one another within various ecosystems on our planet. Ecology serves as a natural conclusion to the child's work in many areas of the Montessori curriculum and can be explored in a variety of ways depending on the student's interests.

World Language

Urban Montessori Charter School is committed to providing language learning opportunities as early as possible in the K-8 timeline. Urban Montessori will provide world language instruction formally from kindergarten. In year one, the world language offered will be Spanish. Moving forward as the school grows, Urban Montessori will explore other world languages to offer both for native Spanish speakers seeking mastery of a third world language and for children interested in learning a world language other than Spanish.

Goals

- Children are able to communicate orally in a world language with a beginning level of fluency and are able to use that language to communicate in settings outside of the classroom.
- Children gain knowledge and understanding of another world culture and understand the role language plays in cultural identity.
- Children develop an understanding of the nature of language and are able to compare and contrast the language they are learning with their native language

Instructional Strategies and Materials

Urban Montessori will provide world language instruction very similarly to the way the School will teach English Language Development to English Language Learners. Children will receive a balance of content-based language instruction and explicit language instruction. The content will enable children to make meaningful connections, build vocabulary and context, and learn about language as it relates to culture. The explicit language instruction will provide the rules of the language and in concert with the content build confidence in the language and provide context to the grammar and rules. In alignment with the Montessori approach, children will gain access to much of the content, vocabulary, cultural exploration, and connections through a prepared environment.

The Montessori setting naturally provides many of the graphic supports and visuals fundamental to content-based language instruction. The teachers will embed procedural, verbal, and instructional scaffolds into the prepared environment to enable them to access the language naturally, and they will create explicit opportunities for children to engage in conversation and discussion as part of the daily routine. This is also where the School will reach out to our families and our community to bring native speakers to the classroom whenever possible to authentically engage our children in the world language.

At the lower elementary level, Urban Montessori will incorporate movement, song, dance, and storytelling, Practical Life and Peace and Character Education and will focus less on written language fluency and more on oral language fluency. Children will also be engaged in thematic cultural units that build their understanding and appreciation of the relationship between language and culture.

The Arts (Visual Arts, Music, Drama, Movement) Overview

“The truth is that when a free spirit exists, it has to materialize itself in some form of work, and for this the hands are needed. Everywhere we find traces of men's handiwork, and through these we can catch a glimpse of his spirit and the thoughts of his time.

The skill of man's hand is bound up with the development of his mind, and in the light of history we see it connected with the development of civilization.” —Dr. Maria Montessori, MD

With the belief that all children have innate creative capacities to be nurtured and shared, Urban Montessori's elementary arts curriculum focuses on building artistic skills in visual arts, music, movement and theater while making larger connections to our history, our culture, our environment, and our unique and shared perspectives of the world. Urban Montessori classrooms have artistic materials at the ready for children to produce creative 'work' emphasizing each child's interests and understanding of The Great Lessons. Additionally, children receive instructional time in the afternoon to synthesize their ideas via visual arts, music and design thinking challenges.

Goals

- Children will build skills in visual arts, music, movement and theater so that they are able to articulate their ideas via a diverse range of visual, musical, kinesthetic or theatrical forms (i.e., drawings, paintings, sculptures, musical scores, dance scores, plays, operas, etc.).
- Children will develop meta-cognitive and reflective skills based on Studio Habits of Mind in order to synthesize their own learning strategies and strengths in both arts and other subjects.
- Children will appreciate different points of view and forms of creative expression across the artistic disciplines in order to empathize with other races, cultures and nationalities as well as take creative action in their own cultural contexts.

Instructional Strategies & Materials

The CA Visual and Performing Arts Framework—artistic perception, creative expression, historical and cultural context, aesthetic valuing and connections/relationships/applications—guides Urban Montessori teachers in their curriculum design and overall integration of the arts into The Great Lessons and Design Thinking curriculum.

- Analytic lenses from Harvard's Project Zero help Urban Montessori teachers and children think critically about their creative work. For example, the Studio Thinking Framework's eight Studio Habits of Mind—develop craft, observe, engage and persist, stretch and explore, express, envision, reflect and understand art world—offer children and teachers a common language to articulate artistic choices and thinking processes. These habits of mind dovetail with the Design Thinking Processes.
- Project Zero's Artful Thinking and Making Thinking Visible protocols also engage children to reflect upon their artistic work and make their learning visible to parents, peers, teachers and community members. Performances of understanding include: dance performances, plays, art galleries or exhibitions of learning.
- Through the founding board, Urban Montessori has relationships with key Bay Area arts organizations, namely MOCHA (Museum of Children's Art), Berkeley Repertory Theater, Shawl Anderson Dance Company, Kala Arts Institute, San Francisco Ballet and San Francisco Opera. These arts organizations and others will be invited to conduct mini-residencies at Urban Montessori, increasing children's intensive disciplinary training by professionals in the field.

Physical Education/Health Overview

The development of healthy minds and bodies at Urban Montessori Charter School is prioritized in three ways: instruction about healthy habits and choices, structured play, and unstructured play. These three foci are integrated in the Montessori curriculum, which includes the study of physical education/health within other areas such as care of self, coordination of movement, and biology and via instruction of the California state standards, which specify the teaching of discrete Physical Education/Health standards.

Goals

- Children will appreciate health through study of healthy habits and choices. They consistently apply these skills within and outside the school environment.
- Children will develop skills for unstructured play, including how to have fun playing alone and with others.

- Children will develop skills for structured play, including how to win and lose with grace.

Instructional Strategies & Materials

At the heart of teaching children about health and physical activity is the need to ensure that children feel included and safe as they learn about health and engage in physical activity. All children will have explicit time scheduled weekly for physical education classes where they will receive training and lessons in numerous physical fitness activities (could include martial arts, yoga, soccer, basketball, football, golf, tennis, swimming, dance, biking, hiking, running, gymnastics, sailing, rowing, climbing) and opportunities to practice their learning in a safe and encouraging setting.

They will also be provided with lessons as part of the core curriculum that teach specific concepts and skills and provided opportunities for practice to apply their learning. For example, inside the classroom, children learn about healthy eating habits through daily preparation and service of healthy snacks. This work has a permanent physical place in the prepared environment. Outside, children learn about healthy habits through shared meals, structured, and unstructured play. For example, gardening, hand washing, eating together, washing dishes, composting, playing “chase me,” resolving a conflict, or participating in a gymnastics or yoga class happens regularly. In particular:

- Instruction about healthy habits and choices provides children with the information they need to appreciate health. Urban Montessori provides children with opportunities to develop healthy habits by making healthy choices.
- Unstructured play is time when children get to choose how, where, and with whom they want to play. Here, they develop responsibility for what they’re doing and for each other, while developing independence and leadership skills.
- Structured play includes developmentally appropriate activities bounded by “the rules of the game.” They include competitive activities and skill development about how to keep activities going so the larger group can keep playing when something comes up that stops play. This may include forms of self-handicapping such as switching players or adapting the rules.
- Exposure to a wide range of physical activities during Physical Education classes, from movement to yoga to swimming to traditional team sports, Urban Montessori children will receive lessons and training in multiple sports and fitness activities to ensure each child connects with a physical activity that s/he enjoys.

Character and Peace Education Overview

Central to Montessori curriculum is the development of children who are able to function successfully in society. At Urban Montessori Charter School, character and peace education is core to the curriculum. Every member of the community is responsible for modeling respect. This includes respect for self, respect for others (including animals), and respect for the environment (at school, at home, and beyond). Many aspects of the school contribute to the development of these mores.

Goals

- Children will be mindful of their responsibilities as members of the class. This includes respecting themselves and others.
- Children will be able to solve real world problems within the context of their classroom, community, and world.
- Children will be empowered to feel they can and should contribute to their classroom, community, and world.
- Children will work with any child in the class on any project at any time.
- Children will develop empathy with others.
- Children will share their work, inside and outside the classroom.

Instructional Strategies & Materials

A variety of instructional strategies and materials contribute to making Urban Montessori Charter School an environment that fosters character and peace education. Some of these include peer teaching, modeling, and the Peace Table/Corner.

- *Peer teaching:* In the Montessori classroom, multi-age groupings make it possible for authentic peer teaching to occur. In traditional classrooms, a teacher may have her third grade children meet with their kindergarten “Reading Buddies” once a week for 15 minutes. In our classrooms, children of different ages have strong relationships because they’re in the same classroom every day. They learn each other’s strengths and weaknesses, the younger children emulate the older children, and their engagement with one another is purposeful. The children are not required to help another child. They are part of a culture that values helping others. They are self-directed and choose to help each other joyfully, based on real interest and real needs.
- *Modeling:* Everything about the culture of Montessori classrooms and schools is intentional. In some traditional school environments, a teacher or adult may be considered the “Learned One” or bringer of knowledge. The goal may be to literally “open minds” to “add knowledge or information.” In contrast, at Urban Montessori, adults and children co-create knowledge by participating in learning together. As described above, Individual Work Plans are prepared together. Modeling appropriate behaviors, attitudes, and habits is done by all members of the community, children and adults.
- *Peace Table/Corner:* Each classroom and outdoor space has a place designated for children to meet to resolve conflicts. In many classrooms, this is a low table called the “Peace Table.” Some classrooms place the table in a quiet corner and call it the “Peace Corner.” The table or area is meant to be inviting, cozy, and tranquil. Any colors used are soothing; if lights are used, they’re dim; floor pillow or beanbags may be used; water fountains may be used. Books on peace may be displayed. This builds on the early childhood experience of the “Peace Rose.” Prior to going to the Peace Table/Corner, a child needing help resolving a conflict completes a form like the one seen below requesting mediation. The form helps the child prepare for the meeting. See below.

Sample Request for Peace Conference

I _____ am calling _____ for a Peace Conference. I want to meet to discuss _____.

I would like a (circle one) teacher or peacemaker to join us.

Once the children are at the Peace Table/Corner, they begin resolving the conflict through use of a Language Frame (see below).

Sample I-Message Language Frames

Child 1 to Child 2: "My name is _____, and I feel _____ when _____ because _____."

(Optional, depending on type of conflict. E.g., physical conflicts are likely to use this, but inclusion/exclusion conflicts are unlikely to) "I want you to _____."

Child 2 to Child 1: "So the problem is you feel _____ when _____ and you want _____."

At this point, Child 2 may share additional unresolved feelings, as needed.

- *Job Chart:* Each classroom has a Job Chart that lists jobs for each child to choose or rotate weekly. The jobs help the children develop specific skills to care for themselves, others, and the environment. See chart below for examples.
- Other possible opportunities for character and peace education are explained below.

Name	Description
Birthdays	Children learn that they travel around the sun once for every year of their life. They participate in a "Sun Ceremony" that has them act out the process of their growing older. A rug/low table is prepared with a yellow sun model with the months around it and a candle acts as the sun. Children hold a small globe and walk around the sun, returning to stand at their birth month, while parent(s) shares important milestones and pictures from each year, as the child continues to walk around the sun.
Historical Halloween	Children choose an important figure from past or current history who has contributed to making the world more peaceful. They research the person, dress as the person, and share what they've learned with their class and schoolmates on Halloween.
International Day	Children research their heritage, including where their ancestors came from, where their name comes from, etc. They share about their culture, including geography, food, customs, etc. with their class and schoolmates on International Peace Day.

School Government	Children vote for President, Vice President, Treasurer, and Secretary of the school, as well as class representatives from each classroom. Those running have a platform, give a speech, and share what their plans are to improve the school. Once elected, they hold bi-monthly meetings to fulfill their elected duties.
The Green Team	Children vote for two representatives from each classroom to be part of The Green Team. Their goal is make the school more environmentally friendly.

Practical Life Overview

The primary goal of the practical life activities is to aid the children's development of self-esteem, concentration, organizational skills and independence. The elementary practical life curriculum is a continuation of the practical life skills presented in the primary classroom. Skills pertaining to care of self, care of environment and living things, along with grace and courtesy are still important. The children are responsible for the care of their classroom. The various responsibilities could include determining classroom guidelines, preparing new materials, printing paper and ordering new dictionaries. However the focus now includes strengthening the ability to cooperate so that the children may become fully capable and responsible adults who develop empathy and sensitivity towards others and who are contributing members of their community.

It is because of this greater sensitivity to others that community service projects are an important part of the elementary practical life curriculum. These projects include the entire school and beyond. "Going out" trips into the wider community are often suggested and planned by the children with a parent or teacher. Such work might include a desire to assist a nation after a natural disaster has occurred. The children's planning process could include exploring the various channels for providing aid, such as viewing websites for organizations already involved. Children can research the work of the various organizations and think strategically about how they can help. Activities might include notifying the public of humanitarian needs, collecting the supplies and donations, and transporting the goods to the nearest office of the aid organization.

Goals

The primary goal is to strengthen the children's ability to cooperate and to develop a sense of responsibility. The children will develop empathy and sensitivity towards others within their immediate environment and beyond.

Design Thinking Overview

Design Thinking is specifically taught and integrated into the curriculum to nurture a creative disposition in children and provide a skill set that enables them to leverage their content knowledge to identify problems and develop innovative solutions. Through Design Challenges, children are given meaningful opportunities to practice the design process and develop their capacities as designers. These skills support the self-directed nature of the Montessori curriculum and help develop children who are primed both for success in high school and to make meaningful contributions to our 21st century society.

Goals

- Children recognize that the objects and systems in their world were designed and built by people
- Children recognize that they can create new solutions to change and improve their world
- Children have a problem solving process they can use to address challenges

As part of this process children learn:

- The phases of the design thinking process
- To play different roles on a design team
- To interview and observe others
- To define problems for which they will develop solutions
- The rules and roles of brainstorming
- To use tools and materials for prototyping
- To test their prototypes
- To present their ideas to others

Instructional Strategies & Materials

Design Thinking Education is an emergent discipline that is being successfully implemented by many including our partners at the Henry Ford Learning Institute and Stanford Institute of Design's K-12 Lab. The School will develop and implement instructional strategies that leverage the experience of our partners and that appropriately scaffold the design process for children in each of the developmental planes. Since one of the tenets of design thinking is that materials inspire design, our classrooms will have a vast array of building materials (recyclables, fabric, wood, glue, etc.) and building tools to encourage broad thinking.

- Both lower and upper elementary children work on Design Challenges to learn the design thinking process
- Both lower and upper elementary children work on Design Challenges tied to the Great Lessons and other curricular content
- Children will work on skill building within the prepared environment
- Children will work with basic shop tools as well as digital technologies to build their prototypes and share their work

Technology Program Overview

The Elementary Technology Program begins by developing children's ability to use technology to bolster their creativity and innovative capacity progressing all the way up to understanding how to use technology effectively to communicate, collaborate and conduct research. Children will find natural intersections between technology and the schools' Montessori, Arts and Design Thinking curricula and will leverage modern technology to address the real world problems and opportunities that the founding team believes are central to providing children with context for their learning in the 21st century.

Goals:

- Children will demonstrate basic computer fluency, including the ability to use the keyboard and mouse to interact with relevant software and online content
- Children will be able to use technology to write and illustrate short essays, stories and poems
- Children will be able to create basic multimedia artifacts, including simple movies, digital paintings and drawings, slides and other presentation materials
- Children will be able to identify technological opportunities to enhance and demonstrate their learning in any curricular subject
- Children will demonstrate basic internet research skills, including introductory search methodology, data collection and organization and source citation
- Children will engage in basic online collaboration with other children and/or professionals at a distance

Instructional Strategies & Materials:

Urban Montessori Charter School will provide children with a range of technology, including computers, Internet connectivity, tablets, mobile devices, input devices and software (including adaptive, media creation, word processing, presentation, spreadsheet and collaboration products)

Secondary Program Overview

Like the elementary program, the secondary curriculum is composed of interwoven subject areas, and in alignment with the third plane of development, the curriculum becomes increasingly multidisciplinary and integrated in its approach and presentation. Urban Montessori Charter School's Secondary Program includes all of the key curricular areas named in the Elementary Program: Language Arts, Mathematics, History/Social Science, Science, the Arts, Character and Peace Education, World Languages, Health and Physical Education, Practical Life, Design Thinking, and Technology. All grade level state standards in English Language Arts, Mathematics, History/Social Studies, Science, Physical Education/Health, and the Arts are taught to mastery. It is at the secondary level where Design Challenges and arts integration are increasingly blended into the core curricula and where state standards are presented through multidisciplinary challenges that are meaningful and relevant to our youth.

Maria Montessori did not specialize in secondary education, but today there are hundreds of Montessori secondary programs nationwide that took her approach to primary and elementary education and mapped it to secondary education. While Montessori did not do extensive research at the secondary level and there are not specific Montessori curriculum materials at this plane of development, she did have several observations about adolescents and their particular plane of development that are in alignment with the understandings of the secondary educators on the Urban Montessori founding team and current research on adolescents.⁸ These observations include:

- Adolescence is a period of great vulnerability
- Adolescence is a period of self-construction; adolescents are trying to make meaning of themselves in the context of larger society
- Adolescents are intellectually prepared to ask and answer hard questions, dive deeper into complex topics, and become motivated by real world issues; simultaneously, they are self-conscious, discouraged easily, and insecure about their ability to do the above
- Adolescents have a great need for creative expression as a means for self-expression and for self-discovery in their pursuit of independence
- Adolescence is a critical time for determining self-worth – “The whole life of the adolescent should be organized in such a way that it will enable him or her, when the time comes, to make a triumphal entry into social life, not entering it debilitated, isolated, or humiliated, but with head high, sure of himself or herself.” (Maria Montessori)

The Urban Montessori approach to its secondary program follows from the values statements made above and from the best practices of Montessori secondary schools across the country. One example is a nationally recognized public Montessori secondary school located in Cincinnati, Ohio. The first public Montessori secondary school in the country, Clark Montessori serves a socioeconomically and racially diverse student population and sends 100% of its seniors to college. Clark organizes its core content around eighth central themes. The themes are selected to be relevant to adolescents and their development, to align with state standards in Social Studies and Science, and to unify the content in a meaningful way, and Urban Montessori will use similar themes in alignment with the Common Core standards. The themes used by Clark Montessori are as follows:

1. Explorations & New Beginnings
2. Identity
3. Independence & Interdependence

⁸ Rathunde, K. (2003). "Comparison of Montessori and Traditional Middle Schools: Motivation, Quality of Experience and Social Context". *The NAMTA Journal*, 28: 12-52.

4. Leadership through Stewardship
5. Balance
6. Change
7. Movement
8. Acquiring a Sense of Belonging

The UMCS themes will be taught quarterly over eight quarters spanning seventh and eighth grade. Each quarter will culminate in an interdisciplinary Design Challenge that focuses on the theme. Children will receive instruction in all content areas and receive targeted instruction in the state standards throughout the quarter. They will be expected to apply their understanding and learning in complex and relevant challenges that require they employ Design Thinking in the development of solutions. It will be this application of knowledge and skills in real-world Design Challenges that motivates children to obtain the knowledge and skills to begin with. In addition, children in this plane of development will be expected to increasingly manage their learning and to collaborate with classmates around understanding the expectations and the standards, managing their time and their deliverables, and ensuring timelines and performance expectations are met. Teachers will play an increasingly facilitative role in secondary classrooms, focusing on building an individual's skills in accordance with individualized work plans and record sheets.

[□ See Appendix F to see how themes are integrated into social studies and science content at Clark Montessori](#)

Similar to the elementary model, teachers will meet weekly with each child to develop a Learning Plan that will include a weeklong schedule of activities and deliverables expected for the week. Depending on the child's needs, the deliverables will be teacher-checked or self-checked and the recording format may vary in alignment with the child's needs. Some students may initially require more of a checklist format use in the elementary program; however, the goal would be to move students towards the secondary work plan format and to move them to towards greater independence. The secondary classroom will be completely differentiated with a goal of building every child's capacity to independently monitor his or her own learning, to advocate for his or her own learning, and to leverage the child's peers in his or her learning.

The prepared environment at the secondary level will be designed specific to the needs of adolescents. Secondary children will be organized in "houses", small clusters of children that "travel" together throughout the day. Each cluster will have their own common space set up for quiet study, small group work, research, and larger group meetings and lessons. Secondary children will each have their own personal space in the common room – a mini workstation. In addition, the common room will include comfortable couches, small tables to enable group work, and bookshelves and walls with leveled books and instructional resources. At this age, children will have a greater role in both creating and managing the prepared environment.

In addition to the common spaces for each cluster, there will be classrooms designed specifically to support the secondary curriculum and the secondary instructional strategies. There will be a science lab, a math lab, an art/design studio, conference rooms for seminars, and a computer learning lab. Part of the day will be spent in seminar where children are receiving whole-group direct instruction from teachers on specific skills. Part of the day will be spent working independently or in small groups on design challenges in a workshop format. During this time, children will be pulled by teachers as needed for small group instruction, differentiated support, and individual conferencing according to a structured schedule. When children are not working specifically with a teacher either in a conference, lesson, or other structured activity, they are expected to be working in the common room in alignment with their individual work plans.

Once a year, secondary students will engage in a weeklong culminating intersession where they engage in a field study to address a specific design challenge. These field studies will allow the

students the opportunity to work deeply on one challenge and have a hands-on experience in a specific field of study. Ideally, these studies would take place off-site and possibly be part of a multi-day overnight trip, allowing community-building, personal and physical challenges, and a learning experience in another region or culture.

□ See Appendix A-12 for a sample Secondary Work Plan

□ See Appendix A-5 for the secondary student schedule

The larger goal of the secondary program is to ensure that children are prepared to be successful in any high school and in meeting their postsecondary goals. Teachers at the secondary level will ensure that children are able to utilize textbooks as resources in their learning, conduct effective research and fieldwork, write persuasively and powerfully, and organize and collect information from multiple sources and in multiple formats (lectures, text-based, primary, secondary, internet, interviews, numerical data, etc). Urban Montessori anticipates its graduates will pursue high schools with diverse offerings and structures, and whether a child chooses a performance-based school for the arts or a more traditional college-preparatory program, Urban Montessori children will have the skills, attitudes, self-confidence, and motivation to excel at the secondary school of their choosing.

Language Arts Overview

UMCS will use the Common Core Standards adopted by the State of California for English Language Arts to organize our English Language Arts program. Urban Montessori intends to adopt much of the Common Core Curriculum Maps for 7th and 8th grade. Teachers will determine how to align the recommended units with Urban Montessori's adopted themes.

Reading

Through wide and deep reading of literature and nonfiction of steadily increasing sophistication, children gain:

- A reservoir of literary and cultural knowledge, references, and images;
- The ability to evaluate intricate arguments; and
- The capacity to surmount the challenges posed by complex texts.

Writing

For children, writing is a key means of asserting and defending claims, showing what they know about a subject, and conveying what they have experienced, imagined, thought, and felt. To be college- and career- ready writers, children must

- Take task, purpose, and audience into careful consideration, choosing words, information, structures, and formats deliberately;
- Know how to combine elements of different kinds of writing to produce complex and nuanced writing;
- Be able to use technology strategically when creating, refining, and collaborating on writing;
- Become adept at gathering information, evaluating sources, and citing material accurately;
- Report findings from their research and analysis of sources in a clear and cogent manner;
- Have the flexibility, concentration, and fluency to produce high-quality first-draft text under a tight deadline; and
- Have the capacity to revisit and make improvements to a piece of writing over multiple drafts when circumstances encourage or require it.

Speaking

To become college and career ready, children must have ample opportunities to take part in a variety of rich, structured conversations—as part of a whole class, in small groups, and with a partner—built around important content in various domains. They must be able to

- Contribute appropriately to these conversations;
- Make comparisons and contrasts
- Analyze and synthesize a multitude of ideas in accordance with the standards of evidence appropriate to a particular discipline;
- Be able to listen attentively to others so that they are able to build on others' meritorious ideas while expressing their own clearly and persuasively.

Language

To be college and career ready in language, children must:

- Have firm control over the conventions of standard English;
- Be able to choose words, syntax, and punctuation to express themselves and achieve particular functions and rhetorical effects;
- Have extensive vocabularies, built through reading and study, enabling them to comprehend complex texts and engage in purposeful writing about and conversations around content;
- Become skilled in determining or clarifying the meaning of words and phrases they encounter, choosing flexibly from an array of strategies to aid them;
- Learn to see an individual word as part of a network of other words—words, for example, that have similar denotations but different connotations.

(Common Core Standards: English Language Arts)

Instructional Strategies & Materials

Children at the secondary level will access primary and secondary sources to seek information and present their written and spoken understanding and analysis in multiple ways as appropriate for the audience. Children will have increased access to the resources available outside the classroom and will be taught how to differentiate and evaluate information and the sources from which the information comes. They will access multiple forms of information with an inquiry orientation, questioning the motives, intentions, and biases of the presenters and the context from which the information is being presented. Children will be expected to read and respond to classical literature, analyze and understand poetry, and be versed in the strategies for accessing and understanding nonfiction text. In alignment with the third plane of development, the secondary language arts curriculum will be integrated with the other disciplines. Lessons on accessing expository text will utilize science and history texts the children are already using. Lessons on poetry will align with cultural studies.

Children will increasingly leverage the world outside the classroom to get information and better understand multiple perspectives, increasingly doing fieldwork and interacting with community resources in Oakland. Technology will play an increasing role in both the acquisition of information and the presentation of learning. As they advance at the secondary level they will use technological tools with greater frequency and will be explicitly taught how to assess the value of different sources as they conduct research. They will also be expected to integrate video, design, digital art, and other media tools in their presentations of learning. Urban Montessori will explore the use of various software tools like My Access learning to ensure increased rigor, constant feedback, and accountability in our writing programs.

The general format for the school day will be a workshop format where children are expected to work on both group and individual assignments, peer conferencing with other children, or working in small groups on group assignments or projects while the teachers are teaching small groups mini-lessons or working with individuals on targeted lessons. There will be whole-group mini-lessons given throughout the week to ensure children receive explicit skills instruction in reading, writing, note-taking and presentation strategies in alignment with the Common Core standards. In addition, children will be pulled together during language arts time to respond to text using reciprocal teaching strategies, literature circles, and Socratic Seminars. Children will be explicitly taught to use note taking,

processing, analysis, and planning tools to build their ability to organize their thinking and collect information in a useful format. As needed, children will receive targeted accelerated instruction in reading and writing strategies utilizing proven reading and writing interventions curriculum.

□ [See Appendix A-13 for the Urban Montessori Secondary ELA Plan](#)

Mathematics Overview

UMCS will use the Common Core Standards adopted by the State of California for mathematics to organize our Mathematics program. Because Montessori is at its foundation differentiated, teachers will develop individual learning plans in alignment with their zones of proximal development in mathematics. This could mean that a child in the 7th grade is learning Geometry if s/he has already demonstrated mastery of Algebra I. Our **MINIMUM** expectation is that ALL children graduate with mastery of Algebra I fully prepared to access Algebra II or Geometry at the high school level. This ensures all UMCS graduates are on track for A-G completion. However, this does not mean that the teacher is only providing instruction in pre-Algebra and Algebra at the secondary level. Based on diagnostic assessments, children will be grouped to receive strategic instruction in their ZPD. This could mean that some children are receiving instruction in Algebra II, Geometry or even Trigonometry if they are ready and have demonstrated mastery in prerequisite content and concepts.

Goals

All UMCS students will graduate with proficiency in Algebra I. They will demonstrate the following habits of Algebraic thinking:

- Doing – Undoing: Effective algebraic thinking sometimes involves reversibility
- Building Rules to Represent Functions: Input is related to output by well-defined rules
- Abstracting from Computation: Abstracting system regularities from computation

(Fostering Algebraic Thinking, Driscoll, 1999, Educational Development Center, Heinemann)

Students will possess utility with algebraic language and constructs when presented with non-routine problems and approaches. They will demonstrate conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and productive disposition in:

- Problem Solving and Variable
- Equality and Algebraic Representation
- Linear and Non-Linear Functions
- Polynomial Functions
- Slope and Graphical Representation
- Polynomials (Multiplication and Factoring)
- Rate of Change and Technology

Instructional Strategies & Materials

Similar to language arts, children will predominantly work in a workshop model where they are working independently or in small groups. Teachers in this model will be working with small groups of children or individuals on targeted lessons conscious that many children struggle to grasp mathematical concepts in the same form and that differentiation and scaffolding may be required for specific learners to master standards. Teachers will be tracking and monitoring student understanding and mastery of standards daily to monitor which lessons are strategic for which children, which children require more guided practice in small groups, or which children need re-teaching one-to-one or in small groups. Children will work on mastery of specific skills and standards in alignment with their individualized work plans developed on a weekly basis.

The materials used in the lessons and in the prepared environment will be strategically selected to support conceptual understanding. Children will be encouraged to make connections and push their understanding by accessing additional resources both in and outside of the classroom. For example, when children are exploring slope, they will be able to access multiple manipulative materials in the classroom that demonstrate slope and push their thinking about slope, but they will also be able to access engineers and road designs to understand why in going over a mountain engineers choose to use switchbacks instead of a very steep road. Technology will increasingly be used to demonstrate concepts in the classroom and to enable children to work at their own level and pace. New “adaptive” teaching programs enable children to do independent practice of skills learned in their zone of proximal development. UMCS will explore programs like Carnegie Learning’s Cognitive Tutor as a supplementary program to differentiate and intervene. Using this type of program will support our ability to provide targeted instruction to both the motivated child ready to accelerate in mathematics as well as the struggling student requiring additional practice and support.

To organize and sequence the learning appropriately and to provide appropriate resources and content-specific professional learning opportunities, UMCS will explore programs like Connected Math that align closely to the UMCS philosophies around effective mathematics instruction. Specifically, UMCS is committed to implementing a secondary math program where

- The "big" or key mathematical ideas around which the curriculum is built are identified.
- The underlying concepts, skills, or procedures supporting the development of a key idea are identified and included in an appropriate development sequence.
- An effective curriculum has coherence-it builds and connects from investigation to investigation, unit-to-unit, and grade-to-grade.
- Classroom instruction focuses on inquiry and investigation of mathematical ideas embedded in rich problem situations.
- Mathematical tasks for students in class and in homework are the primary vehicle for student engagement with the mathematical concepts to be learned. The key mathematical goals are elaborated, exemplified, and connected through the problems in an investigation.
- Ideas are explored through these tasks in the depth necessary to allow students to make sense of them. Superficial treatment of an idea produces shallow and short-lived understanding and does not support making connections among ideas.
- The curriculum helps students grow in their ability to reason effectively with information represented in graphic, numeric, symbolic, and verbal forms and to move flexibly among these representations.
- The curriculum reflects the information- processing capabilities of calculators and computers and the fundamental changes such tools are making in the way people learn mathematics and apply their knowledge of problem-solving tasks.

(From the Connected Math Program)

Once children have demonstrated understanding of a given lesson and are able to apply their learning at the higher ends of Bloom’s taxonomy (synthesize, apply, analyze, and create), teachers will create open-ended multidisciplinary Design Challenges for children to apply their learning to solve relevant and real problems, deepen their understanding and to integrate their learning from the other disciplines. Design Challenges will be facilitated in workshops where some children collaboratively engage with the challenges while the teacher is conducting targeted lessons with other small groups or individuals.

[□ See Appendix A-14 for Urban Montessori Secondary Math Program](#)

History/Social Science Overview

History at the secondary level will be taught in alignment with the California State Standards. Because our classrooms will be multi-age with 7th and 8th graders combined, teachers at the secondary level will build upon the Great Lessons at the elementary level and teach World and United

States history in the context of the overall advance of human civilization. Instead of separating World and United States history, the World and United States history standards will be integrated so children can build better awareness of how the United States and the rest of the world advanced, related, and interacted over time.

Goals

- Children will have knowledge of the pivotal historical events that took place in World and United States history from medieval times through World War I.
- Children will be able to explain how major events are related to one another in time, construct various time lines of key events, people, and periods of the historical era they are studying, use a variety of maps and documents to identify physical and cultural features of neighborhoods, cities, states, and countries and to explain the historical migration of people, expansion and disintegration of empires, and the growth of economic systems.
- Children will be able to frame questions that can be answered by historical study and research; distinguish fact from opinion in historical narratives and stories; distinguish relevant from irrelevant information and essential from incidental information; and assess the credibility of primary and secondary sources and draw sound conclusions from them.
- Children will be able to detect the different historical points of view on historical events and determine the context in which the historical statements were made; understand and distinguish cause, effect, sequence, and correlation in historical events; explain the sources of historical continuity and how the combination of ideas and events explains the emergence of new patterns; recognize the role of chance, oversight, and error in history; and recognize that interpretations of history are subject to change as new information is uncovered.

Instructional Strategies & Materials

The Social Studies units will align with the following themes to ensure there is cohesion across the curriculum. This is a best practice from Clark Montessori.

- Explorations & New Beginnings
- Identity
- Independence & Interdependence
- Leadership through Stewardship
- Balance
- Change
- Movement
- Acquiring a Sense of Belonging

Children are provided with opportunities to learn about history/social studies through primary sources (international pen pals, interviews of elders, autobiographies), secondary sources, inquiry-based research projects, and fieldwork. Because so much of history is based on interpretation, all units of history will be taught using diverse sources. The prepared environment becomes the perfect means by which to deliver a rich history lesson conducted through self-guided exploration, as a classroom can be arranged to present multiple perspectives, different media, and various sources on the same historical event. The teacher can then support children as they begin to understand the events that occurred through multiple voices and lenses and inevitably begin to ask questions about the accuracy of the sources, the biases imbedded, the means by which to seek “truth”, and the importance of understanding ALL the perspectives and voices. Again, history will primarily be taught in a workshop model where children are working on multidisciplinary inquiries and Design Challenges in small groups while the teacher is doing direct targeted instruction in research skills, geography skills, analysis skills, and text-based language arts skills. Because so much of history is accessing, processing, and integrating information often found through text and because presentation of understanding and analysis will almost always have a verbal component, history will generally be integrated with language arts. The historical content will be taught as stand-alone lessons and units, but whenever possible, they will be integrated with science, math, art, music and peace education so children understand that all disciplines have a rich history that has informed our society and values today.

Science Overview

The secondary curriculum will build upon the elementary focus on Earth, the origin of the Earth and the interdependence of plants and animals by going deeper into life sciences and then moving into physical science. Children will have the opportunity to build connections that link science to technology and societal impacts. As science, technology, and societal issues are strongly connected to community health, population, natural resources, environmental quality, natural and human-induced hazards, and other global challenges, children will begin building the foundation for understanding these issues.

Goals

- Children have basic understanding of life science (cell biology, genetics, evolution, the human body, and the principles of chemistry underlying biological functions) and physical science (motion, forces, structure of matter, and density and buoyancy).
- Children are able to select and use appropriate tools and technology to perform tests, collect data, and display data.
- Children are able to design and conduct a scientific investigation based on a question they produce and follow the scientific method— develop a hypothesis; design an experiment; distinguish between variable and controlled parameters in a test; construct appropriate graphs from data and develop quantitative statements about the relationships between variables; evaluate the accuracy and reproducibility of data; present a conclusion with comprehensive evidence.

Instructional Strategies & Materials

Science units will also align with the following themes to ensure there is cohesion across the curriculum.

- Explorations & New Beginnings
- Identity
- Independence & Interdependence
- Leadership through Stewardship
- Balance
- Change
- Movement
- Acquiring a Sense of Belonging

Children will be provided with opportunities to learn about science content through primary sources, secondary sources, inquiry-based research projects, hands-on materials, and fieldwork. The prepared environment again becomes the perfect means by which to deliver a rich science lesson conducted through self-guided exploration, as the classroom can be arranged to enable children to explore a scientific idea before they study it. The teacher can then support children as they begin to understand the motion or force or cell biology through exploration that generates questions and curiosity. Like history, science will primarily be taught in a workshop model where children are working on multidisciplinary inquiries and Design Challenges in small groups while the teacher is doing direct targeted instruction in research skills, analysis skills, science content, integrated math skills, and text-based language arts skills. The science content will be taught as stand-alone lessons and units, but whenever possible, it will be integrated with language arts, history, math, art, music and peace education so children understand that science concepts and content flows across all disciplines and is foundational for understanding the interdependency of all things in our lives.

World Language Overview

Urban Montessori will provide world language instruction formally from kindergarten. At the secondary level, many children will have an opportunity to learn a third language.

Goals

- Children are able to communicate in writing and orally in a second world language (after their native language) with a high level of fluency and are able to use that language to communicate in settings outside of the classroom; children have a high level of fluency in reading texts and participating in text-based discussions in a world language
- Children are able to communicate orally in a third world language.

Instructional Strategies and Materials

Urban Montessori will provide world language instruction very similarly to the way the School will teach English Language Development to English Language Learners. Children will receive a balance of content-based language instruction and explicit language instruction. The content will enable children to make meaningful connections, build vocabulary and context, and learn about language as it relates to culture. The explicit language instruction will provide the rules of the language and in concert with the content build confidence in the language and provide context to the grammar and rules. In alignment with the Montessori approach, children will gain access to much of the content, vocabulary, cultural exploration, and connections through a prepared environment. The explicit instruction will happen in small groups to allow children to learn at their own pace and to ensure language instruction is taking place in the child's Zone of Proximal Development. At the secondary level, design challenges will require children to go off campus and engage native speakers in interviews and discussions.

The Arts (Visual Arts, Music, Drama, Movement) Overview

Building on the elementary arts program, Urban Montessori young adolescents move into a more group-oriented focus where group projects require 21st century learning skills of leadership, collaboration and communication. They work increasingly more independently in the art studio, expressing individual points-of-view via art materials, while more fully participating in group-inspired artistic projects like community murals, public art installations, plays, dance performances, gallery exhibitions or film/videos.

Goals

- Children will master skills in visual arts, music, movement and theater so that they are able to articulate their ideas via a diverse range of visual, musical, kinesthetic or theatrical forms (i.e., drawings, paintings, sculptures, musical scores, dance scores, plays, operas, etc.).
- Children will further develop meta-cognitive and reflective skills based on Studio Habits of Mind in order to synthesize their own learning strategies and strengths in both arts and other subjects, propelling them to a successful high school experience.
- Children will appreciate different points of view and forms of creative expression across the artistic disciplines in order to empathize with other races, cultures and nationalities as well as take creative action in their own cultural contexts
- Children will participate in group-oriented projects that positively affect the community at-large and instill 21st-century learning skills of leadership, collaboration and communication. Children will develop a portfolio of artworks for high school applications, including drawings, paintings, photographs of sculptures or installations, murals, music recordings, collaborative performances, murals, etc. and be able to articulate their thinking behind the chosen works.

Instructional Strategies & Materials

Similar to elementary school, the CA Visual and Performing Arts Framework guides Urban Montessori's secondary school teachers in their curriculum design. In addition to fine art, teachers focus on media literacy—how to deconstruct advertising, propaganda, fiction, reality TV, etc. and tell persuasive stories so that children learn to function critically in a media-saturated society. Film, video and digital photography are introduced at the secondary level.

- Project Zero's Studio Thinking Framework's eight Studio Habits of Mind are part of every secondary child's individualized learning plan and process portfolio reflection log, showing growth over time.

- Project Zero's Artful Thinking and Making Thinking Visible protocols are led by secondary children, who model creative confidence and make their learning visible to parents, peers, teachers and community members.
- Participating in mini-residencies with Bay Area Arts and media organizations, secondary children are given opportunities to further their disciplinary knowledge, propelling them to create a solid, well-rounded high school portfolio.
- Field trips to various artistic exhibitions of modern and contemporary art, museums, theater, street theater, music concerts, dance performances, plus film festivals are part of the secondary experience, fostering inspiration and increased understanding of the art world and all of its proponents.

Physical Education/Health Overview

Very similar to the elementary physical education program, the secondary school physical education program is focused on the development of healthy minds and bodies. Because adolescents have so many changes taking place in their bodies, there will be ongoing space and time to discuss and better understand those changes. A significant component of the physical education program will be developing increasing understanding of the role of exercise and nutrition on physical and mental wellness and building healthy habits in our tweens. Urban Montessori will also explicitly design physical challenges that authentically teach important life skills like persistence, practice, teamwork, sportsmanship, self-awareness and reflection, and self-discipline.

Goals

- Children will gain deeper awareness of the interconnectedness of mind and body, and as they develop into adolescents, they will develop positive body images.
- Children will be able to identify at least two physical activities that they enjoy
- Children will demonstrate age-appropriate ability around and see the value in persistence, practice, teamwork, sportsmanship, self-awareness and reflection, and self-discipline.

Instructional Strategies & Materials

At the secondary level, physical education will be divided into three general areas – the relationship between nutrition, fitness and health; general body awareness; and physical and recreational activities that integrate environmental education and responsibility. The first two areas will be addressed through integration with the science curriculum as well as through team time. Nutrition education and body awareness will regularly be integrated into science education, and Design Challenges will be presented that push children to make those connections. Nutrition education will also tie to the gardening program and the responsibility of children in the management of the school lunch program. Since school lunches are often critiqued by teens, Urban Montessori will involve secondary classroom leaders in the decision-making around the school lunch program and seek a partnership with a lunch provider who is excited about the implementation of this learning component. Urban Montessori will seek or develop curricula that support adolescents in developing positive body images and self-awareness around the changes in their bodies that will be implemented during intersession and during team time. Children will be separated by gender as needed so they can share openly about the physical and emotional changes taking place during this turbulent time.

The third area of physical education will be facilitated through guided independent study. The elementary program exposes children to the many recreational and physical activities available in the Bay Area. At the secondary level, children will be able to select specific activities they want to learn more deeply. Children will develop individualized physical education plans that document how they are meeting the physical education standards. Physical education activities will also be recorded in student work plans. Children will be required to provide a log and a written report on their physical education activities to ensure they are completing the requirements. Almost all physical education activities will be done outside of the school day. On site, Urban Montessori will assess students regularly in specific fitness activities in alignment with the Presidents' Physical Fitness Test. Any child

who is struggling to meet the physical education requirements independently will be provided a more structured physical education program where his or her activities are dictated and monitored.

Character and Peace Education Overview

Very similar to the elementary curriculum, character and peace education is also core to the secondary program. Ultimately, character and peace education is integrated thoughtfully into all disciplines in the secondary program through the eight themes. The skills required by the Montessori work plans and the many opportunities to collaborate as part of a team authentically build children's self-esteem, independence, responsibility, compassion, openness to new experience and learning, patience and self-discipline, acceptance of others, and effective and satisfying social relationships.

Goals

- Children will be mindful of their own learning and their own behavior. They will demonstrate self-awareness and self-discipline in their work and be able to identify and problem solve challenges as they arise.
- Children will be able to solve real world problems within the context of their classroom, community, and world; they will be able to articulate the value of the work they are doing.
- Children will feel self-confident in their ability to make a difference and be self-aware of the role they can play to positively impact their group, their class, their community, and their world.
- Children will demonstrate self-awareness and self-discipline in working collaboratively. They will take responsibility for leading and facilitating the group's progress and learning and will understand interdependency and the power and value of the collective.
- Children will be able to resolve conflicts by listening to others' perspectives, sharing their perspective respectfully, and facilitating collective understanding; all children will be able to understand and value the perspectives and experiences of others in different contexts, from different cultures, and with different opinions
- Children will be able to share their perspectives and opinion respectfully and present their understanding and their thinking in a clear and persuasive manner

Instructional Strategies & Materials

The secondary program focuses on supporting adolescents to build a strong sense of identity and a greater awareness of themselves in the context of their world. "In the transition from childhood to adolescence, individuals begin to develop more abstract characterizations of themselves, and self-concepts become more differentiated and better organized. Adolescents begin to view themselves in terms of personal beliefs and standards, and less in terms of social comparisons (Harter 1998)." True mastery of the goals stated above requires a foundation of self-confidence, self-discipline and self-awareness. As stated above, character and peace education at the secondary level will be intentionally integrated across all the disciplines. To support children in developing this foundation, the Schools will utilize instructional strategies that promote discussion (Socratic Seminar, literature circles), that encourage debate, that push peer teaching (reciprocal teaching, collaborative inquiries), and encourage mindfulness (journal and letter writing, reflections, art, music, meditation). Design Challenges and lessons will be developed to encourage children to explore their own histories, cultures, values, and dreams so they can make meaningful connections to the history or science they are learning. All units and lessons will be developed to encourage connections, build curiosity, and push critical thinking and aligned along eight critical themes. Urban Montessori will ensure that every child at the secondary level has an adult ally to whom the child feels connected and safe, and children will be supported to find their own solutions to conflicts with peers, families, or with staff. The teachers for the secondary program will serve as mentors and facilitate the process as their children learn how to observe, listen, read critically, gather information, and learn from hands-on experience.

When children run into obstacles and identify challenges in completing their work, managing their time, managing themselves, or working with others, teachers will support students by coaching them, being a thought partner, asking meaningful questions, mediating issues in a group, providing feedback, and providing tools and strategies. That the challenges arise out of authentic tasks will enable children to learn these lessons in context, making the learning that much more meaningful.

Practical Life Overview

Practical Life activities encourage the development of independence and foster each child's adaptation to the social context of their environment. At the secondary level, practical life activities return to care of self, care of the environment, and exercises of grace and courtesy though at a level relevant to adolescent development. At this age, care of self is about understanding what is happening with their bodies, being able to act with increasing independence in managing their lives, and developing a more personalized understanding of how to care for themselves. Care of environment extends past immediate environment to the larger community and global environment. At this age, we push children to better understand how their day-to-day actions have impact on the globe and on other people. Grace and courtesy at this age is about self-awareness, empathy, and self-confidence.

Goals

- Children understand how their actions and behavior impact others both in their immediate environment as well as a larger global context
- Children are able to manage their time, others' expectations of them, and their work – prioritize, sequence, and request help as needed
- Children are able to go into foreign contexts, have the confidence to engage and interact, and develop positive relationships across cultures, languages, generations, and contexts.

Instructional Strategies & Materials

In the individualized Montessori setting, practical life goals and activities will be personalized to each child's level of functioning. Children will be facilitated in self-reflection to identify strengths and areas of growth. They will outline specific goals for themselves and then receive targeted instruction and monitoring in the achievement of those goals. For example, if a child identifies organization as a challenge, the teacher and that child would work together to develop a plan to develop better organizational skills, with scaffolding and specific lessons around how to be better organized in alignment with this plan. The idea that everything that we do has impact on someone else would be a constant and ongoing theme across all the disciplines and an explicit guiding question in all of the Design Challenges presented.

Design Thinking Overview

Design thinking at the secondary level will be a natural extension of the program at the elementary level. Children already steeped in the design process, equipped with prototyping skills and viewing themselves as designers will take on projects of longer duration and with more profound real world impact than they experienced at the elementary level.

Goals

- Children understand that the design process can be applied to a wide range of problems and they regularly leverage this process
- Children perform 'need finding' to uncover opportunities to change and improve their world
- Children engage in solving problems that meaningfully impact themselves and their community and gain presentation and implementation skills to defend their ideas in a public forum and see their visions become reality
- Children view themselves as designers and develop additional techniques as they develop key design thinking mindsets
 - Mindful of process
 - Ready to collaborate
 - Empathy for others
 - Bias to action
 - Prototype everything

Instructional Strategies & Materials

At the secondary level, design skills will be reinforced and bolstered via special Stop, Drop and

Design days with most of the projects fully integrated as an extension of the regular curriculum. Children will have tools and materials available to create high fidelity prototypes of their designs, leveraging principles of construction and engineering to truly test their ideas in the world.

- Design Challenges will be created so children can work on real world problems of relevance to their lives and community
- Graduating children will work on a capstone design project

Technology Overview

The secondary technology program builds upon the foundation established in the elementary program. At the secondary level, children extend their skills to create more sophisticated, creative and innovative artifacts through the use of technology, advance their ability to gather and evaluate online content related to their learning, develop an understanding of what it means to be a digital citizen and understand technology operations and concepts related to how the hardware and software they use functions.

Goals:

- Children will demonstrate proficiency with presentation, word processing and spreadsheet applications
- Children will demonstrate proficiency in at least one media creation application, such as *Photoshop, Illustrator, or Final Cut Pro* and will be able to integrate the appropriate use of original media into demonstrations of mastery for any curricular subject
- Children will demonstrate proficiency in using a variety of digital media to locate, organize, analyze and evaluate information from a variety of sources
- Children will understand how to engage safely and respectfully in online research, collaboration and networking
- Children will demonstrate at least a basic understanding of key computer components, internet infrastructure and application development principles
- Children will demonstrate at least an introductory level of mastery in one coding language, such as Ruby on Rails, JavaScript, ActionScript, Python, Perl or PHP.

Instructional Strategies & Materials

Urban Montessori Charter School will provide children with a range of technology, including computers, Internet connectivity, tablets, mobile devices, input devices and software (including adaptive, media creation, word processing, presentation, spreadsheet and collaboration products). There will be direct instruction on how to use the hardware, the software applications, and navigating the web, but application of technology will be integrated throughout the core curriculum and through arts integration and Design Challenges.

URBAN MONTESSORI CHARTER SCHOOL INSTRUCTIONAL PLANNING

At Urban Montessori Charter School, instructional planning is organized into five steps: preparation of the prepared environment, long-term plan development, unit plan development, weekly lessons and weekly work plans. Taken together, these five steps bring together Montessori’s effective child-centered approach with instructional plans that align programmatic and state standards seen at high-performing district and charter public schools across the state.

Instructional Planning at Urban Montessori Charter School	
Steps	Goals
1. Preparation of the prepared environment	Coordination of space, people, time, as well as the selection of activities and materials. The environment should provide full opportunities for

	individual development within the classroom.
2. Long-term plan development	Mapping of grade level state standards in ELA, Math, Science, and History/Social Science onto a school year calendar.
3. Unit plan development	Designing thematic and standards-based units that integrate content across the curriculum.
4. Weekly lesson plans	Listing of presentations (or lessons) from the teacher(s) to each child for the week. These lessons are in the child's zone of proximal development, or ZPD.
5. Weekly work plans or journals	Empower children to document what they are working on in between conferences with teachers.

Preparation of the Prepared Environment

Montessori emphasizes careful preparation of environments that respond to the specific needs and tendencies of children at each stage of development. The prepared environment is wholly geared to maximize children's independent learning and exploration. Given individualized learning plans (discussed below), children may choose what they want to work on, with whom they would like to work, and where they would like to work, and may do so at their own pace as teachers observe and guide them to master learning goals. The environment, which includes both the physical space and the multi-age class groupings, directly shapes the children's experience and their ability to be successful. Preparation of the prepared environment includes:

- Space design and furnishings
- Distribution of ages in mixed-age classroom
- Adult/child ratio
- Time (minimum of three hours of uninterrupted time at the primary and elementary level)
- Materials

Materials in the Montessori environment are presented as keys to further independent activity and exploration. Their purpose is extended activity, which is the basis for the child's own self-construction. Because Montessori views the curriculum as a web, the materials of the various levels are interrelated. Frequently, the same material may be used at several levels, but with a different focus or purpose. Furthermore, although all materials are categorized on the list (e.g., mathematics, language, botany, etc.), their presentation and use in the classroom is integrated to reflect the interrelatedness of all the disciplines – and of life itself.

[□ See Appendix A-4 for a detailed list of materials to be included in the prepared environments of the primary and lower and upper elementary levels.](#)

Long-term Plan Development

Long-term plans provide a roadmap for a classroom for a school year. They're a calendar-view of when state standards are introduced and when the teacher expects each standard might be mastered. This method, called "backwards mapping", is derived from the standards-based backwards design process Grant Wiggins and Jay McTighe developed for unit planning applied to long-term planning. Their standards-based backwards design process⁹ supports teachers to have clear priorities

⁹ Wiggins, G. McTighe, J. (2005). *Understanding By Design*. Second Edition. Alexandria: Association for Supervision and Curriculum Development.

and purposes and assists in “un-packing” the California Standards to reveal the foundational understandings implied by the standards.

When long-term planning, teachers take a macro view of their instruction, determining what standards fit where in the months, weeks, and days of the school year. To backwards map state standards, teachers review state standards in advance of the school year and literally “map” them out onto a calendar of school days (see sample template below). The long-term plan is informed by anecdotal observations, diagnostic, formative, and summative data. It serves as a standards-based pacing guide for the school year and a reference as units are developed using the Backwards Design or Teaching for Understanding Frameworks.

180 Day School Calendar for Standards Mapping

	Monday	Tuesday	Wednesday*	Thursday	Friday
Week ___					
Week ___					
Week ___					
Week ___					
Week ___					

Suggestions:

1. Review standards.
2. Determine which are short-range, medium-range, and long-range standards.
3. Map standards onto calendar.
4. Review TEs, pacing guides and make adjustments.
5. Further compact or extend time periods after analyzing beginning of the year standards-based assessment.

Long-range standards:

-
-
-
-

Unit Plan Development

At Urban Montessori Charter School, unit plans are thematic and standards-based. They may focus on one curricular area or be cross-curricular. Their purpose is to provide children with schema or cognitive frameworks that help them organize information, make meaning of what they are learning, and make connections with what they already know.

The School will use two unit planning frameworks: (1) Backwards Design Unit Planning and (2) Teaching For Understanding Unit Planning. Backwards Design Unit Planning is particularly adept at facilitating standards-alignment with theme-driven unit planning. Teaching For Understanding Unit Planning is similar, but its strengths are theme-driven instruction and performances of understanding throughout the unit. Urban Montessori Charter School will support its teachers to use both tools, as each lends itself well to particular curriculum areas. The chart below illustrates how the two frameworks will be used initially at Urban Montessori Charter School. Over time, and as the instructional team gains familiarity with the tools and the school’s instructional model, it is likely they will both be used across the curriculum.

□ See Appendix A-15 for a detailed explanation of each planning framework

Unit Planning Tools at Urban Montessori Charter School	
Framework Strengths	Yr 0 & 1 Planning Priorities

Backwards Design	Unpacking state standards Theme-driven instruction Aligned summative assessment	To address any grade level state standards not taught to mastery through Montessori materials in: English Language Arts Math History/Social Science Science English Language Development
Teaching for Understanding	Theme-driven instruction Performances of understanding Ongoing assessment	Unit development in: Design Thinking and Arts Integration Foreign/World Language

Weekly Lesson Plans

At Urban Montessori Charter School, lesson plans formalize the teacher’s decisions about what to do and how to do it. They are always flexible to allow adjustments according to the changing needs of the child.

Urban Montessori Charter School teachers will work from the three-strand system, with children grouped according to what presentations (or lessons) they need, which often fall into cycles by age. Within the three-year age grouping in the classroom, then, there is a first-year cycle of presentations, a second-year cycle of presentations, and a third-year cycle. This is a flexible set of guidelines drawn to ensure that all presentations are made each year. Teachers are trained to align presentations with each child’s interest and readiness. L.S. Vygotsky described such alignment as being in the child’s zone of proximal development, or ZPD.

Weekly plans for elementary and middle school are highly individualized, beginning with individual observations of the children and their needs. At both levels, subsequent grouping of children according to those with common needs allows for more efficient and animated group lessons

[□ See Appendix A-16 for an elementary Weekly Lesson Plan Sample](#)

Weekly Work Plans or Journals

At Urban Montessori Charter School, work plans are a log of each child’s time and activities for the week or day. Depending on the age and readiness of the child for the writing, s/he may keep a work journal instead. The process of documenting his or her own work helps the child feel like a partner in the planning, with responsibility and ownership over his or her education.

The plan or journal will be used in a teacher-child conference at Urban Montessori Charter School every week (or more frequently), depending on the needs of the child. In addition to the plan or journal, the child brings all the work s/he has completed since the last conference. At the conference, the child discusses work that is completed and work planned for the future. If there has been work in one or two curricular areas, the child and teacher may decide to schedule work and presentations in subjects that have been inactive. Productivity and work habits can be discussed. Accountability is part of the work plan and conference process and therefore goals should be clear, achievable, and completed under the consistent observation of the teacher after the child defines the work to be finished.

[□ See Appendix A-9 for an Elementary Work Plan sample and Appendix A-12 for a Secondary Work Plan sample](#)

PLAN FOR CHILDREN WHO ARE ACADEMICALLY UNDER-PERFORMING

Overview

As stated earlier, Dr. Montessori developed many of her methods by observing and working with

children in highly challenging situations including the Orthophrenic School in Rome which served children who were institutionalized and at the first Casa dei Bambini (Children's House) which served children who lived in extreme poverty. Thus, Montessori classrooms were designed to effectively serve children who, historically, were considered either academically low achieving or at-risk. Montessori education addresses the needs of children who are academically behind by providing each child with an individualized plan to accelerate their learning. These plans build on each child's strengths and interests, identify the most promising areas for growth, and focus on instruction in the child's Zone of Proximal Development to promote learning and growth at a rapid pace.

It follows then, that Montessori classrooms are also inherently powerful Tier 1 interventions. They are structured to maximize independence and self-directed learning. In every classroom at Urban Montessori there is a trained teacher and trained support teachers with an adult-student ratio between 1:12 and 1:18. This ratio and the independent classroom culture support children who are not making adequate progress by allowing for individualized lessons and targeted attention from teachers. Additionally, since Montessori teachers are constantly observing children and collecting data (as part of the assessment system, a child not making adequate progress is noticed immediately, and the adults provide individualized support to that child immediately. Work plans can easily be adjusted to accelerate the learning of low-achieving children without the need for referrals and Student Success Teams and individualized support plans can be drawn to identify specific developmental and academic areas of need for low-achievers and to establish interventions that are monitored and reviewed regularly. Finally, the multi-age class groupings themselves can be academically forgiving, providing low-achieving children with multiple years to practice and fully master bands of curricular content.

A Student Support and Monitoring System

Urban Montessori teachers will formally review children's progress with the Director of Instruction every six weeks utilizing multiple measures. Flags will be set up in our monitoring system to catch children who demonstrate a lack of growth on more than two measures (including level of engagement, teacher observation data, performance assessments, benchmarks, etc) despite the Tier 1 interventions in place. In these meetings, the Director of Instruction and the teacher will review the individualized plans for those children not making adequate progress and restructure them to be even more strategic and targeted. They will also determine whether to target particular children for Tier 2 intervention or to try additional Tier 1 interventions.

Tier 1 interventions in the classroom can include:

- In-class individual or small group instruction two to three times per week in a specific area targeted for growth, monitoring progress for six weeks, utilizing strategic materials and resources designed to build conceptual understanding and to accelerate understanding
- Peer support and teaching by an older child in the classroom
- Increased responsibilities in the classroom to build confidence and connectivity to the community
- A personal project that excites the child
- Encouraging the child to utilize more strategic resources and stations in the room the child may have not been utilizing and monitoring progress at that station
- Regular personal goal-setting and check-ins with the child if engagement is of concern

Should the Tier 1 interventions fail to accelerate progress or be inadequate, the teacher will work with the Director of Instruction to convene a Student Success Team. This team will be comprised of all the adults who work with the child at the School, other adults who may be effective in working with the child, any external mentors and advocates who have a strong relationship with the child, and the parents or guardians. At this meeting, the team will do a root cause analysis of the lack of progress and develop an interventions plan that builds on the Tier 1 classroom interventions and supplements with strategic Tier 2 interventions outside of the classroom. Support teachers will be trained in

implementing strategic interventions curricula (Examples include Fountas and Pinnell Leveled Literacy Intervention, Literacy Navigator, Math Navigator), so children can receive the targeted instruction in the classroom whenever possible. Should a child need to receive that instruction outside of the classroom, he or she would not be removed from the daily, 3-hour, core work block. Targeted interventions instruction could take place before or after school.

Tier 2 interventions outside of the classroom can include:

- Individual or small group instruction four to five times per week in a specific area targeted for growth, monitoring progress for six weeks utilizing strategic interventions curricula designed to accelerate learning
- Individualized guided practice with trained parents, volunteers, older children, etc (practicing reading, oral discussion, debate, math problems, math facts, etc.)
- Arts/movement therapy
- Counseling services and referrals
- Mentoring, clubs, support groups
- Other health, wellness, and family interventions as needed
- Change of classroom
- Finding exciting and engaging outside-of-school activities and programs that may motivate the child

After another six weeks, should a student continue to not make adequate progress, the Student Success Team would be reconvened and a plan developed to collect additional data. Additional testing may be requested or observations conducted, both inside and outside of the school setting. This data would help either identify a stronger more effective plan to address the child's needs and/or indicate whether a referral for Special Education may be appropriate.

[□ See Appendix A-17 for the Student Support Plan](#)

PLAN FOR CHILDREN WHO ARE ELIGIBLE FOR SPECIAL EDUCATION

Overview

Urban Montessori shall comply with all applicable State and Federal Laws in serving children with disabilities, including, but not limited to, Section 504 of the Rehabilitation Act ("Section 504"), the Americans with Disabilities Act ("ADA") and the Individuals with Disabilities in Education Improvement Act ("IDEIA"). California law gives schools various options on how to deliver special education and related services either as (1) an arm of the charter-granting agency, (2) an independent local education agency, or (3) as a charter SELPA. The School shall be its own local education agency ("LEA") in conformity with Education Code Section 47641(a). The School LEA has applied to become a member of the El Dorado District Office of Education ("EDCOE") Special Education Local Plan Area ("SELPA"), and the Urban Montessori Charter School application has been approved for fall of 2012.

[□ See Appendix G for the EDCOE SELPA approval letter](#)

The School shall comply with all state and federal laws related to the provision of special education instruction and related services and all SELPA policies and procedures; and shall utilize appropriate SELPA forms. The School shall not discriminate against any pupil with a disability in the admissions process or any other aspect of operation.

The School shall be solely responsible for its compliance with the IDEIA, Section 504 and the ADA. The facilities to be utilized by the School shall be accessible for all children with disabilities. The facilities to be utilized by the School shall provide children with disabilities equal access to all aspects of the educational program.

Section 504 of the Rehabilitation Act

The School recognizes its legal responsibility to ensure that no qualified person with a disability shall, on the basis of disability, be excluded from participation, be denied the benefits of, or otherwise be subjected to discrimination under any program of the School. Any student, who has an objectively identified disability, which substantially limits a major life activity including but not limited to learning, is eligible for accommodation by the School.

A 504 team will be assembled by the Executive Director of a school and shall include the parent/guardian, the student (where appropriate) and other qualified persons knowledgeable about the student, the meaning of the evaluation data, placement options, and accommodations. The 504 team will review the student's existing records; including academic, social and behavioral records, and is responsible for making a determination as to whether an evaluation for 504 services is appropriate. If the student has already been evaluated under the IDEIA but found ineligible for special education instruction or related services under the IDEIA, those evaluations may be used to help determine eligibility under Section 504. The student evaluation shall be carried out by the 504 team, which will evaluate the nature of the student's disability and the impact upon the student's education. This evaluation will include consideration of any behaviors that interfere with regular participation in the educational program and/or activities. The 504 team may also consider the following information in its evaluation:

- Tests and other evaluation materials that have been validated for the specific purpose for which they are used and are administered by trained personnel.
- Tests are selected and administered to ensure that when a test is administered to a student with impaired sensory, manual or speaking skills, the test results accurately reflect the student's aptitude or achievement level, or whatever factor the test purports to measure, rather than reflecting the student's impaired sensory, manual or speaking skills.

The final determination of whether the student will or will not be identified as a person with a disability is made by the 504 team in writing and notice is given in writing to the parent or guardian of the student in their primary language along with the procedural safeguards available to them. If during the evaluation, the 504 team obtains information indicating possible eligibility of the student for special education per the IDEIA, a referral for assessment under the IDEIA will be made by the 504 team.

If the student is found by the 504 team to have a disability under Section 504, the 504 team shall be responsible for determining what, if any, accommodations or services are needed to ensure that the student receives a free and appropriate public education ("FAPE"). In developing the 504 Plan, the 504 team shall consider all relevant information utilized during the evaluation of the student, drawing upon a variety of sources, including, but not limited to, assessments conducted by the School's professional staff. The 504 Plan shall describe the Section 504 disability and any program accommodations, modifications or services that may be necessary.

All 504 team participants, parents, guardians, teachers and any other participants in the student's education, including substitutes and tutors, must have a copy of each student's 504 Plan. The site administrator will ensure that teachers include 504 Plans with lesson plans for short-term substitutes and that he/she review the 504 Plan with a long-term substitute. A copy of the 504 Plan shall be maintained in the student's file. Each student's 504 Plan will be reviewed at least once per year to determine the appropriateness of the Plan, needed modifications to the plan, and continued eligibility.

Services for Students under the IDEIA

Urban Montessori Charter School will be an LEA member of the EDCOE SELPA in accordance with Education Code section 47641(a). Urban Montessori Charter School makes the following assurances:

- *Free Appropriate Public Education* – The School will assure that a free appropriate public

education shall be provided to all enrolled students including children with disabilities who have been expelled from school.

- *Child Find* – The School will assure that all students with disabilities are identified in accordance with the policies and procedures of the SELPA.
- *Full Educational Opportunity* – The School will assure that all students with disabilities have access to the full range of programs available to non-disabled students.
- *Least Restrictive Environment* – The School will assure that students with disabilities are educated with students who are not disabled to the maximum extent appropriate. This will be addressed through the use of supplementary aids and services in the general education environment in accordance with each student's IEP .
- *Individualized Education Program* – The School will assure that an Individualized Education Program ("IEP") is developed, reviewed and revised for each eligible student under the IDEIA.
- *Assessments* – The School will assure that an IEP review shall be conducted on an annual basis at a minimum. In addition a reassessment shall be conducted at least once every three years, in accordance with the IDEIA, and more often if conditions warrant or requested by the student's parents or teacher. Parents will receive reports on their individual student's progress toward IEP goals and progress at the IEP meeting and student-led conferences.
- *Confidentiality and Procedural Safeguards* – The School will assure that the confidentiality of identifiable data shall be protected at the collection, storage, disclosure and destruction stages. In addition, students and their parents shall be provided with safeguards through the identification evaluation and placement process and provisions for a free appropriate public education.
- *Personnel Standards* – The School will attract, recruit and hire appropriately trained and credentialed personnel to provide special education services to children with disabilities.
- *State Assessments* – The School will assure that students with disabilities either under the Individuals with Disabilities Improvement Act ("IDEIA") or Section 504 are included in State assessment programs with appropriate accommodations and modifications when necessary and appropriate. These assessments include, but are not limited to, the California Standards Test and the CAT 6.

In addition, the School shall comply with the EDCOE Local Master Plan and perform all corrective actions deemed necessary by the EDCOE SELPA. The Director of Special Education at Urban Montessori will work with the Executive Director to develop an annual budget, hire necessary staff, contract for appropriate services and take responsibility for meeting the special education compliance and quality requirements.

The Director of Instruction and other team members will work with the EDCOE leadership to provide regular professional development that builds the capacity of the special education staff in the areas of promising instructional practices, compliance with state and federal statutes, reporting requirements and use of instructional data. Urban Montessori will approach Aspire Public Schools to negotiate a partnership where the School can send its special education staff to Aspire's monthly trainings. In addition, all staff members will be provided a personalized professional learning plan that will identify high leverages capacity-building learning activities for the teacher. Urban Montessori will maintain at least one Board member or Advisor on its Advisory Board with expertise in Special Education to support the School's program implementation, staff training, and compliance.

Because Montessori classrooms are differentiated by design and enable individualized learning and support very naturally, the special education leads on the Urban Montessori team believe that a Montessori classroom is ideal setting in which to serve most Special Education students. Because classrooms are multi-age, children can be working at different levels without stigma and without the need for alienation. Montessori teachers are trained to group students according to interest and engagement as well as need and strength, and this enables Special Education students to have their strengths engaged and maximized while having their needs addressed.

Since Urban Montessori Charter School will operate as an LEA of the EDCOE SELPA in accordance

with Education Code section 47641(a), the District shall have no responsibility to ensure that the students who attend Urban Montessori Charter School are provided a free appropriate public education. In accordance with state and federal law, each student eligible under the IDEIA will be provided a free and appropriate education in the least restrictive environment. The decisions regarding the specific services each student will receive are the responsibility of the Individualized Education Program Team. The team includes the involvement of parents and the decisions are formulated in a written plan (referred to as an IEP).

Urban Montessori Charter School supports all special education students in compliance with state and federal laws. No student will be denied admission to the School because he or she is in need of special education services.

PLAN FOR CHILDREN WHO ARE ENGLISH LANGUAGE LEARNERS

“Language exerts hidden power, like a moon on the tides.”

- Rita Mae Brown

Our Commitment to Language Diversity

Almost one third of Oakland Unified Schools District’s children are English Language Learners. Urban Montessori Charter School expects that a significant proportion of our student body will speak a language other than English. The founding team also believes that having fluency in multiple languages, including English, is critical to 21st Century success. Our English Language Learner program will ensure that every child assessed as an English Language Learner masters written and spoken English and that these children also retain and build fluency and literacy in their home language.

Identification and Reclassification of English Learners

Home Language Survey

The School will administer the home language survey upon a student’s initial enrollment in the School.

CELDT Testing

All children who indicate that their home language is other than English will be given the California English Language Development Test (CELDT) within 30 days of enrollment⁵ to evaluate their listening, speaking, reading and writing abilities in English. This test will be given at least annually between July 1 and October 31 until the student is re-designated as fluent English proficient. The School will notify all parents of its responsibility for CELDT testing and of CELDT results within 30 days of receiving test results from the publisher. The CELDT shall be used to fulfill the requirements under the No Child Left Behind Act for English proficiency testing.

English Learner Reclassification

Urban Montessori will utilize multiple criteria in determining whether to reclassify a pupil as proficient in English, including but not limited to all of the following:

- Assessment of language proficiency using an objective assessment instrument including, but not limited to, the CELDT.
- Staff determination that the student is able to access the curricular materials in English at or above the levels of native English-speaking peers

⁵ The thirty-day requirement applies to children who are entering a California public school for the first time or for children who have not yet been CELDT tested. All other children who have indicated a home language other than English will continue with annual CELDT testing based upon the date last tested at the prior school of enrollment.

- School and teacher evaluations/assessments of whether the student has mastered grade-level standards.
- Parental opinion and consultation, achieved through notice to parents or guardians of the language reclassification and placement including a description of the reclassification process and the parents' opportunity to participate, and encouragement of the participation of parents or guardians in the reclassification procedure.

The Urban Montessori Charter School English Language Learner Instructional Program

English language proficiency is critical for our children. English proficiency in our society serves as a powerful gatekeeper, opening doors to opportunity for those who reach proficiency and limiting or closing doors to opportunity for those who do not. Access to high quality English instruction for English Learners is an issue of equity. Urban Montessori Charter School is committed to effectively serving children who are English Language Learners through a comprehensive approach to language instruction. In particular, our Sheltered English Language Program will be guided by Susana Dutro's "Systematic English Language Development (ELD)" and "Constructing Meaning" approaches. These trainings and materials are available through E.L. Achieve.

□ See Appendix A-18 for ELL Program materials

□ See Appendix A-19 for "Rethinking English Language Instruction" by Dutro and Moran

In "Rethinking English Language Instruction: An Architectural Approach," Susana Dutro and Carrol Moran present a framework for English Learner instruction that is a student-centered, language-focused approach to planning and teaching. Designed to address one of the most significant tensions in second language literature, the debate regarding language acquisition versus language learning, the approach prioritizes saying "yes" to both informal and formal language learning opportunities (Beebe, Selinger, Genessee, Long, Cummins and Scover, 1988, Bourhis, 1990). Further, the approach takes into consideration another tension existing in the research, whether students should analyze language processes by looking at language as an object of study and seeking the patterns and rules of language, or by intuiting patterns and rules of language by engaging in purposeful language activity. Their comprehensive framework for English Learner instruction is based on three elements:

1. A Blueprint for English Language instruction (which includes a comprehensive view of the instructional day);
2. Features of Explicit Language Instruction that backwards maps language instruction from task analysis to instruction, explicitly building receptive and expressive language by connecting reading, writing, listening and speaking; and
3. Effective program planning and teacher training.

Urban Montessori intends to implement this framework using the following practices and Blueprint for English Language Instruction:

Dutro and Moran advocate for rethinking some common ELD practices. They suggest that:

- Language instruction requires teaching English, not just teaching "in" English or just providing time for children to interact with one another in English
- ELD requires purposeful daily instruction in both a developmental program and as explicit preparation for content courses with ample opportunities for both formal and informal learning across the curriculum and throughout the instructional day
- When applying or practicing skills to develop fluency, instruction intentionally provides for output of language as a critical part of the learning process, not just as the assessment or outcome of language development (Swain, 1986).

The blueprint includes three components of ELD to be taught throughout the day:

- The first is a vertical slice of the curriculum. This is systematic ELD referring to English instruction as its own discipline that follows a developmental scope and sequence of language skills that builds from simple to complex structures within the context of a range of everyday and academic language functions. Instruction is organized by academic English proficiency levels.
- The second component of ELD is "front-loading language," which is instruction that occurs throughout the day as a horizontal slice of the curriculum, across all content areas. Front-loading of ELD describes a focus on language preceding a content lesson. The linguistic demands of a content task are analyzed and taught in an up-front investment of time to render the content understandable to the student. This front-loading refers not only to the vocabulary, but also to the forms or structures of language needed to access and discuss the content.
- The third component of English language instruction maximizes the "teachable moment." That is, the utilization of opportunities as they present themselves to use precise language to fill a specific, unanticipated need for a word or a way to express a thought or idea. Fully utilizing the teachable moment means providing the next language skill needed to carry out a task or respond to an impromptu stimulus, like using a thunderstorm to stimulate a discussion about weather to expand and deepen language skills.

Urban Montessori Charter School seeks to provide English Learners with each of the three components above. The School knows that while such a comprehensive approach may not be required to develop everyday language, it is essential to develop academic language to the level required for college admissions or job interviews.

Urban Montessori Charter School will commit to implementing the Blueprint for English Language Instruction by doing the following:

- Phase in training on all aspects of the framework and comprehensive approach, so that what is most critical is prioritized immediately for both ELD specialist(s) and teachers, with additional trainings in future years of the school's operation, as appropriate and as resources allow.
- Train the ELD specialist(s) in Systematic ELD in the first year of the School's operation.
- Train all teachers in "A Focused Approach to Constructing Meaning: Explicit Language for Elementary Literacy Instruction" during the first year of the school's operation, with additional training (like "Constructing Meaning: Explicit Language for Secondary Content Language") to come prior to opening our middle school.
- Schedule regular blocks of time dedicated to teaching English where Systematic ELD is taught. At Urban Montessori, ELD will be taught at least three times per week for one hour per session.
- Provide children instruction at their assessed level of English Language Development to ensure they develop a solid English language foundation and are continually challenged to stretch their ability to use language flexibly.
- Teach vocabulary for social and academic purposes from general to increasingly precise words.
- Provide ample oral and written practice for application of newly taught language in authentic contexts.

Systematic ELD will not replace English Language arts instruction or any other content instruction at Urban Montessori Charter School. Rather, it will equip our English Learners with the language skills they:

- Are not likely to learn outside of school,
- Will not be taught in any other content area,
- Need to express the sophistication of their thinking to succeed in college, and

- Are expected to use every day for academic and real life purposes.

Urban Montessori Charter School embraces the following three essential strategies to build a strong ELL program:

1. Common Core State Standards Initiative

California has adopted the Common Core State Standards Initiative for implementation. Urban Montessori Charter School embraces the Common Cores State Standards Initiative and the ideas expressed in “Application of Common Core State Standards for English Language Learners.” The School believes that consistent standards across the country will provide appropriate benchmarks for all students. In the area of English Language Arts, the Common Core State Standards are organized into five sections, including reading, writing, speaking and listening, language, and media and technology. The language standards for instruction each year help ensure that students gain adequate mastery of a range of skills and applications specific to the English language regardless of whether English is the child’s first language. Students advancing through the grades are expected to meet each year’s grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. In K-5 and 6-12, language progressive skills by grade are listed. Below are the key points in the English Language Arts language standards:

- The standards expect that students will grow their vocabularies through a mix of conversations, direct instruction, and reading. The standards will help students determine word meanings, appreciate the nuances of words, and steadily expand their repertoire of words and phrases.
- The standards help prepare students for real life experience at college and in 21st century careers. The standards recognize that students must be able to use formal English in their writing and speaking but that they must also be able to make informed, skillful choices among the many ways to express themselves through language.
- Vocabulary and conventions are treated in their own strand not because skills in these areas should be handled in isolation but because their use extends across reading, writing, speaking, and listening.

Urban Montessori Charter School looks forward to aligning the Common Core State Standards Initiative into its curriculum. This includes alignment of our ELL Program with the Common Core English Language Arts standards.

2. Additional Sheltered English Instruction (SEI) Program Supports

In addition to the comprehensive ELD program described above, language acquisition will be a priority across the curriculum. A sample of additional strategies that will be used in Urban Montessori classrooms to support English Learners include:

- Specially Designed Academic Instruction in English (SDAIE) methods
- Frontloading strategies (e.g., pictorial input, comprehension sentence frames)
- Songs, poems, and chants in English to build fluency
- Oral language production from children (e.g., during work time)
- Differentiated instruction (e.g., individualized or small group)
- Listening to books on tape to build receptive English and fluency
- Guided reading of leveled texts to introduce English structure and syntax
- Language experience, interactive writing to construct English text
- Interactive and model writing to construct English text
- Word study
- Vocabulary development

3. California English Language Development Test (CELDT) and Reclassification

A cornerstone of Urban Montessori Charter School's vision for equity is our school-wide goal to reclassify each of our English Learners as English proficient no later than the end of fifth grade. The process for reclassification depends on performance on the California Standards Test (CST), on the CELDT, and in the classroom.

Academic Intervention for English Learners

ELLs who do not make the minimum expected growth of one level per year on the CELDT will be referred to the SST process. Language development will be tracked and monitored using the ADEPT assessment tool.

English Language Learners will have access to the same interventions approach described above under ***Plan for Children Who Are Low-Achieving***. Children not making adequate progress on their individualized EL goals will receive the appropriate Tier 1, 2, or 3 interventions.

Should a student enroll at Urban Montessori at EL level 1 or 2 who would benefit from primary language support, the School will place that child in a classroom where there is an adult fluent in that child's native language if at all possible.

Urban Montessori will meet all applicable legal requirements for English Learners related to annual notification to parents, student identification, placement, program options, reclassification of fluent English proficient status, monitoring and evaluating program effectiveness, and standardized testing requirements. The School will implement policies to assure proper placement, evaluation and communication regarding English Learners and the rights of children and parents.

PLAN FOR CHILDREN WHO ARE HIGH-ACHIEVING

Montessori education has been utilized successfully to meet the needs of academically low-achieving children and high-achieving children. Unlike many programs that separate these groups and provide different programs and use different instructional strategies for low and high achievers, Montessori keeps the children together and uses the same strategies and approaches for all children. Urban Montessori Charter School believes that the Montessori approach and learning environment is ideal for high-achieving children seeking more independence and able to direct their own learning and inquiry. Further, the individualized plans ensure that all children will have a program tailored to their performance levels and their strengths and areas of need. Additionally, because the School will have multi-age classrooms, children who are excelling will be able to become leaders in the classroom, teach others, or work at the pace of older children.

The belief at Urban Montessori is that all children are gifted, and that it is the responsibility of the adults to identify a child's gifts and nurture those gifts. Just as every child is gifted, every child is challenged, and it is the responsibility of the adults to strategically address those challenges and to help children become self-aware of their own strengths and needs. The Design Challenges presented to Urban Montessori children will allow a range of creative solutions, as complex as the children choose. These collaborative inquiries are designed to ensure children are challenged and that children leverage each other's gifts to create a more powerful collective solution to authentic and engaging problems. In Design Thinking, the process of design (which involves defining and solving meaningful, real world problems) will be explicitly taught.

III. MEASURABLE PUPIL OUTCOMES AND METHODS TO MEASURE PUPIL PROGRESS TOWARD MEETING OUTCOMES

Governing Law: *The measurable pupil outcomes identified for use by the Charter School. “Pupil outcomes,” for purpose of this part, means the extent to which all pupils of the school demonstrate that they have attained the skills, knowledge, and attitudes specified as goals in the school’s educational program*

- *California Education Code Section 47605(b)(5)(B)*

Governing Law: *The method by which pupil progress in meeting those pupil outcomes is to be measured.*

- *California Education Code Section 47605(b)(5)(C)*

PUPIL OUTCOMES

Graduating from Urban Montessori Charter School

When children graduate from Urban Montessori Charter School, they will be academically, socially, emotionally, and intellectually prepared for the high school of their choice and well on their way to becoming powerful, contributing citizens of the world. Urban Montessori’s goal is to have all children graduate:

- **Academically at or above grade-level** with respect to California’s State Standards in English Language Arts, Mathematics, Science, Cultural Studies, Art, Movement/Physical Education, Character Education and Technology with respect to content, concepts, and critical connections
- With **beginning oral and written fluency in a second language** and able to articulate their understanding and appreciation for language and cultural diversity
- Able to express their understanding and learning in response to **multiple forms of assessments** including essays, self-reflection, standardized tests, presentations, creative performance, art, and technical models and demonstrations
- **Self-directed learners** who are intrinsically motivated, capable of forming their own questions, adept at assessing the broad range of resources available to them to uncover answers, and able to think flexibly in finding answers
- **Emotionally intelligent** with a high level of self awareness with respect to their strengths, opportunities for growth, and learning styles; capable of understanding others’ perspectives different from their own and respectfully and **thoughtfully interacting and collaborating** with the most diverse cohorts
- **Creatively confident** with awareness of the inter-relationships that exist between all things in our world and the ability to turn that understanding into creative actions that **positively contribute to the world**

The above list outlines the Urban Montessori Charter School’s larger goals with respect to pupil outcomes. The table below outlines the School’s goals with respect to specific benchmark assessments to ensure all children are making adequate progress towards mastery in all subject areas.

Urban Montessori recognizes that teachers must translate the State standards into a set of measurable outcomes against which the children are regularly assessed. The descriptions of the Primary, Elementary, and Secondary Curricula give a brief overview of the goals of each subject area, and the School intends to teach the California State standards to mastery, but the list of specific day-to-day and week-to-week measurable objectives will be created annually by the teachers. Urban Montessori will facilitate an annual summer retreat where the teaching staff will map the standards,

prioritize those to teach to mastery, break down the standards into measurable objectives and then sequence those objectives into a year-long plan. This sequenced plan listing all the measurable objectives in every subject area will be what drives the School's assessments. Teaching teams will be provided regular dedicated time to review their sequenced plans, align those plans with the diagnostic assessment data of their children, and develop plans to differentiate teaching and support for children based on where they are and where they need to be. Urban Montessori teaching will be focused on building understanding where children are required to think deeply about the content being taught and are able to synthesize and apply their understanding in complex tasks.

METHODS TO MEASURE PUPIL OUTCOMES

The School's Theory of Action on Assessments

The founding team of Urban Montessori Charter School believes that assessments should inform instruction and curriculum, and that assessments must drive accountability towards student learning and growth. That said, the founding team also believes that there must be multiple forms of assessment and, that like learning styles, different children excel on different forms of assessment. Just as it is the responsibility of the adults to figure out how to move a child to high levels of achievement and performance, it is the responsibility of the adults to have a diverse set of assessments by which a child can demonstrate high levels of learning.

Urban Montessori's commitment is not only to ensure every child is prepared for the high school of their choice but also to ensure every child knows how to demonstrate their level of preparation, that they are able to advocate for themselves, and that they are able to "learn" and "practice" an assessment form that is more challenging for them. The School also believes that for children to be prepared for the 21st Century, they must be flexible learners and thinkers. Demonstrating and presenting what you know and what you can do is an important skill for success in today's world.

Multiple Measures/Assessments Selected

The assessment matrix below provides an overview of the multiple data sources by which the School will measure student outcomes and the goals tied to each measure. While the founding team believes that the most powerful assessments a teacher uses are his or her own informal and ongoing assessments, the School is clear that effective and accountable schools have formal assessment systems to ensure all children are making adequate and consistent growth on multiple objective measures and to inform the teacher's informal assessment systems.

Urban Montessori Charter School's performance goals include absolute measures of proficiency, goals relative to external standards, and annual goals for matched cohorts. Proficiency levels are set at 80% (numeric scale) or 3 of 4 (rubric) across subject areas. The targets listed in the table below are school-wide averages that grow incrementally through the years.

The goals have been created to be specific, measureable, attainable, results-based and time-bound to ensure that school improvement efforts are concrete, motivating and realistic. Performances on these measures, taken together, will indicate each child's progress toward "meeting statewide standards," as required by law, though no one measure alone will constitute a sole indicator of satisfactory or unsatisfactory progress.

Subject Area	Measurable Outcomes	Assessment Tools	Type of Assessment	Frequency	Proficiency Goal	Annual Goal - % children in a given year
Language Arts	Children will be expected to read grade-appropriate texts fluently and with comprehension, to demonstrate facility in expository and narrative writing forms, to communicate ideas and understandings clearly and in detail, and to demonstrate a correct understanding of the rules that govern the English Language. Children will be expected to demonstrate and apply their understanding on a variety of performance assessments.	<i>Reading:</i> mCLASS Reading 3D using both Dibels and Rigby (K-3); Scholastic Reading Inventory (4-8)**	Diagnostic and standards-aligned benchmarks	At least 3x/year	K: C 1: I 2: M 3: P 4: S 5: V 6: Y 7/8: Z	12-13: B=Baseline* 13-14: B+5% 14-15: B+10% 15-16: B+15% 16-17: B+20%
		<i>Writing:</i> My Access (4-8)**; Writing benchmarks aligned to standards-aligned writing rubrics (K-3)***		2x/year		
		California Standards Test (CST) = grades 2-8	Standards-aligned assessment	1x/year	Proficient or Advanced	
		Report Card (K-8)	Summary document of all assessments	3x/year	4 out of 5 point rubric	
		Albanesi tests (Curriculum-imbedded Montessori assessments)	Curriculum-imbedded assessment	As needed	Mastery	
Portfolio of performance-based assessments	Performance-based assessments	Formal review 1-3/year	4 out of 5 point rubric			
Mathematics and Geometry	Children will be expected to understand and correctly apply mathematical concepts to simple and complex problems, compute accurately, and coherently explain their mathematical reasoning. Children will be expected to demonstrate and apply their understanding on a variety of performance assessments.	mCLASS Math (K-3); Vantage Learning ARDTP (4-8)**	Diagnostic and standards-aligned benchmarks	3x/year	K-3: Established 4-8: Proficient	12-13: B=Baseline* 13-14: B+5% 14-15: B+10% 15-16: B+15% 16-17: B+20%
		California Standards Test (CST) = grades 2-8	Standards-aligned assessment	1x/year	Proficient or Advanced	
		Albanesi tests (Curriculum-imbedded Montessori assessments)	Curriculum-imbedded assessment	As needed	Mastery	
		Portfolio of performance-based assessments	Performance-based assessments	Formal review 1-3/year	4 out of 5 point rubric	
		Report Card (K-8)	Summary document of all assessments	3x/year	4 out of 5 point rubric	
Cultural Studies and Science	Children will demonstrate understanding of key scientific concepts in the	California Standards Test (CST)	Standards-aligned assessment	Grades 5 & 8	Proficient or Advanced	12-13: B=Baseline* 13-14: B+5%

	fields of earth, life and physical sciences. Children will be expected to demonstrate and apply their understanding on a variety of performance assessments.	Report Card (K-8)	Summary document of all assessments	3x/year	4 out of 5 point rubric	14-15: B+10% 15-16: B+15% 16-17: B+20%
		Portfolio of performance-based assessments	Performance-based assessments	Formal review 1-3/year	4 out of 5 point rubric	
History and Social Science	Children will demonstrate understanding of key geographical, social, historical, political, and sociological knowledge with a deep understanding of the history of the interconnectedness and relevance of the sciences. Children will be expected to demonstrate and apply their understanding on a variety of performance assessments.	Portfolio of performance-based assessments	Performance-based assessments	Formal review 1-3/year	4 out of 5 point rubric	
		California Standards Test (CST)	Standards-aligned assessment	Grade 8	Proficient or Advanced	12-13: B=Baseline* 13-14: B+5% 14-15: B+10% 15-16: B+15% 16-17: B+20%
		Report Card (K-8)	Summary document of all assessments	3x/year	4 out of 5 point rubric	
English Language Development (in addition to assessments indicated for general education population)	Children will be expected to gain one ELL level per year until reclassification as English language fluent.	ADEPT (A Developmental English Proficiency Test)**	Criterion-referenced assessment	1x/year	Early Advanced or Advanced	12-13: B=Baseline* 13-14: B+5% 14-15: B+10% 15-16: B+15% 16-17: B+20%
		CELDT	Criterion-referenced assessment	1x/year	Early Advanced or Advanced	
Special Education (in addition to assessments indicated for general education population)	Children will be expected to meet the annual goals articulated in the student's Individualized Education Plan (IEP)	Tri and Annual Review Assessments	Diagnostic assessments; criterion-referenced benchmark assessments	1x/year	Meeting all IEP goals	100% annually
Character and Peace Education	Children will demonstrate self-esteem, independence, responsibility, compassion, openness to new experience and learning, patience and self-discipline, acceptance of others, and effective and satisfying social relationships	Report Card (K-8)	Summary document of all assessments	3x/year	4 out of 5 point rubric	12-13: B=Baseline* 13-14: B+5% 14-15: B+10% 15-16: B+15% 16-17: B+20%
		Portfolio of performance-based assessments	Performance-based assessments	Formal review 1-3/year	4 out of 5 point rubric	
The Arts	Children will demonstrate skills in of a variety of artistic media, including drawing, painting,	Report card (K-8)	Summary document of all assessments	3x/year	4 out of 5 point rubric	12-13: B=Baseline* 13-14: B+5% 14-15: B+10%

	sculpture, printmaking, 2-D design, 3-D design and photography. Children will apply their creative skills in arts integrated projects in core subjects, Design Challenges, and fine arts exhibitions, developing and articulating their learning through Studio Habits of Mind.	Portfolio of performance-based assessments	Performance-based assessments	Formal review 1-3/year	4 out of 5 point rubric	15-16: B+15% 16-17: B+20%
Physical Education and Health	Children will be expected to understand how their physical health and well being are tied to physical fitness and proper nutrition and have a greater understanding of the forces challenging global and local health.	Report Card (K-8)	Summary document of all assessments	3x/year	4 out of 5 point rubric	12-13: B=Baseline* 13-14: B+5% 14-15: B+10% 15-16: B+15% 16-17: B+20%
		President's Physical Fitness Test (5 th , 7 th)		1x/year	Participant fitness	
World Languages	Children will be expected to gain knowledge, skill and understanding of the language and cultural heritage featured in their world language class and have a greater appreciation and awareness of our multilingual society and world.	Portfolio of performance-based assessments	Performance-based assessments	1-3/year	4 out of 5 point rubric	12-13: B=Baseline* 13-14: B+5% 14-15: B+10% 15-16: B+15% 16-17: B+20%
		Report Card (K-8)	Summary document of all assessments	3x/year	4 out of 5 point rubric	
Technology	Children will demonstrate an ability to utilize up-to-date technologies as part of and as demonstration of their learning, regardless of subject matter. Children will be expected to identify and apply appropriate technological solutions on a variety of performance assessments.	Report Card (K-8)	Summary document of all assessments	3x/year	4 out of 5 point rubric	12-13: B=Baseline* 13-14: B+5% 14-15: B+10% 15-16: B+15% 16-17: B+20%
		Portfolio of performance-based assessments	Performance-based assessments	1-3/year	4 out of 5 point rubric	
		Portfolio of performance-based assessments	Performance-based assessments	1-3/year	4 out of 5 point rubric	

*This growth trajectory assumes that at least 50% of children in the baseline year are scoring Proficient or Advanced on the CST. If less than 50% of children in the baseline year are scoring Proficient or Advanced, the School will develop a more aggressive growth plan

**The Urban Montessori founding team is conscious of the exciting new assessments and data tools becoming available to track and monitor student growth and learning. The assessments indicated have been tentatively selected because they are diagnostic assessments that measure growth in alignment with grade-level standards. They are computer-based assessments allowing teachers to disaggregate data, develop personalized reports, query the data to observe patterns, and observe classroom trends easily and in a timely manner so the data can strategically inform instruction. Urban Montessori does not commit to using these specific assessments; the School commits to using assessments that can be given frequently, are computer-based and allow instant reporting, are diagnostic, provide data on growth, and provide growth towards grade-level standards mastery. The

School eagerly awaits the launch of several exciting new products in the coming year in alignment with the Common Core standards and will provide a final assessment list as these decisions get made.

***These rubrics will need to be revised to align with the Common Core standards. They are currently aligned with the California ELA standards.

□ See Appendix H to see how the mCLASS Reading 3D, mCLASS Math, and the SRI align with Common Core standards, enabling these assessments to be both diagnostic and standards-aligned

Note: Vantage Learning is realigning the ARDTP maps for the Common Core; they should become available summer 2011

□ See Appendix A-20 to see standards-aligned writing rubrics for grades K-3

□ See Appendix A-21 to see an example of an Albanesi assessment.

Criterion-Referenced and Formative Assessments

Urban Montessori Charter School is committed to using both criterion-referenced/standards-aligned assessments and diagnostic/formative assessments in our school-wide assessment plan. Criterion-referenced assessments will be used to monitor whether children are mastering grade level standards, and to identify standards to focus on in the classroom. These assessments are also disaggregated to identify trends, find specific areas of instructional strength and weakness, and to ensure children are making progress towards grade-level proficiency against state standards.

Formative assessments will be used not just to inform instruction but also to track and monitor student growth and learning. Montessori teachers are trained to develop individualized work plans for each child. Each child will have an active role in defining their work plan and will monitor his or her own work in that plan on a progress sheet. The teacher and child will meet regularly to ensure a child is making progress on their work plan. As part of this process, teachers lead children in selecting work to go into their portfolio. They collect evidence of performance in their portfolio with their self-reflections on the work and completed rubrics. Children will be coached to talk intelligently and communicate their current level of performance, how they feel about the work they did, and what they learned to their families to other children, and to teachers. In addition to observation and documentation, Urban Montessori teachers will use the Albanesi assessment systems in Math and English Language Arts three times per year. These assessments align with the Albanesi Curriculum Programs for the Montessori method. They are administered individually to children at specific ages for the purpose of measuring the level of abstraction that a child has reached in Geometry, Math, and Language.

All children in grades k-3 will be assessed in reading and math using proven assessments like the mCLASS Reading 3D and Math assessments. Children in grades 4-8 will be assessed using assessments like Scholastic's SRI and Vantage Learning's ARDTP. These assessments both monitor growth AND track performance against grade-level standards. All are aligned with Common Core standards and produce reports that can provide lexile growth AND progress against standards. The School is committed to using computer-integrated assessments so all the data collected can be summarized, disaggregated, and queried. Teachers will give these assessments to children at least 3 times per year. Because the assessments are individualized to children's performance levels, teachers can have children assessed as frequently as needed to closely monitor growth. In addition, unlike benchmark tests that are given simultaneously to all children, these computer-based assessments are taken individually and can easily be incorporated into a differentiated Montessori classroom.

Assessment data will be used both to support the development and monitoring of individualized plans and to track each individual's growth over time against targets. All children in grades 4-8 will be assessed in reading and math using proven diagnostic assessments like SRI for reading and ARDTP

for math though we are actively exploring new assessments being developed at the upper elementary and secondary levels in the coming two years. At the upper elementary and secondary levels, the School expects children to be monitoring their own assessment data and their growth against their own targets. Teachers will be playing an increasingly facilitative role in supporting children to better monitor and advocate for their own learning.

The ARDTP, SRI, and the mCLASS assessments are specifically being considered because all of these assessments are computer adaptive, present powerful reports that track both growth and performance against common core standards, and are ideal for individualized learning. In selecting assessments that can be both formative and standards-aligned, the School minimizes assessment fatigue for both children and teachers but provides the same or better information to both inform instruction and ensure the school is moving all children towards mastery of grade-level standards.

Children will also participate in Design Challenges as part of collaborative teams. Design Challenges will push children to apply their learning in authentic interdisciplinary tasks that are intriguing and relevant. Rubrics will be developed to evaluate Design Challenge work, and community will be invited to participate in the evaluation of their responses.

Urban Montessori will look into partnerships with organizations like Envision Academy, the Stanford Redesign Network as well as Oakland Unified District Office of Education around the development of performance assessments as a part of the Urban Montessori assessment program. The founding team at Urban Montessori feels strongly that authentic assessments are the most accurate of assessments in determining academic mastery and growth and that authentic assessments must be part of a comprehensive assessment system that regularly evaluates children and monitors their learning and growth. This is an area for exploration after the school has successfully launched.

Accordingly, all assessment data will be captured in the children's report cards. All student data will be recorded into the assessment database to ensure performance on multiple assessments is captured. Teacher notes and observations, performance on criterion-referenced assessments, growth on formative assessments, children's reflections on their own growth, performance in their portfolios, teacher rubrics, work plans, and performance on Design Challenges will all be recorded in one system to ensure the summative report card is indeed summative and includes data from multiple assessments. Ideally, the report card will be a report generated from our assessment platform that presents the most current assessment data in ALL content areas where student and teacher comments and reflections are incorporated. UMCS is exploring assessment platforms that are capable of generating custom reports like Data Director and Vantage Learning Systems. However, in the absence of such a system, the report card will still present ALL current assessment data as well as teacher observations on student growth.

[□ See Appendix I to see Urban Montessori's three-year opening/prioritization plan](#)

[□ See Appendix A-22 to see Urban Montessori's assessment calendar](#)

Portfolio of Performance-Based Assessments

Urban Montessori Charter School intends to develop a portfolio-based performance assessment system to ensure students' responses to authentic tasks, daily teacher observations, students reflections and work plans/logs are incorporated into the formal assessment system. Urban Montessori is exploring digital portfolio options where teacher observation data is captured digitally, student work plans and logs can be captured digitally, and performance on authentic tasks can also be captured digitally. However, in the short term, all of this data will be collected by the teacher and incorporated into the six-week data check-ins and formally reported on report cards. UMCS will explore the development of a more formal portfolio-based assessment system after the school has successfully launched.

State Assessments

Pursuant to California Education Code Section 47605(c), Urban Montessori Charter School will conduct state pupil assessments, including the STAR (California Standards Test), the California English Language Development Test (CELDT), and any other assessments as mandated by (e.g. SABE or its equivalent, California Fitness Exam). Urban Montessori is subject to all state (API) and federal (AYP) assessment and accountability requirements.

The results of these state assessments will be an indicator of overall school wide performance, class performance, grade-level performance, and subgroup performance. These tests will be one of multiple assessment methods used to document and monitor student growth on a continuum of achievement.

State Assessment Modifications and Accommodations

Children with disabilities under the Individuals with Disabilities Improvement Act or Section 504 are included in State standardized testing and will be afforded the appropriate accommodations/modifications where necessary and appropriate.

Promotion and Retention Policies

At Urban Montessori Charter School, our belief is that the most effective intervention for a child who is struggling to meet grade-level standards is quality differentiated instruction, individualized targeted support, and a comprehensive Response to Intervention system. There is little research supporting retention as an effective intervention in accelerating learning. In fact, most research demonstrates that retention is an ineffective intervention, and that children who are retained are more likely to have lower levels of proficiency, GPAs, attendance rates, and graduation rates.¹⁰

The Montessori model is designed to individualize instruction and differentiate support using developmentally appropriate practices. Every child receives an individualized learning plan that is developed to capitalize on a child's unique interests and strengths and address a child's unique needs. Because children are learning in multi-age classrooms settings, they are given three-year cycles to demonstrate mastery. Multiple years in a given classroom enable children to develop strong relationships with the adults, become proficient in their communities and in their learning environment, and feel comfortable in a wide range of skills, abilities, and developmental phases. In addition, when a child might truly benefit from another year in a given classroom, because some children remain and some move on from each class every year, the stigma of staying will be negated.

At Urban Montessori, decisions about whether a child should move forward from primary to lower elementary to upper elementary to secondary and ultimately on to high school will be decided case by case in the best interest of the child. This decision will be made collectively by teachers, families, the child when appropriate, and UM leadership. That said, the School understands the consequences of sending an over-aged child to high school and will make it a priority to ensure EVERY child is prepared to go to high school before the age of 15.

USE OF ASSESSMENT DATA

Integration of Technology and Assessment Systems

Urban Montessori is committed to ensuring that the School's assessments are part of a system that collects the assessment data, organizes that data so that it is easily reportable and easy to query,

¹⁰ Roderick, M., & Nagaoka, J. (2005). Retention under Chicago's high-stakes testing program: Helpful, harmful, or harmless? *Educational Evaluation and Policy Analysis*, 27(4), 309–340.

connects to other data systems (human resources, student information) and enables multiple stakeholders to access and interact with that data. In too many schools, parents and children have little to no access to growth and performance data. There are numerous organizations working on the development of comprehensive solutions that integrate data from multiple sources, allow teachers to create and incorporate authentic assessments, and provide the capacity for multiple stakeholders to interact with that data.

Cycles of Inquiry

Urban Montessori teachers and administrators will be engaged in on-going cycles of inquiry into their practice and its connection to student learning outcomes. They will work both review data every six weeks individually with the Director of Instruction to review performance for all children in their classrooms and in collaborative teams to review class performance and benchmark data. In both cases, teachers will be guided to look at how children performed on multiple measures during that six-week cycle, identify patterns of underperformance or high performance, and identify focus children who are not making adequate progress. Collaborative teams will use these opportunities to form questions that arise from the data, develop hypotheses around the questions, and pursue different strategies or actions to improve student outcomes. Teachers will be coached in using various inquiry protocols to ensure the School is building teacher capacity to facilitate and conduct cycles of inquiry both formally and informally.

The founding team understands that teaching to deep understanding and mastery is complex, that teachers cannot approach this complex task formulaically. They must develop hypotheses about how a given child might master a particular objective based on that child's interests, current level of ability, level of engagement, personality, learning style, etc. Should the hypothesis be incorrect, as a researcher, an effective teacher would use that data to form another hypothesis and continue this line of inquiry until success is achieved. Urban Montessori will build this capacity in teachers and build a culture of teacher inquiry.

Reporting and Accountability to Authorizer

Urban Montessori will promptly meet all reasonable inquiries for data from the Authorizer or other authorized agency and assure timely scheduled data reporting to our Authorizer in compliance with the law; further Urban Montessori hereby grants authority to the State of California to furnish copies of all test results directly to the Authorizer, as well as to the School.

Use and Reporting of Data to School Stewards and Stakeholders

Urban Montessori has a goal of every family having access to student performance data on a regular basis. The founding team believes that effective schools are often effective because families and community have the means to advocate for their children and hold the school accountable. The School welcomes that level of advocacy and thinks that that ability begins with access to data and information. At the beginning of every school year, the School will hold family meetings to share its assessment philosophy and system and to train the families on how to access assessment data. Urban Montessori's goal is that every family and child be able to access their child's data and reflections on his or her performance on a computer system. Until that technology is realized, the School will hold family accountability sessions throughout the year to share school-wide progress and regular family meetings about individual student progress.

In addition, Urban Montessori will utilize multiple streams of data to review program effectiveness and inform programmatic decisions on a regular basis. Sources of data include, but are not limited to, API scores, AYP details, CST results, interim benchmark assessment results, unit assessment results, student reflections, portfolio evaluations, report cards, student, staff and family satisfaction surveys, discipline referrals, attendance rates, and student/family attrition rates.

Where appropriate, the data will be broken out by schools, target subgroups, grade-level, individual class, and individual child, and will be collected, analyzed, and disseminated in a transparent manner

that promotes accountability and continuous improvement amongst members of the school community. Urban Montessori will employ a universal inquiry cycle to review the various types of data generated about the school program.

Urban Montessori will continuously review academic content and instruction in light of the data produced in accordance with this section, and will make improvements in curriculum, instruction and professional development as appropriate. To this end, a school improvement plan will be developed each year with input from the School's community, staff, and board.

Charged with stewardship of public school funds, the Urban Montessori Board will systematically review the schools' data in order to monitor trends in student learning outcomes and ensure that there are sufficient and appropriate financial and human resources to properly enact the School's program and remain true to the charter. The Board will work in conjunction with the Urban Montessori leadership and community to make necessary changes in response to identified needs as reflected in the School's data streams.

In accordance with Title III, Urban Montessori will adhere to all mandated reporting guidelines in relation to English Learners, including notification to parents regarding CELDT results and reclassification. In accordance with IDEIA, Urban Montessori will comply with all state and federal laws regarding reporting requirements for children with IEPs, including, at a minimum, trimester reports to a Special Education student's parents on progress towards goals stated within the IEP.

Reporting to Broader Community

The School will annually publish the School Accountability Report Card (SARC) in accordance with state and federal laws as they apply to charters.

District Visitation/Inspection

The School will comply with a District requested visitation process to enable the District to gather information needed to validate the School's performance and compliance with the terms of this charter. The School agrees to and submits to the right of the District to make random visits and inspections or observations in order to carry out its statutorily required oversight in accordance with Education Code Section 47607.

Response to Inquiries

Pursuant to Education Code Section 47604.3 the School shall promptly respond to all reasonable inquiries including, but not limited to inquiries regarding its financial records from the District Office of Education, District Board of Education, and the State Superintendent of Public Instruction.

III. GOVERNANCE STRUCTURE

Governing Law: The governance structure of the school, including, but not limited to, the process to be followed by the school to ensure parental involvement—California Education Code Section 47605 (b)(5)(D)

Non-Profit Public Benefit Corporation

Urban Montessori shall be operated as a California Nonprofit Public Benefit Corporation in accordance with Education Code Section 47604.

Urban Montessori will operate autonomously from the Authorizer, with the exception of the supervisory oversight as required by statute and other contracted services as negotiated between the Authorizer and the School. Pursuant to California Education Code Section 47604(c), the Authorizer shall not be liable for the debts or obligations of Urban Montessori, or for claims arising from the performance of acts, errors, or omissions by Urban Montessori, if the Authorizer has complied with all oversight responsibilities required by law.

Included as appendices are the Articles of Incorporation and Corporate Bylaws for Urban Montessori, which will be amended from time to time by the Board of Directors in accordance with the bylaws.

□ [See Appendix J for the Articles of Incorporation](#)

□ [See Appendix K for Urban Montessori Charter School Bylaws](#)

Board of Directors

Urban Montessori shall be governed by a corporate Board of Directors who shall be selected, serve, and govern the School in accordance with their adopted corporate bylaws, which shall be maintained to align with the terms of this charter and applicable law. Urban Montessori, Inc., a California nonprofit public benefit corporation, will serve as the sole statutory member of the Urban Montessori and will be responsible for, among other things, appointing the Board of Directors of Urban Montessori as outlined in the Urban Montessori bylaws.

In accordance with Education Code Section 47604(b), the Authorizer may appoint a representative to serve on the Urban Montessori Board of Directors.

□ [See Appendix B for biographies of the founding team and a list of the Urban Montessori Founding Board of Directors and Advisors](#)

Board Duties

The Urban Montessori Board of Directors will be responsible for the operation and fiscal affairs of the School, including but not limited to:

- Approval of the annual budget, calendar, salary schedules, major fundraising events, and grant writing;
- Negotiation and approval of an MOU or other contracts with the Authorizer;
- Approval of bylaws, resolutions, and policies and procedures of school operation;
- Approval of all changes to the charter to be submitted to the Authorizer as necessary in accordance with applicable law;
- Long-term strategic planning for the School;
- Participation as necessary in dispute resolution with the Authorizer;
- Monitoring overall student performance;
- Filling the position of Executive Director, as necessary;
- Evaluating the Executive Director;

- Monitoring the performance of the School and taking necessary action to ensure that the School remains true to its mission, charter, and applicable laws;
- Monitoring the fiscal solvency of the School;
- Participation in the School's independent fiscal audit, including the resolution of any audit findings;
- Participation in the School's performance report to the Authorizer;
- Participation as necessary in student expulsion matters;
- Increasing public awareness of the School; and
- Fundraising efforts

The Board of Directors may initiate and carry out any program or activity that is not in conflict with or inconsistent with its charter, governance documents, and any applicable law and which is not in conflict with the purposes for which charter schools are established.

Board Meetings

The Board of Directors will meet regularly to review and act on its responsibilities. All meetings of the Board of Directors shall be held in accordance with the Brown Act.

The Board of Directors shall adopt a conflicts code which shall comply with the Political Reform Act, Government Code Section 87100, and applicable conflict restrictions required by the Corporations Code and any conflicts statutes or regulations that may be adopted in the future as applicable to the School. The corporation will have an approved conflict of interest policy on file at the District, and all members will file Form 700 annually.

The Board of Directors meetings will be headed by the Chairman of the Board, who will be elected annually by the Board of Directors.

Board Delegation of Duties

The Board may execute any powers delegated by law to it and shall discharge any duty imposed by law upon it and may delegate to an employee or contractor of the School any of those duties with the exception of employment of the Executive Director, approval of Board policies, approval of the budget or budget revisions. The Board however, retains ultimate responsibility over the performance of those powers or duties so delegated. Such delegation will:

- Be in writing;
- Specify the entity designated;
- Describe in specific terms the authority of the Board of Directors being delegated, any conditions on the delegated authority or its exercise and the beginning and ending dates of the delegation; and
- Require an affirmative vote of a majority of present Board members

Executive Director

The Board of Directors intends to hire an Executive Director for the school who will be responsible for administering a school in all of the aspects of its day-to-day operations, working with the Board of Directors, the Authorizer, children, parents, and community members. The Executive Director will be the leader of Urban Montessori Charter School. The Executive Director will report directly to the Board of Directors, and s/he is responsible for the orderly operation of the School and the supervision of all employees in that school.

The Executive Director's duties shall include, but are not limited to, the following:

- Understand, promote and support the mission, vision and guiding principles of Urban Montessori.

- Ensure that all school staff understand, promote and support the mission, vision and guiding principles of Urban Montessori.
- Develop and monitor the school program.
- Communicate school-wide instructional practices and pedagogical approach to staff, parents, children and the community.
- Coordinate the use of standardized tests and other assessments.
- Develop the school's annual performance report and SARC.
- Contribute to the development of a school-wide "ethic of critical inquiry" through actively participating in school and classroom-based research and evaluation activities focused on improving practice.
- Lead annual, quarterly and ongoing reviews of student achievement data for continual school improvement
- Ensure continual curricular review and acquisition of relevant materials, using student achievement data analysis to drive decision-making.
- Develop and administer the budget as approved by the Board of Directors in accordance with generally accepted accounting principles; present at a minimum quarterly financial reports to the Board of Directors.
- Draft the school budget for Board approval. Monitor the budget and provide regular reporting to the Board of Directors. Assure that necessary equipment and supplies are available to support the school's program and enhance the school's physical plant.
- Attend meetings at the Authorizer as requested by the Authorizer and stay in direct contact with the Authorizer to assist the Authorizer in its oversight duties.
- Stay up-to-date on school laws and regulations.
- Ensure ongoing professional development, prioritization and evaluation of program effectiveness.
- Act as a resource to all staff in the development and implementation of the school's programs.
- Welcome input from staff, parents, children and Board of Directors on the school's functioning through formal and informal structures in order to make positive changes over time while maintaining program continuity and comprehensiveness.
- Through an established supervision process and daily informal observation, acquire thorough understanding of individual styles and strengths of all the teaching and administrative staff of the school. Continually work to help all teaching staff reach instructional goals and improve their performance.
- Provide opportunities and encouragement for staff to grow professionally. Directly or indirectly facilitate the work of staff in groups. Assist all staff in providing improved learning environments for children.
- Provide overall supervision of student teachers, interns, and other unpaid classroom and school volunteers at the school.
- In regularly scheduled staff meetings, work with teachers to:
 - Anticipate future needs
 - Discuss potential problems and generate potential solutions
 - Coordinate programs and procedures
- Involve parents and the larger community
 - Help teaching staff to be aware of, and comfortable with, diversity in teaching styles and techniques. Assign teaching staff to non-instructional duties in line with their interests, capabilities and teaching loads. When there is a vacancy in the teaching staff, seek out and interview qualified applicants. Ensure compliance with all regulations regarding teachers' credentials.
- Develop a sense of community while respecting and responding appropriately to the strengths and needs of staff. Be available to staff on a consistent daily basis to help address their individual and collective needs. Act as a liaison, when necessary and appropriate, between parents and staff. Actively seek parent, student and staff input and involvement in key decisions that affect the school.

- Demonstrate excitement about learning and excitement about engaging children in learning. Attempt to know every student attending the school and uphold high expectations for children and teaching staff. Provide appropriate discipline and encouragement for children when necessary. Provide a meaningful and efficient system for maintaining necessary student records. Attend IEP meetings as required by law.
- Be available to parents on a regular basis. Keep parents informed of and involved in policy changes at the school. Encourage parent support and cooperation and enlist their efforts to sustain well-kept school structure. Plan and conduct interesting and informative parent meetings.
- Establish and maintain communication with the school's internal and external community.

The above duties may be delegated as approved by the Board of Directors to another employee of Urban Montessori or to an appropriate third party provider as allowed by applicable law.

Family Participation in Governance

Urban Montessori will ensure parents and caregivers have an opportunity to participate in the governance of its school through involvement in the Family Advisory Council. The Family Advisory Council ("FAC") shall include one parent or caregiver from each classroom who will be selected by election annually at the first class meeting of the year. The FAC will provide a forum for parents to express concerns, request information, review schoolwide performance data, and provide feedback on school policy, and will work to facilitate effective communication among parents, teachers and administration. The Family Advisory Council shall meet every other month as a body and co-lead with the teacher family meetings by classroom every other month. In this way, Urban Montessori builds family leadership capacity and builds greater ownership for the school and its direction. They shall provide information, feedback and make recommendations to the Executive Director, as well as the FAC board representatives, who will be charged with sharing FAC recommendations with the Board of Directors as appropriate. The FAC will collectively have two representatives on the Board of Directors.

Expectations and Opportunities for Family Involvement

The School recognizes that children learn best when parents are engaged in their education¹¹. The School will meet with each family individually on an annual basis to develop a family participation plan.

To encourage parent participation in all aspects of school life, the School features:

1. *Special family sessions*: Scheduled throughout the year, sessions will teach the families about their child's particular plane of development, our educational model and approach for that particular plane of development, and ensure families and schools are working in alignment and in partnership around the children's education.
2. *Participation in school decision-making*: Families have representatives on the Family Advisory Council, and the FAC will have two representatives on the Board of Directors. See above question
3. *Opportunities to evaluate their schools and the staff*: Annually, parents will be asked to complete a survey evaluating their school, the principal, and their child's teachers. The survey results will be reviewed by the School staff and will be a factor in personnel decisions.

In addition, the School will request a minimum of 10 participation hours by each family each year. The School recognizes this may present a challenge to some families, so the School will work with each family annually in developing individualized family participation plans that support a family in meaningful participation. The School will provide a variety of opportunities to participate with family members' different skills, needs, and interests. Families will get credit for helping in classrooms, leading extra-curricular activities, coaching sports teams, assisting with event planning, attending field

¹¹ Fan, X. T., & Chen, M. (2001). Parental involvement and children' academic achievement: A meta-analysis. *Educational Psychology Review*, 13, 1-22.

trips, attending FAC meetings, serving on parent committees, fundraising, office support, mentoring children, and communicating with other parents. Families can also get credit for participating in parent education events.

IV. HUMAN RESOURCES

Governing Law: *The qualifications to be met by individuals to be employed by the school.*

- *California Education Code Section 47605 (b)(5)(E)*

Qualifications of School Employees

In accordance with Charter School health and safety policies, described below, all employees shall be fingerprinted and background-checked and receive background clearance and tuberculosis clearance prior to commencing employment with Urban Montessori. Urban Montessori's Executive Director, the Director of Instruction, and Teachers will meet the following qualifications:

Executive Director Qualifications:

Urban Montessori's Executive Director will lead an Urban Montessori school and be responsible for helping his or her assigned school and children achieve the outcomes outlined in this charter petition. The Executive Director will have the following qualifications:

Required

- Minimum three years successful classroom teaching experience
- Ability to provide leadership and serve as a mentor
- Experience managing or demonstrated capacity to manage a growing start-up organization – building and inspiring a strong professional culture, strategically aligning and securing resources, creating and implementing accountability systems, managing transitions
- Excellent organization, time management and follow-up skills; high sense of commitment; demonstrated ability to successfully handle multiple projects simultaneously; ability to work as part of a team
- Computer literacy and comfort with acquiring new technology skills

Preferred

- Doctoral degree (EdD) or Master's degree (MA or MS) preferably in Education
- Five years successful administrative experience in a public school environment
- Experience working in both traditional and innovative school environments, with exceptional management skills
- Strong instructional leader – able to align multiple approaches and best practices into a cohesive and powerful instructional program, build a teacher continuum of instruction specific to Urban Montessori's instructional program, coach and build capacity of teachers on that continuum, and design and implement a professional development system that builds teacher capacity along that continuum and effectively engages teachers as professionals in their own development
- Experience facilitating cycles of data inquiry with teachers to move teacher practice

Director of Instruction Qualifications:

An Urban Montessori Director of Instruction will be responsible for the instructional program at a given school and will support the Executive Director to ensure the school and children achieve the outcomes outlined in this charter petition. The Director of Instruction will have the following qualifications:

Required

- Minimum five years successful classroom teaching experience in a Montessori setting
- Minimum two years successful experience coaching teachers, developing and implementing teacher training in Montessori methods
- Montessori training and certification

- Able to coach and build capacity of teachers and design and implement a professional development system that builds teacher capacity and effectively engage teachers as professionals in their own development
- Ability to provide leadership and serve as a mentor, facilitate and manage conflict
- Able to model strong instruction, effective and respectful management of classroom culture, and strong communication skills
- Excellent organization, time management and follow-up skills; high sense of commitment; demonstrated ability to successfully handle multiple projects simultaneously; ability to work as part of a team
- Computer literacy and comfort with acquiring new technology skills

Preferred

- Master's degree (MA or MS) preferably in Education
- Strong understanding of the Montessori approach and able to effectively integrate other best practices into the Montessori approach
- Experience managing student interventions systems and developing interventions for struggling children
- Experience facilitating cycles of data inquiry with teachers to move teacher practice
- Strong understanding of how to use multiple forms of assessment in informing and driving instruction

Lead Teacher Qualifications:

Education and/or Experience

- Bachelor's degree (BA or BS) from four-year college or university; and at least 3 years of successful teaching in age group assigned in a Montessori classroom
- Montessori certification in the age group/level assigned
- Appropriately credentialed; NCLB compliant
- CLAD Certification required

Other Qualifications

- Strong understanding of Montessori methods and able to effectively integrate other best practices with the Montessori method
- Strong understanding of literacy and math development in children and able to build children' individual learning plans that identify children's zone of proximal development and build upon their understanding and interests
- Strong understanding of how to use multiple forms of assessment in informing and driving instruction
- Inquiry orientation to his or her own practice and interested in conducting research in the classroom
- Able to lead a team and effectively maximize adults and supports in a classroom setting
- Ability to provide leadership and serve as a mentor
- Computer literacy and comfort with acquiring new technology skills

Support Teacher Qualifications:

Education and/or Experience

- Bachelor's degree (BA or BS) from four-year college or university
- Content expertise in foreign language, visual art, music, or design thinking
- At least two years of experience teaching English Language Development, foreign language, visual art, music, or design thinking to k-8 children

- Some experience working in Montessori classrooms or some Montessori training preferred

Other Qualifications

- Able to work with small groups of children and effectively implement targeted lessons

All employees will be expected to meet the following:

- Ability to obtain California Driver's License with a clean DMV printout
- Ability to pass state and federal background checks
- Ability to obtain First Aid/CPR Certification
- Clear TB and criminal background check upon hire
- Able to build immediate and loving rapport with children of all ages; strong understanding of child development and adolescent development
- Sense of humor, high ethical professional standards, equity perspective
- Passion for teaching and working with children from urban communities, with specific knowledge and understanding of the needs of children from different experiences, languages and backgrounds
- Excellent communication, presentation and interpersonal skills with demonstrated ability to speak and write clearly and persuasively
- Enthusiasm and commitment to participating in a cooperative effort to launch Urban Montessori, with commitment to the vision, mission and guiding principles of the School
- Driven adult learner dedicated to his or her own professional growth
- Adaptability to change with the necessary skills to work in a creative and demanding learning environment, including the ability to problem-solve and manage ambiguity and adversity
- Working knowledge of another language highly preferred, ideally a language spoken by families at Urban Montessori

Required Educational Level / Credentialing:

Urban Montessori's lead teachers will be required to hold a California Commission on Teacher Credentialing certificate, permit, or other document equivalent to that which a teacher in other public schools would be required to hold, in accordance with Education Code section 47605(I), and shall meet applicable "highly qualified" requirements required by the No Child Left Behind Act. The California Charter Schools Act gives charter schools "flexibility with regard to noncore, non-college preparatory courses," which is applicable to Urban Montessori's specialty teachers in music, art design and foreign language. Urban Montessori will maintain auditable files of teacher credentials on site in compliance with applicable law.

Human Capital Strategy

Urban Montessori shall develop a comprehensive recruitment policy to attract highly qualified, credentialed teachers, strong visionary leaders, and exceptional staff. The Urban Montessori recruitment strategies for employing highly qualified teachers shall include using established teacher recruiting services, such as EdJoin and Montessori-specific job boards, Monster.com, college employment fairs, posting on educational listserves and networking, as well as developing strategic partnerships.

Urban Montessori is in the process of developing strategic partnerships with Montessori teacher training programs in the Bay Area. These programs will provide teacher interns in the classrooms who will work under the leadership of the lead teachers. The Director of Instruction will work with each lead teacher to build a professional development plan for every support teacher and intern to ensure the School is building the capacity of our aides and interns as teachers. The School is committed to developing a career ladders initiative to professionally support and develop the staff in their career planning and to ensure staff is able to grow and advance within the Urban Montessori organization.

[□ See Appendix L for the Human Capital Plan with Job Descriptions](#)

Professional development will be provided on an ongoing basis and will be built into the school calendar. Professional development workshop days include:

- An intensive two-week Summer Institute to review data, map standards, build curriculum units, build interventions plans for struggling children, develop design challenges
- A three-day design thinking training facilitated by the K-12 Lab at the Stanford University Design School
- Weekly two-hour professional development sessions
- Daily teacher collaboration time
- Designated times throughout the term where staff are released to meet with the Director of Instruction around their individual professional growth, observe other classrooms, attend professional development opportunities, and review student growth data
- Other designated whole-group professional development days scheduled throughout the year
- Additional individualized professional development plans developed collaboratively between staff and Director of Instruction

Professional development needs will be assessed through analysis of student assessment data, annual staff surveys, evaluations and observations, and in alignment with the multi-year strategic plan on the implementation of the educational program. Because the staff consists of lead Montessori teachers as well as other specialists who support Montessori instruction in the morning and lead instruction in design, arts, foreign language and/or ELD in the afternoon, professional development will be partially differentiated and partially whole-school. All teachers will come together around cycles of data inquiry, around “A Focused Approach to Constructing Meaning: Explicit Language for Elementary Literacy Instruction”, Response to Intervention, and Schoolwide culture. Otherwise professional development will be highly-differentiated to ensure teachers are receiving the support they need to move their practice.

[□ See Appendix A-23 for the Multi-year Professional Development Plan](#)

In accordance with Education Code Section 44259.1, which requires that school district teachers in the state of California earn their Professional Clear Credential through on the job mentoring and training, teachers will participate in a California Commission on Teacher Credentialing (“CCTC”) - approved Induction Program to earn their Clear Credential. By the completion of the program, educators will have completed a portfolio showing evidence of their professional learning in each of the six Induction standards in the California Standards for the Teaching Profession (“CSTP”) framework.

The School will also pursue strategic partnerships with organizations like the Design School at Stanford University, Oakland Unified School District, Alameda County Office of Education, Stanford Redesign Network, Project Zero, Grand Lake Montessori, the Henry Ford Learning Institute, the National Equity Project, Envision Academy, and others to share best practices around teacher development and leverage specialists in arts integration, performance assessments, Montessori practices, teaching diverse populations, and design thinking.

Personnel Policies

The Board will adopt and maintain personnel policies that will be compiled and included in a personnel manual provided to all employees upon commencing employment.

[□ See Appendix M for the draft Employee Handbook](#)

Compensation and Benefits

Governing Law: *The manner by which staff members of the Charter Schools will be covered by the State Teachers' Retirement System, the Public Employee's Retirement System, or federal social security.*

- *California Education Code Section 47605 (b)(5)(K)*

Urban Montessori will structure its employee compensation plan in a manner that will attract candidates with the necessary skills and experience.

All employees of the School who qualify for membership in STRS (including teachers and other qualified certificated employees) shall be covered under the appropriate system. Employees will contribute at the rate established by STRS. The School will work with the District Office of Education pursuant to Education Code Section 47611.3 to ensure that appropriate arrangements for the coverage have been made. All employees who are not members of STRS must contribute to the federal social security system. The School will make all employer contributions as required by STRS and federal social security. The School will also make contributions for workers' compensation insurance, unemployment insurance and any other payroll obligations of an employer. The Executive Director or designee will be responsible for arranging retirement benefits.

Employee Representation

Governing Law: *A declaration whether or not the Charter School shall be deemed the exclusive public school employer of the employees of the Charter School for the purposes of the Educational Employment Relations Act.*

- *California Education Code Section 47605 (b)(5)(O)*

Urban Montessori shall be deemed the exclusive public school employer of Urban Montessori teachers, staff and other employees of Urban Montessori for purposes of the Educational Employment Relations Act. Urban Montessori recognizes the employees' rights under the EERA provisions to organize for collective bargaining.

Rights of School Authorizer Employees

Governing Law: *A description of the rights of any employee of the school Authorizer upon leaving the employment of the school Authorizer to work in a charter school and of any rights of return to the school Authorizer after employment at a charter school*

- *California Education Code Section 47605 (b)(5)(M)*

No person shall be required to work at the School. Persons employed by Urban Montessori are not considered employees of the Authorizer for any purpose whatsoever. Employees of the District who resign from District employment to work at Urban Montessori Charter School and who later wish to return to the District shall be treated the same as any other former District employee seeking reemployment. Urban Montessori shall not have any authority to confer any rights to return on District employees. Sick or vacation leave or years of service credit at the District or any other school district will not be transferred to Urban Montessori. Employment by Urban Montessori provides no rights of employment at any other entity, including any rights in the case of closure of Urban Montessori.

V. OTHER SCHOOL POLICIES

Health and Safety

Governing Law: The procedures that the school will follow to ensure the health and safety of pupils and staff. These procedures shall include the requirement that each employee of the school furnish the school record summary as described in Section 44237

➤ *California Education Code Section 47605(b)(5)(F)*

In order to provide safety for all children and staff, Urban Montessori will adopt and implement full health and safety procedures in consultation with its insurance carriers and risk management experts.

The following is a summary of the health and safety policies of Urban Montessori:

Procedures for Background Checks

As required by Education Code Sections 44237 and 45125.1, new employees and contractors as well as non-parent volunteers at the School, must submit two sets of fingerprints to the California Department of Justice for the purpose of obtaining a criminal record summary (LiveScan fingerprinting may be used as an alternative). The Executive Director shall monitor compliance with this policy and report to the Urban Montessori Board of Directors on a quarterly basis. The Urban Montessori Board Chairman shall monitor the fingerprinting and background clearance of the Executive Director. Volunteers who will volunteer outside of the direct supervision of a credentialed employee shall be fingerprinted and receive background clearance prior to volunteering without the direct supervision of a credentialed employee.

Role of Staff as Mandated Child Abuse Reporters

All non-certificated and certificated staff will be mandated child abuse reporters and will follow all applicable reporting laws, the same policies and procedures used by the Authorizer.

TB Testing

Employees and any volunteers with repeated or extended contact with children will be tested for tuberculosis using the Mantoux Tuberculin skin test or must provide a negative TB test conducted within the last four years or if tested positive for TB must furnish a certificate from a health provider that s/he is free from communicable TB prior to commencing employment or volunteering as required by Education Code Section 49406. All employees will be retested for TB at least every four years.

Immunizations

All children enrolled and staff will be required to provide records documenting immunizations as is required at public schools pursuant to Health and Safety Code Sections 120325-120375, and Title 17, California Code of Regulations Sections 6000-6075.

Medication in School

Urban Montessori will adhere to Education Code Section 49423 regarding administration of medication in school.

Vision, Hearing, Scoliosis

Children will be screened for vision, hearing and scoliosis in accordance with Education Code Section 49450, *et seq.*, as applicable to the grade levels served by Urban Montessori.

Emergency Preparedness

Urban Montessori shall adhere to an Emergency Management Plan drafted specifically to the needs of the school sites in conjunction with law enforcement and the Fire Marshall. This plan shall include, but not be limited to the following responses: fire, flood, earthquake, terrorist threats, and hostage situations. If utilizing facilities that were previously used as a school site, any existing emergency preparedness plan for the school site shall be used as a starting basis for updating the plan for Urban Montessori.

Blood borne Pathogens

Urban Montessori shall meet state and federal standards for dealing with blood borne pathogens and other potentially infectious materials in the work place. The Board of Directors shall establish a written infectious control plan and provide training to staff to protect employees and children from possible infection due to contact with blood borne viruses, including human immunodeficiency virus (HIV) and hepatitis B virus (HBV). Whenever exposed to blood or other bodily fluids through injury or accident, children and staff should follow current medical protocol for disinfecting procedures.

Drug Free/Alcohol Free/Smoke Free Environment

Urban Montessori shall function as a drug, alcohol and tobacco free workplace.

Facility Safety

Urban Montessori shall utilize facilities that are compliant with the Americans with Disabilities Act and will meet the building requirements described in Education Code 47610-47610.5. Urban Montessori agrees to test sprinkler systems, fire extinguishers, and fire alarms annually at its facilities to ensure that they are maintained in an operable condition at all times. The School shall conduct fire drills as required under Education Code Section 32001.

Comprehensive Sexual Harassment Policies and Procedures

Urban Montessori is committed to providing schools that are free from sexual harassment, as well as any harassment based upon such factors as race, religion, creed, color, national origin, ancestry, age, medical condition, marital status, sexual orientation, or disability. Urban Montessori will adopt the Authorizer's comprehensive policy to prevent and immediately remediate any concerns about sexual discrimination or harassment at Urban Montessori (including employee to employee, employee to student, and student to employee misconduct). Misconduct of this nature is very serious and will be addressed in accordance Urban Montessori sexual harassment policy, included in the Employee Handbook.

□ [See Appendix N for draft safety procedures](#)

Dispute Resolution

Governing Law: The procedures to be followed by the Charter School and the entity granting the charter to resolve disputes relating to provisions of the charter

- *California Education Code Section 47605 (b)(5)(N)*

The School recognizes that it cannot bind the District to a dispute resolution procedure to which the District does not agree. The policy below is intended as a starting point for a discussion of dispute resolution procedures. The School is willing to consider changes to the process outline below as suggested by the District.

The School and the District will be encouraged to attempt to resolve any disputes with the District

amicably and reasonably without resorting to formal procedures. In the event of a dispute between the School and the District, School staff, employees and Board members of the School and the District agree to first frame the issue in written format (“dispute statement”) and to refer the issue to the District Superintendent and Executive Director of the Urban Montessori school in dispute. In the event that the District Board of Trustees believes that the dispute relates to an issue that could lead to revocation of the charter in accordance with Education Code Section 47607, the School requests that this shall be noted in the written dispute statement, although it recognizes it cannot legally bind the District to do so. However, participation in the dispute resolution procedures outlined in this section shall not be interpreted to impede or act as a pre-requisite to the District’s ability to proceed with revocation in accordance with Education Code Section 47607.

The Executive Director and Superintendent shall informally meet and confer in a timely fashion to attempt to resolve the dispute, not later than 5 business days from receipt of the dispute statement. In the event that this informal meeting fails to resolve the dispute, both parties shall identify two Board members from their respective boards who shall jointly meet with the Superintendent and the Executive Director of the school in dispute and attempt to resolve the dispute within 15 business days from receipt of the dispute statement.

If this joint meeting fails to resolve the dispute, the Superintendent and the Executive Director shall meet to jointly identify a neutral third party mediator to engage the Parties in a mediation session designed to facilitate resolution of the dispute. The format of the mediation session shall be developed jointly by the Superintendent and the Executive Director. Mediation shall be held within sixty business days of receipt of the dispute statement. The costs of the mediator shall be split equally between the District and the School. If mediation does not resolve the dispute either party may pursue any other remedy available under the law. All timelines and procedures in this section may be revised upon mutual written agreement of the District and the School.

Addressing Internal Concerns and Complaints

Urban Montessori Charter School is committed to working with all stakeholders to address any concerns and complaints. All stakeholders are encouraged to share their ideas and concerns with the Executive Director at any time. If the Executive Director is unable to resolve a concern, all stakeholders are able to contact the Chair of the Board of Directors. A formal complaint process will be used if necessary to address any community concerns that are not resolved through informal conversations.

The School will establish and communicate through parent and employee handbooks complaint procedures that address both complaints alleging discrimination or violations of law and complaints regarding other areas. The School will not, at any time, refer internal complaints to the District.

Achieving Racial & Ethnic Balance – the Urban Montessori Outreach Plan

Governing Law: The means by which the school will achieve a racial and ethnic balance among its pupils that is reflective of the general population residing within the territorial jurisdiction of the school district to which the charter petition is submitted.

- *California Education Code Section 47605.6(b)(5)(H)*

The School will conduct a variety of outreach activities to attract an applicant pool that broadly reflects the racial and ethnic balance of Oakland. These strategies may include:

1. Establishing an enrollment timeline and process that allows for a broad-based recruiting and application process. Typically, formal outreach activities for the following school year’s enrollment begin in November, and the lottery is held in March.
2. Creating and distributing enrollment brochures and forms in various languages, including

- English, Chinese, Vietnamese, Cambodian, Arabic and Spanish.
3. Meetings with and presentations to local pre-schools and Head Start programs, parent groups, neighborhood groups, community organizations, churches, and youth service organizations.
 4. Posting enrollment information on the website in multiple languages
 5. Hosting Montessori 101 workshops in target communities where families have less exposure to and understanding of the Montessori model
 6. Holding open houses and hosting scheduled tours for interested parents. During open enrollment season, the School will typically have 2-3 open houses per neighborhood.
 7. Advertising openings by posting flyers in neighborhoods, distributing flyers at local grocery stores, buying ad space on buses or in the newspaper, and sending information via direct mail.

The office manager plays a key role in fielding calls about enrollment, coordinating open houses and presentations, and assisting individual families to fill out the Interest Form.

Urban Montessori Charter School recognizes that the Montessori model may be more known and desired by families who have had access to predominantly private Montessori preschools. The founding team is therefore committed to doing extensive outreach to communities that may have not had experience with Montessori and organizing a virtual tour of a Montessori classroom as part of our outreach to ensure families with less exposure to Montessori can make thoughtful choices.

[□ See Appendix C for draft Outreach plan](#)

Public School Attendance Alternatives

Governing Law: The public school attendance alternatives for pupils residing within the District who choose not to attend the charter school.

- *California Education Code Section 47605.6(b)(5)(O)*

No student may be required to attend Urban Montessori Charter School. Children who reside within the school district in which the School operates who choose not to attend the School may attend a school within that school district according to its policy or at another school district or school within the district through its intra- and inter-district transfer policies. The parent or guardian of each student enrolled in the School shall be notified on admissions forms that the student(s) has no right to admission in a particular school of any local educational agency (or program of any local educational agency) as a consequence of enrollment in the School, except to the extent that such a right is extended by the local educational agency.

Student Admissions Policies and Procedure

Governing Law: Admission requirements, of the charter school, if applicable.

- *California Education Code Section 47605.6(b)(5)(N)*

Urban Montessori Charter School is open to all children. Admission to the School shall not be determined according to the student's place of residence or that of his or her parent or guardian, within the state of California, except as provided below. Admission tests will not be required; however, assessments will be administered to determine individual instructional programs once children are admitted. These tests will serve as diagnostics of children's reading, writing and math skills.

Student Recruiting and Enrollment Growth

The School will use a variety of strategies to actively recruit a diverse student population who understand and value the Charter School's mission and are committed to the School's instructional and operational philosophy.

Urban Montessori plans to start with seven multiage classrooms of 36 children in Kindergarten through second grade, and expand two classrooms each year by enrolling two new classes of Kindergarten children each year over 6 years until full capacity of 681 children is reached. This "slow

growth” plan will:

- Maximize the portion of children who enter a Montessori setting early enough to fully benefit from the Montessori approach which was designed explicitly for children starting at age three and continuing minimally through the second elementary program,
- Enable the School to bring on staff gradually, and ensure selection of the most qualified teachers,
- Allow time for smoother orientation and integration of new teachers into the program,
- Facilitate the development of a close-knit school community,
- Spread the cost of acquiring furniture and equipment and curriculum development over many years, and
- Give teachers time to gradually build a fully-articulated K-8 curriculum.

Commitment to a Discrimination-free and Harassment-free Education

The School is committed to providing a safe, discrimination-free and harassment-free education to its children. The School shall not discriminate against any pupil on the basis of the characteristics listed in Education Code Section 220 (actual or perceived disability, gender, nationality, race or ethnicity, religion, sexual orientation, or any other characteristic that is contained in the definition of hate crimes set forth in Section 422.55 of the Penal Code or association with an individual who has any of the aforementioned characteristics). The School shall comply with all applicable legal minimum and maximum age requirements for admission.

Application and Admissions Process

The Montessori approach was designed to maximize the potential of children beginning at the age of three and is often more known in the United States as a preschool model more than a K-12 model. Because the ideal Montessori school begins working with children at the age of three, Urban Montessori is committed to pursuing a public preschool in the future to provide a complete public Montessori experience.

Because the School does not anticipate serving students who have a Montessori preschool experience and because the School does not currently offer a preschool primary program, Urban Montessori will support students in transitioning into the Montessori model in the following ways:

1. In year 1, Urban Montessori will develop a summer orientation program that will allow children to become acclimated to the Montessori student-directed prepared environment, and
2. Following, until there is a preschool program operating, Urban Montessori will use the Kindergarten year as a “bridge” year to explicitly prepare children to enter the grades 1-3 multi-age setting successfully.

In order to ensure that all children will be placed appropriately and benefit fully from Urban Montessori Charter School, parents will be strongly encouraged to participate in a pre-admission meeting and a school tour. Urban Montessori will also develop a Montessori 101 workshop series for prospective families who have had little to no exposure to Montessori to ensure they understand the model before they select it.

Application to Urban Montessori Charter School shall be completed and returned to the School no later than the deadline published for that school year to be included in Urban Montessori Charter School’ random public lottery. In order to maximize access to Urban Montessori Charter School, the application will be a one-page document requesting minimal information and provided in multiple languages. We will also offer assistance in completing the application should families request it.

All children who wish to attend Urban Montessori Charter School shall be admitted, up to capacity. Admission to Urban Montessori Charter School shall not be determined by the place of residence of the student or his or her parent in the State, except as provided in Education Code Section 47605(d)(2).

If the number of children who wish to attend an Urban Montessori school exceeds that school's capacity, admission, except for existing children of Urban Montessori Charter School, shall be determined by a public random drawing. In the case of a public random drawing, the following categories of children will be exempt from the public random drawing:

1. Currently enrolled children
2. Children of Urban Montessori Charter School founders
3. Siblings of children currently enrolled in Urban Montessori Charter School

As part of the public random drawing, the following categories will receive weighted preference for admission to the school in ranked order⁶:

1. Children seeking to change schools under the public school choice provisions of ESEA
2. Children of Urban Montessori Charter School employees
3. Children of Urban Montessori Charter School Board Members after two years of service on the Board
4. Children residing within the boundaries of Oakland Unified District

All applications drawn after reaching capacity will be placed on a wait-list.

Once a child has been offered a seat at Urban Montessori Charter School, families will be required to complete the registration process which will minimally require families provide the following –

- Completion of a student registration form;
- Proof of Immunization;
- Home Language Survey;
- Completion of Emergency Medical Information Form;
- Proof of minimum and maximum age requirements, e.g. birth certificate;
- Authorization for the school to request and receive student records from schools the student has attended or is currently attending;
- A copy of any existing Student Success Team (SST) evaluations and recommendations for the student shall be provided;
- A copy of any existing 504 or Individual Education Plan (IEP) for the student shall be provided.

Upon admission, families will be encouraged to attend a family orientation. Every family that enrolls in Urban Montessori will have an individualized orientation/intake meeting to review the school's policies and procedures, welcome and learn about the child and the family joining the Urban Montessori community and the assets they bring to the community, create a family involvement plan, address any questions and concerns, and ensure Urban Montessori has sufficient student information to develop an initial individualized learning plan. The School will also take this time to ensure families know about all the summer orientation events and to encourage families with no prior Montessori experience to participate in the Introduction to Montessori summer session. These sessions will be designed to introduce children and their families to the Montessori prepared environment, the expectations for student behavior and learning in a Montessori setting, introduce them to Montessori materials and approach, and generally acclimate children to a very student directed learning environment.

[□ See Appendix O for Urban Montessori Charter School application form and Frequently Asked Questions](#)

[□ See Appendix P for Urban Montessori Charter School admissions policies](#)

⁶ To comply with the Public Charter Schools Grant Program as required by the State Board of Education approved RFA, UMCS will not implement preferences for Children of Urban Montessori Charter School employees or Children of Urban Montessori Charter School Board Members after two years of service on the Board the period during which UMCS is receiving Public Charter Schools Grant monies.

Suspension and Expulsion Policies

Governing Law: The procedures by which pupils can be suspended or expelled.

- *California Education Code Section 47605.6(b)(5)(J)*

Urban Montessori Charter School is committed to ensuring that the School's culture and discipline policies are in alignment with child development research. The School will establish a school-wide behavior plan that makes expectations for student behavior clear and describes consistent and escalating consequences for inappropriate behavior. This plan will be distributed to families and children, and children will be taught the elements of the plan. Urban Montessori will implement a comprehensive interventions system to ensure children who require behavioral intervention or social-emotional supports receive interventions plans targeted towards improving children's performance academically, socially, emotionally, and physically. In addition, the School will implement a Peace curriculum to ensure all children are being explicitly taught the habits and self-management strategies needed to engage effectively as part of a community.

[□ See Appendix Q for the draft School Discipline Plan that outlines the Schools' expulsion and suspension policies and procedures](#)

[□ See Appendix E for the draft Attendance Policies](#)

Should a child's inappropriate behavior escalate or be severe enough to warrant suspension or expulsion, the procedures for suspension and expulsion of the School's children are based on the procedures identified in the California Education Code. The policies and procedures for suspension and expulsion will be periodically reviewed and the list of offenses for which children are subject to suspension and expulsion will be modified as necessary. The School will notify the District of any expulsions. The School will account for suspended or expelled children in its average daily attendance accounting as provided by law.

In the case of a special education student, or a student who receives 504 accommodations, the School will ensure that it makes the necessary adjustments to comply with the mandates of state and federal laws, including the IDEIA and Section 504 of the Rehabilitation Plan of 1973, regarding the discipline of children with disabilities. Prior to recommending expulsion for a Section 504 student or special education student, the charter administrator will convene a review committee to determine 1) if the conduct in question was caused by, or had a direct and substantial relationship to the child's disability; or 2) if the conduct in question was the direct result of the LEA's failure to implement the 504 plan or IEP. If it is determined that the student's misconduct was not caused by or had direct and substantial relationship to the child's disability or the conduct in question was not a direct result of the LEA's failure to implement the 504 plan or IEP, the student may be expelled.

VI. REPORTING AND ACCOUNTABILITY

Budgets and Cash Flow

Governing Law: The petitioner or petitioners shall also be required to provide financial statements that include a proposed first-year operational budget, including startup costs, and cash flow and financial projections for the first three years of operation.

- *California Education Code Section 47605.6(h)*

At full enrollment, the School will be able to sustain itself on state and federal per-pupil funds, without the need for additional grant monies.

Sources of Funds

The vast majority of funds for the School's operations come from the State of California and local in-lieu of property taxes, in the form of a per-student standard allocation (Revenue Limit Per Average Daily Attendance, or "ADA"). The School will also receive additional monies ("categorical funds") for special populations and specific programs.

Uses of Funds

Annually, most of the School's funds will go toward personnel and facilities (including rent or debt service, utilities and maintenance). The School also anticipates spending about 5% of its budget on other direct program costs (e.g. classroom supplies). Private and federal grant funds for one-time start-up costs will be used for items such as furniture, computer equipment, textbooks, and teacher training.

□ Please see Appendices S, T, and U for the School's start-up and three-year budgets, a budget narrative, and a one-year cash flow as required by Education Code Section 47605.6(h). These documents are based upon the best data available to the Petitioners at the date of submission.

Financial Reporting

By July 1 of each calendar year, the School will provide a draft budget for the following school year to the District, including its estimate for enrollment and its Average Daily Attendance assumptions. The School shall comply with all other financial reports required by Education Code Section 47604.33, including submitting the first interim by December 15, 2nd interim by March 15, unaudited actuals by September 15, and final audit by December 15.

The School will maintain sufficient staff and systems including technology, required to ensure timely reporting necessary to comply with the law and to meet all reasonable inquires from District and other authorized reporting agencies.

Insurance

The School shall acquire, maintain and finance general liability, workers compensation, and other necessary insurance for the School of the types and in the amounts required for an enterprise of similar purpose and circumstance.

The School shall provide evidence of the above insurance coverage to the District no later than sixty days prior to operation or an earlier agreed upon date by the District and the School.

Administrative Services

Governing Law: The manner in which administrative services of the school are to be provided.

- *California Education Code Section 47605.6(h)*

The School will contract with an outside vendor for any "back office" services that the school staffs are unable to perform (e.g. state reporting). The School will be responsible for all of its own personnel salary and benefit plans, provisions and costs. In the event that any administrative services are to be

provided by the District, the specifics will be agreed to in a Memorandum of Understanding between the School and the District.

Facilities

Governing Law: The location of each School facility that the petitioner proposes to operate.

- *California Education Code Section 47605.6(b)(5)(D)*

Governing Law: A description of the facilities to be utilized by the school.

- *California Education Code Section 47605.6(h)*

The School is initially seeking a facility with 10-12 classrooms, a larger multi-use space for lunch and assemblies, and office space. Ideally, the facility would also include a playground area, garden space, and on-site parking for staff and visitors. The School would consider co-locating with another school on a larger facility, especially during its first couple years. The School shall comply with Education Code Section 47610 by either utilizing facilities that are compliant with the Field Act or that are compliant with the State Building Code. The facilities shall be approved by the local/state fire marshal for the intended use. The School agrees to test sprinkler systems, fire extinguishers, and fire alarms at its facilities to ensure that they are maintained in an operable condition at all times.

As a first option, Urban Montessori Charter School intends to locate itself in the Lake Merritt area in downtown Oakland. The school has a goal to serve a broad, diverse group of Oakland residents from across the city, and downtown has ready access to public transportation and freeways. Since late 2010, the facilities committee has been actively evaluating a location at 16th and Harrison Street (1535 Harrison). This standalone facility has 19,556 square feet of usable space spread across a ground floor and mezzanine level. This facility could accommodate 11 large classrooms, multipurpose room, offices, and small meeting spaces. It would meet the needs of the school for the first three years, and potentially be a longer term site for the lower elementary. The property spans the block between Harrison and Webster Streets and has a 49-car parking lot, some or all of which could be used for outdoor play area given the availability of other parking lots in the area. The facilities committee, which includes an architect, has pulled the city plans for structural upgrades that were performed to the building in 1995. The committee evaluated those plans with a structural engineer and determined that the bracing in the building is still up to code, but additional work would need to be done on the roof. The exits of the building are sufficient for fire/life safety, but the building would require sprinklers, which would be straightforward given the layout of this building. A ramp would be required at the back entrance, but otherwise the building meets ADA requirements assuming equivalency of use on the ground and mezzanine levels. Total cost of upgrades was estimated to be \$350,000.

□ [See Appendix V for facilities requirements](#)

The building has been vacant for over three years. The facilities committee has been in communication with both the current tenant (who is not actually occupying the building but has a lease for two more years) and the owner. The tenant would like to find someone to offset at least partially its lease costs, and the owner has communicated verbally that he is amenable to paying for about half of the improvements to the building and amortizing the rest into the lease since the improvements are bringing the building up to code and increasing the value of his property rather than simply reconfiguring the building for our particular use. The amount budgeted for facilities includes a premium for owner financing of tenant improvements.

The facilities committee has also been investigating back up locations in case the Harrison Street location does not work out. The Barclays Building, home to AIPCS II, has recently been upgraded to E-occupancy and has an entire floor available. The facilities committee toured the facility under construction and has data on the asking full service rent. When the budgeted rent and utilities are combined, the budgeted amount exceeds the above-market asking full service rent of \$1.65.

Urban Montessori will also pursue a facility from the district under Proposition 39 and/or under a separately negotiated long-term lease arrangement. It shall utilize California Building Standards Code compliant facilities in accordance with Education Code Section 47610.

Independent Fiscal Audit

Governing Law: The manner in which annual, independent, financial audits shall be conducted, in accordance with regulations established by the State Board of Education, and the manner in which audit exceptions and deficiencies shall be resolved.

- *California Education Code Section 47605.6(b)(5)(l)*

An annual independent fiscal audit of the books and records of the School will be conducted as required under the Schools Act, Education Code Sections 47605.6(b)(5)(l) and 47605.6(m). The books and records of the School will be kept in accordance with generally accepted accounting principles, and as required by applicable law and the audit will employ generally accepted accounting procedures. The audit shall be conducted in accordance with applicable provisions within the California Code of Regulations governing audits of Schools as published in the State Controllers Guide. The Treasurer of the Board of the School will select an independent auditor and will be responsible for overseeing the independent audit. The auditor will have, at a minimum, a CPA and educational institution audit experience and be approved by the State Controller on its published list as an educational audit provider. To the extent required under applicable federal law, the audit scope will be expanded to include items and processes specified in applicable Office of Management and Budget Circulars.

The annual audit will be completed within four months of the close of the fiscal year and that a copy of the auditor's findings will be forwarded to the District Superintendent, the State Controller, and to the CDE by the 15th of December of each year. The Board of Directors will review any audit exceptions or deficiencies and develop a plan to resolve them. The School will submit a report to the District proposing how the exceptions and deficiencies have been or will be resolved to the satisfaction of the District along with an anticipated timeline for the same. Any disputes between the District and the School regarding the resolution of audit exceptions and deficiencies will be referred to the dispute resolution process referenced in Section V of this Charter. The independent fiscal audit of the School is a public record to be provided to the public upon request.

Direct Funding

The School will receive funding pursuant to Education Code Section 47630 et seq. and will opt to receive its funding directly from the state pursuant to Education Code Section 47651. Any funds due to the School that flow through the District shall be forwarded to the School in a timely fashion. During the term of this charter petition, the School and the District will negotiate in good faith to develop a Memorandum of Understanding that establishes the specific financial and service relationship between the two parties.

District Fee for Oversight

The District may charge for the actual costs of supervisory oversight of the School not to exceed 1% of the School's revenue, or the District may charge for the actual costs of supervisory oversight of the School not to exceed 3% if the School is able to obtain substantially rent free facilities from the District.

Closure Procedures

Governing Law: A description of the procedures to be used if the charter school closes. The procedures shall ensure a final audit of the school to determine the disposition of all assets and liabilities of the charter school, including plans for disposing of any net assets and for the maintenance and transfer of public records.

- *California Education Code Section 47605.6(b)(5)(Q)*

Closure of Urban Montessori will be documented by official action of the Board of Directors. The action will identify the reason for the closure. The official action will also identify an entity and person or persons responsible closure-related activities.

The Board of Directors or its designee will promptly notify parents and children of that school, the District Office of Education, the School's SELPA, retirement systems in which the School's employees participate (e.g., State Teachers' Retirement System, and federal social security), and the California Department of Education of the closure as well as the effective date of the closure. This notice will also include the name(s) of contact information for the person(s) to whom reasonable inquiries may be made regarding the closure; the pupils' school districts of residence; and the manner in which parents/guardians may obtain copies, including specific information on completed courses and credits that meet graduation requirements.

The Board or its designee will ensure that the notification to the parents and children of the site of the closure provides information to assist parents and children in locating suitable alternative programs. This notice will be provided promptly following the Board's decision to close the School.

The Board will also develop a list of pupils in each grade level and the classes they have completed, together with information on the pupils' districts of residence, which they will provide to the entity responsible for closure-related activities.

As applicable, the School will provide parents, children and the District with copies of all appropriate student records and will otherwise assist children in transferring to their next school. All transfers of student records will be made in compliance with the Family Educational Rights and Privacy Act ("FERPA") 20 U.S.C. § 1232g. The School will ask the District to store original records of School children. All records of the school shall be transferred to the District upon site closure. If the District will not or cannot store the records, the School shall work with the District to determine a suitable alternative location for storage.

All state assessment results, special education records, and personnel records will be transferred to and maintained by the entity responsible for closure-related activities in accordance with applicable law.

As soon as reasonably practical, the School will prepare final financial records. The School will also have an independent audit completed within six months after closure. The School will pay for the final audit. The audit will be prepared by a qualified Certified Public Accountant selected by the School and will be provided to the District promptly upon its completion. The final audit will include an accounting of all financial assets, including cash and accounts receivable and an inventory of property, equipment, and other items of material value, an accounting of the liabilities, including accounts payable and any reduction in apportionments as a result of audit findings or other investigations, loans, and unpaid staff compensation, and an assessment of the disposition of any restricted funds received by or due to the School.

The School will complete and file any annual reports required pursuant to Education Code section 47604.33.

On closure of the School, all assets of the School, including but not limited to all leaseholds, personal property, intellectual property and all ADA apportionments and other revenues generated by children attending the School, remain the sole property of the School and shall be distributed in accordance with the Articles of Incorporation to another California public educational entity. Any assets acquired from the District or District property will be promptly returned upon school closure to the District. The distribution shall include return of any grant funds and restricted categorical funds to their source in accordance with the terms of the grant or state and federal law, as appropriate, which may include

submission of final expenditure reports for entitlement grants and the filing of any required Final Expenditure Reports and Final Performance Reports, as well as the return of any donated materials and property in accordance with any conditions established when the donation of such materials or property was accepted.

On closure, the School shall remain solely responsible for all liabilities arising from the operation of Urban Montessori schools. As the School is operated by a non-profit public benefit corporation, should the corporation dissolve, the Board will follow the procedures set forth in the California Corporations Code for the dissolution of a non-profit public benefit corporation and file all necessary filings with the appropriate state and federal agencies. As specified by the Budget in the Appendix, the School will utilize the reserve fund to undertake any expenses associated with the closure procedures identified above.

VII. IMPACT ON CHARTER AUTHORIZER

Governing Law: Potential civil liability effects, if any, upon the school, any school district where the charter school may operate and upon the District board of education.

- *California Education Code Section 47605.6(h).*

The School is to be operated by a California nonprofit public benefit corporation. This corporation is organized and operated exclusively for charitable purposes within the meaning of Section 501(c)(3) of the Internal Revenue Code and California Revenue and Taxation Code Section 23701d.

Pursuant to Education Code Section 47604(c), an entity that grants a charter to a School operated by or as a nonprofit public benefit corporation shall not be liable for the debts or obligations of the School or for claims arising from the performance of acts, errors or omissions by the School if the authority has complied with all oversight responsibilities required by law. The School shall work diligently to assist the District in meeting any and all oversight obligations under the law, reporting, or other District-requested protocol to ensure the District shall not be liable for the operation of the School.

Further, the School and District shall enter into a memorandum of understanding, wherein the School shall indemnify the District for the actions of the School under this charter. The corporate bylaws of the Corporation provide for indemnification of the School's Board, officers, agents, and employees, and the School will purchase general liability insurance and Board Members and Officer's insurance to secure against financial risks. As stated above, insurance amounts are determined by recommendation and the School's insurance company for schools of similar size, location, and student population. The District shall be named an additional insured on the general liability insurance of the School.

The School shall be responsible for all supplies and equipment that it purchased and, in the event of loss by fire, disaster, or theft, the District shall have no responsibility for such items. Further, the District shall have no responsibility for losses of student property for any reason whatsoever and the School shall hold the District harmless from any such losses.

The School has instituted appropriate risk management practices as discussed herein, including screening of employees, establishing codes of conduct for children, and dispute resolution.

In order to ensure the necessary oversight and review of mandated reports for which the authorizer must determine fiscal health and sustainability, the following schedule of reporting deadline to the District will apply each year of the term of this charter;

1. September 15 – Final Unaudited Financial Report for Prior Year
2. December 15 – First Interim Financial Report for Current Year
3. March 15 – Second Interim Financial Report for Current Year
4. July 1 – Preliminary Budget for Subsequent Year

VIII. CONCLUSION

Term of Charter Petition

The School's charter shall begin on July 1, 2012 and expire five years thereafter. Any material revisions to School's charter shall be made by the mutual agreement of the governing board of the School and the District in accordance with Education Code Section 47607. The School may present a petition to renew or materially revise the Charter, and the District agrees to respond to such petitions pursuant to the process, criteria and timelines specified in Education Code Section 47605.

Interpreting the Charter

All terms of the charter that can be interpreted as within the intent of the California Education Code shall be interpreted in such a manner. The terms of this charter contract are severable. In the event that any of the provisions are determined to be unenforceable or invalid for any reason, the remainder of the charter shall remain in effect, unless mutually agreed otherwise by the School and the District. The District and the School agree to meet to discuss and resolve any issues or differences relating to invalidated provisions in a timely, good faith fashion.

Changes in the law or the District administration related to charter schools occur from time to time. The School shall fully comply with all such legal and/or administrative changes. Modifications to this charter pursuant to such changes shall be deemed administrative amendments and shall not be considered "material revisions" requiring approval pursuant to Education Code §47607(a)(1).

Revoking the Charter

The District may revoke the charter of the School in accordance with Education Code Section 47607.

Approving the Charter

By approving this charter, the District will be fulfilling the intent of the Charter Schools Act of 1992 to improve pupil learning; create new professional opportunities for teachers; and provide parents and pupils with expanded choices in education and following the directive of law to encourage the creation of charter schools. The Petitioners are eager to work independently, yet cooperatively with the District to establish the highest bar for what a charter school can and should be. To this end, the Petitioners pledge to work cooperatively with the District to answer any concerns over this document and to present the District with the strongest possible proposal requesting a five-year term to begin operation.