Integrating,
Engaging,
Creating and
Differentiating
Curriculum for
Gifted Learners

Dr. Ellen Honeck, Dr. Angela Tanner and Jocelyn Balaban



Curriculum Design Features

- Scope and sequence
- Learner outcomes
- Cognitive taxonomy for thinking skills
- Evaluation scheme



Standards



- · Content based Standards
 - Common Core State Standards (CCSS)
 - Next Generation Science Standards (NGSS)
 - College, Career and Civic Life Framework for Social Studies Standards (C3)
- · Affective Standards
 - Collaborative of Academic and Social Emotional Standards (CASEL)
- · Gifted Standards
 - NAGC PreK-12 Programming Standards

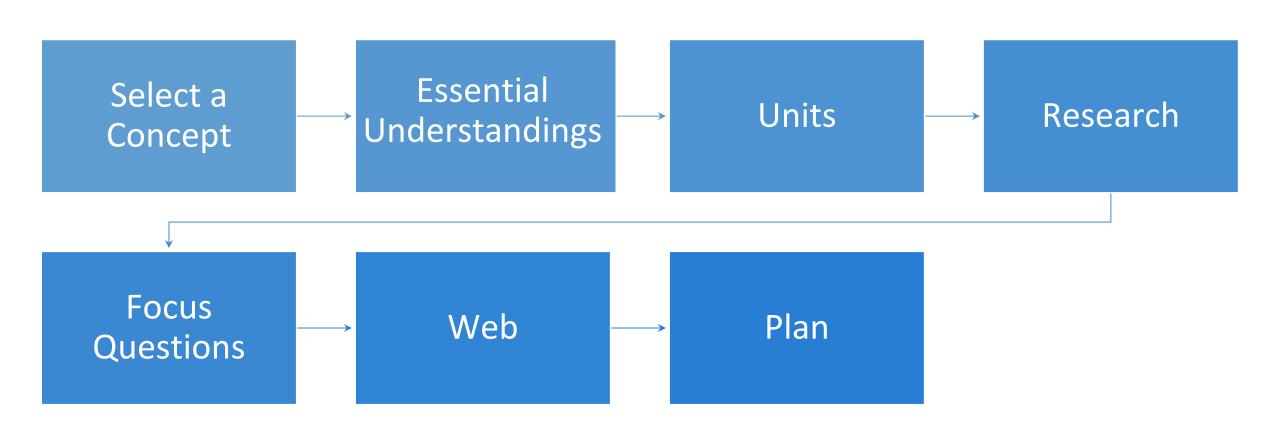
Assumptions for Creating Curriculum

View teachers as active curriculum designers.

Share rationale, process, and product of integrated curriculum with all members of school community.

Writing and using an integrated curriculum is an evolutionary process that takes time, effort, patience, budget, support and more time!

Organizational Elements



Create Essential Questions

Ask:

 What concepts relate to the "big idea" and are important to emphasize? Develop questions to narrow and specify area of study.

Sample Questions: "Evidence"

- What is evidence?
- What does evidence tell us? Why is this important?
- How is evidence sorted, organized and examined?
- Whose job is it to investigate evidence?
 What does that career involve?
- What skills are needed to analyze and evaluate evidence?
- How is evidence reconstructed to "tell a story?"
- How is inference distinguished from evidence?
- How much can evidence tell us?



Choose a Unit

Pick unit topics that will engage students and are interested

Make sure unit topics relate to the overarching theme

The topic should reinforce the concept

Research

Gather teacher and student resources about the unit topic.

Read background materials to gain an understanding about the unit and the key concepts within the unit.

Setting up the unit

Shape

Shape the direction and focus of unit

Create

Create goals for the unit

Identify

Identify questions to guide unit

- Use student input to help identify the questions
- Teacher input for missing concepts



Shaping the Unit

How can I create a "need to know?"

How can I mentally and physically engage students in this unit?

What type of preassessment is the best to assess prior knowledge?

How can I get students to ask their own questions and create their own problems? What experiences can I organize that will enable students to build their understandings and concepts?

How can I help to focus their investigations?

How can I encourage students to make their own connections among their learning experiences?

In what ways will students to express their understandings of the big idea?

Sample Goals

To understand how physical processes shape Earth's surface patterns and systems

To begin to see the chronological organizations of history and how to group people and events into major eras to identify and explain historical relationships

To know how to use maps and globes to locate and derive information about people, places and environments

To measure and collect data, to compile and display results using a variety of tools, techniques and representations

Sample Questions

Natural Disaster Unit

- How do time, location, and human behavior influence the development of a disaster and its degree of devastation?
- How have people responded to disasters in their communities?
- How has science and technology increased our understanding of natural disasters?
- What forces create natural disasters, and how do they work?

Creating a Web



Examine the topic from many discipline perspectives



Use graphic organizers (wheels, webs, etc.) to cover discipline fields and processes



Include questions, topics, people, ideas, resources, materials, field trips, organizations, etc.

Key points

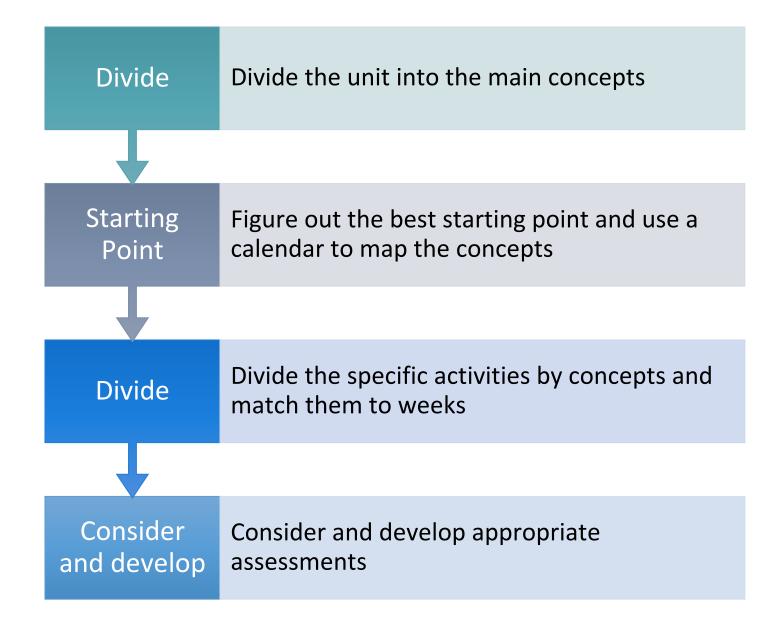
Exploration of the topic should include student and staff input

Open-ended, flexible activities

Notice how the ideas can be grouped and how they are connected

Meaningful learning experiences

Planning



Assessments

Align

Align assessment to activity objectives to performance outcomes and unit goals

Develop

Develop behavioral indicators of attitudinal change, affective characteristics

Authentic

Utilize assessments that are authentic and assess students based on the essential understandings

Culminations

A way to demonstrate learning and understanding of concepts.

Provides an opportunity to be creative.

A community event to celebrate the students learning.



THE KNOX SCHOOL of SANTA BARBARA

——— For Gifted and Talented Children ———

~ Joyful Learning ~



★ Designed by TownMapsUSA.com

The Knox School of Santa Barbara

Dr. Angela Tanner, Founder and Executive Director

www.knoxschoolsb.org



MISSION

To provide a stimulating and nurturing environment where, alongside an engaging and challenging curriculum, the social and emotional needs of gifted and talented students are respected and compassionately supported.

Giftedness is.... asynchronous development in which advanced cognitive abilities and heightened intensity combine to create inner experiences and awareness that are qualitatively different from the norm. (Columbus Group, 1991)







- when adrenaline is up learning is down (you have to feel safe in order to learn optimally)
- don't be afraid to allow the child to make mistakes; it's an opportunity for learning
- coercing someone into learning doesn't work; make it relevant and they will want to learn



Characteristics

- **❖** Asynchronous development
- ❖ Advanced verbal, reasoning ability
- ❖ Excellent memory, rapid learning rate
- ❖ Humanitarian concerns, compassion
- ❖ High expectations of self and others
- Sensitivities
- ❖ Idealism and sense of justice
- ♦ High energy, alertness, or eagerness
- Curiosity
- ❖ Long attention span when interested
- ❖ Ability to see patterns, relationships
- Quickly grasps new knowledge, concepts
- **♦** Abstract thinking
- Sophisticated/unusual sense of humor
- Creativity and divergent thinking
- **❖** Intensity
- Complex, deep thought process
- Questioning of rules and authority
- Perfectionism & high expectations

Program

Integrated Curriculum

Ability-based (not age-based) program with no ceilings

Hands-on learning

Opportunities to fail, self-assess, problem solve, and then try again

within a safe, non-judging, and supportive environment

Focus on social-emotional learning

Multiple opportunities for higher-order thinking and processing

<u>Process</u>

Inquiry based learning - value constructionist learning

Engages the learner as an active seeker and constructor rather than

a passive receiver of knowledge

Challenged by questions that demand a higher level response, or

open-ended questions that stimulate inquiry and active exploration

Differentiated, individualized instruction

Environment

Physical environment and emotional climate is critical to learning

Small class size, high teacher to student ratios

High challenge, low perceived threat

Recognize and honor students' uniqueness

Build self-awareness of strengths and needs



INFLUENCES - KNOX CURRICULUM

- Joyce Van Tassel-Baska
- Jerome Bruner
- Lawrence Kohlberg
- Carol Ann Tomlinson
- Sandra Kaplan
- Elliot Eisner
- James Webb
- Jim Delisle
- Annemarie Roeper
- Lucy Caulkins
- Howard Gardner

- Lev Vygotsky
- Jean Piaget
- Nel Noddings
- Heidi Hayes Jacobs
- John Dewey
- Barbara Clark
- Tracy Cross
- Jane Piirto
- Donna Ford
- Sylvia Rimm



BENEFITS OF INTEGRATED CURRICULUM

- Provides optimum levels of learning
- Adapts based on learner characteristics
- Cuts across all levels of development
- Combines acceleration and enrichment
- Includes evaluation designed to document the maximum potential effect

Joyce Van Tassel-Baska



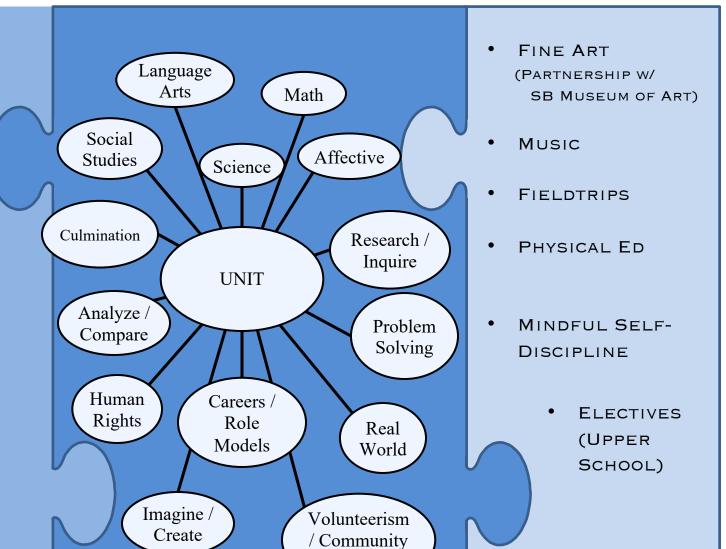


~ WORKSHOPS ~

~ Main Thematic Unit ~

~ ENRICHMENT ~

- MATH
 WORKSHOP
- READING
 WORKSHOP
- WRITINGWORKSHOP
- STEAM
- SCIENCE



Service

UNIT CYCLES - YEAR "A"

GRADE LEVEL	1 ST TRIMESTER	2 ND TRIMESTER	3 RD TRIMESTER
JK/K	Discovery	Community	Change
1 st / 2 nd	Inventions & Simple Machines	Colonial America	Ancient Egypt
3 rd /4 th	Animal Adaptations	Westward Expansion	Banking & Business
5 th / 6 th	Water	Civil Rights	Architecture
7 th / 8 th	Renaissance & DaVinci	Utopia-Dystopia	Economics

UNIT CYCLES - YEAR "B"

GRADE LEVEL	1 st Trimester	2 ND TRIMESTER	3 RD TRIMESTER
JK / K	Systems	Patterns	The Human Body
1 st / 2 nd	Arctic / Antarctic	Australia	What's the Matter?
$3^{rd}/4^{th}$	Natural Disasters	Africa	Restaurant Wars
5 th / 6 th	Space	Maya	Mythology
7 th / 8 th	Mystery	Ancient Greece & Rome	World's Fairs



INITIAL LESSON PLANS CHECKLIST

Essential Understandings

Unit Guiding Questions

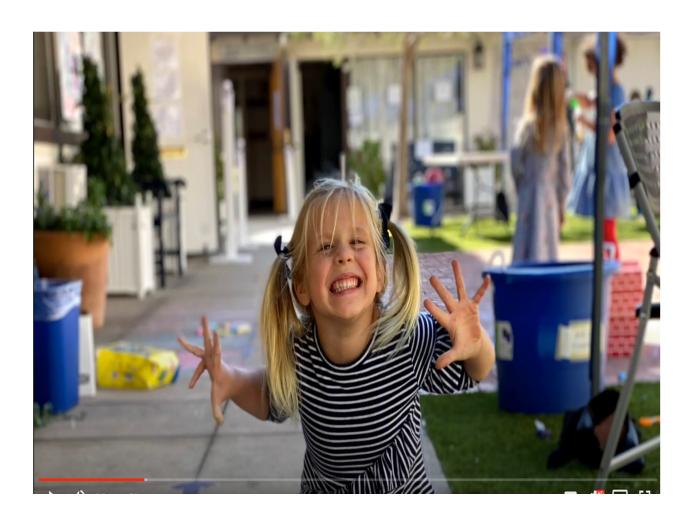
Unit Web

Weekly Lesson Overviews, including general topics, web domains, projects/lessons

Field Trips

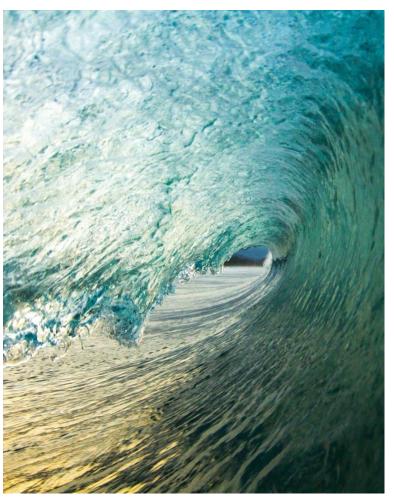
Project Ideas

Culmination Ideas





UNIT: WATER



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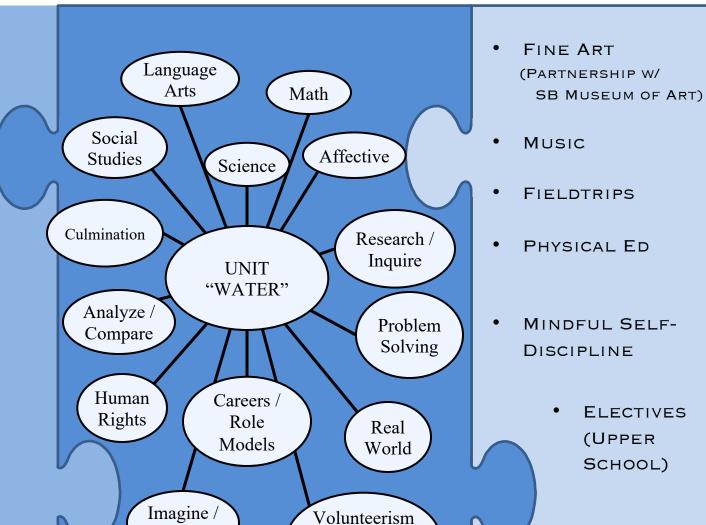
~ WORKSHOPS ~

~ MAIN THEMATIC UNIT ~

Create

~ ENRICHMENT ~

- MATH
 WORKSHOP
- READING
 WORKSHOP
- WRITINGWORKSHOP
- STEAM
- SCIENCE



/ Community
Service



ESSENTIAL UNDERSTANDINGS WATER UNIT

- > Water is essential to life.
- > Water is a limited natural resource which is impacted by the geology and geography of a space.
- > Environmental factors impact the availability and quality of the water on the planet.
- ➤ Problem-solving processes can be employed and specific actions can be taken, both individually and collectively, to improve water conditions for different regions of the world.
- > Scarcity of a limited resource can impact societies.



GUIDING QUESTIONS

WATER UNIT

- > What are defining features, forms, functions and forces of water?
- > What roles does water play across societies, cultures, landscapes, and time?
- ➤ How has water affected humans and how have humans affected water?

"WATER" UNIT

Language Arts

Mat

Social Studies

Science

 Chemistry – anatomy/ properties of water molecules

Biology

• Polarization of molecules

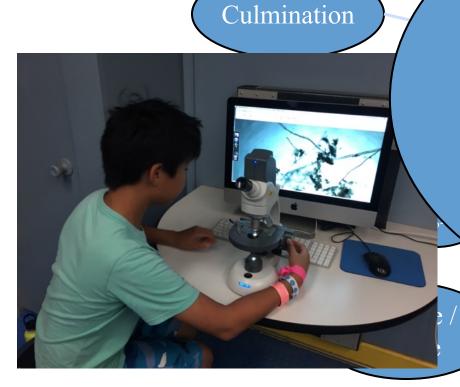
Hydrophilic-Hydrophobic

Buoyancy / Density/Archimedes Principle

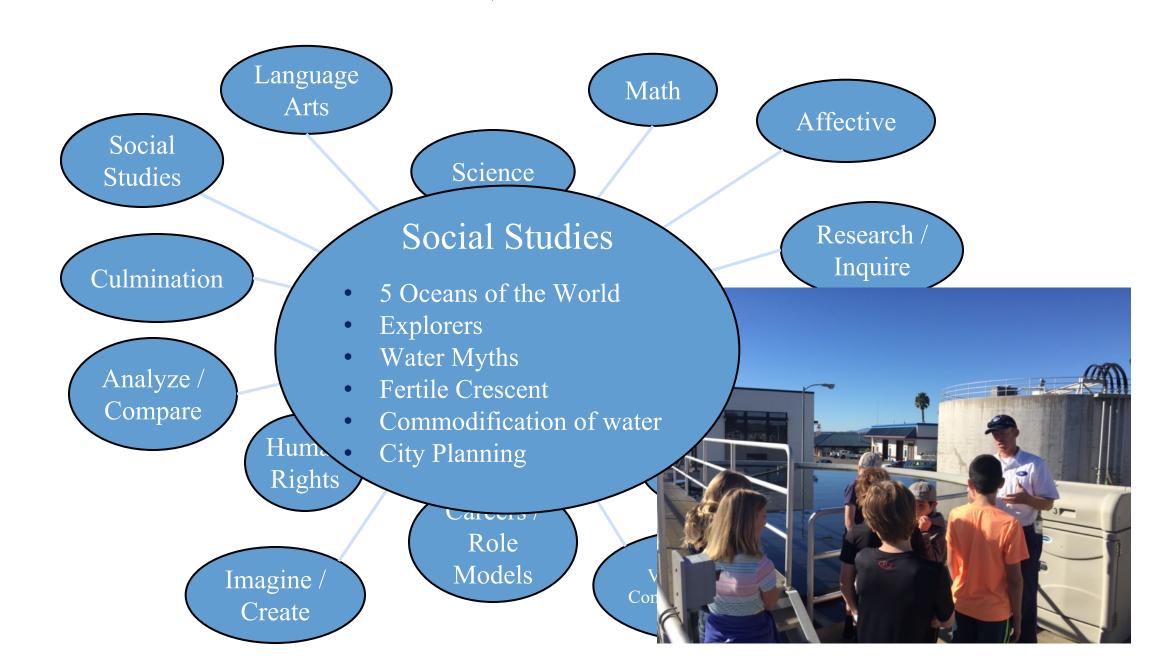
Problem Solving

Models

Volunteerism / Community Service

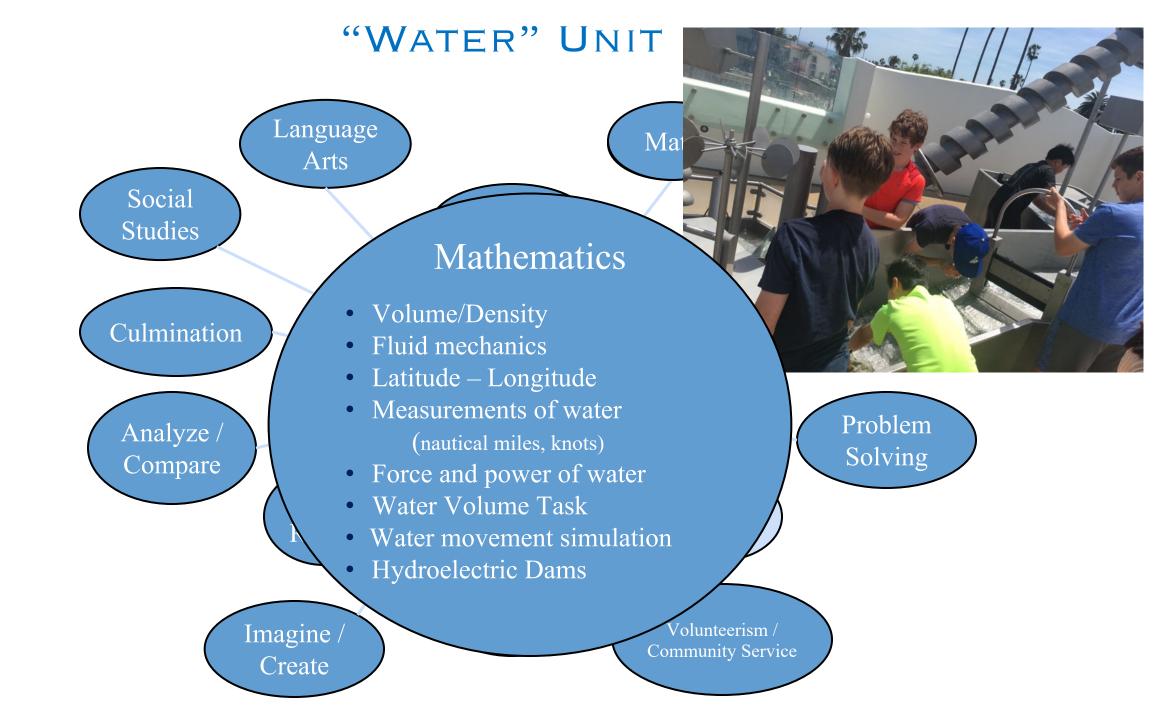


"WATER" UNIT



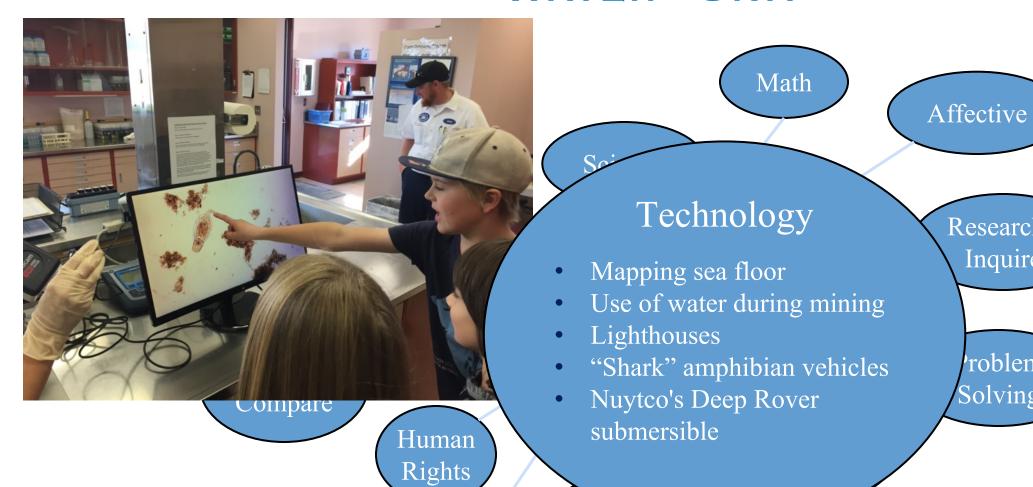
"WATER" UNIT







"WATER" UNIT



Research. Inquire

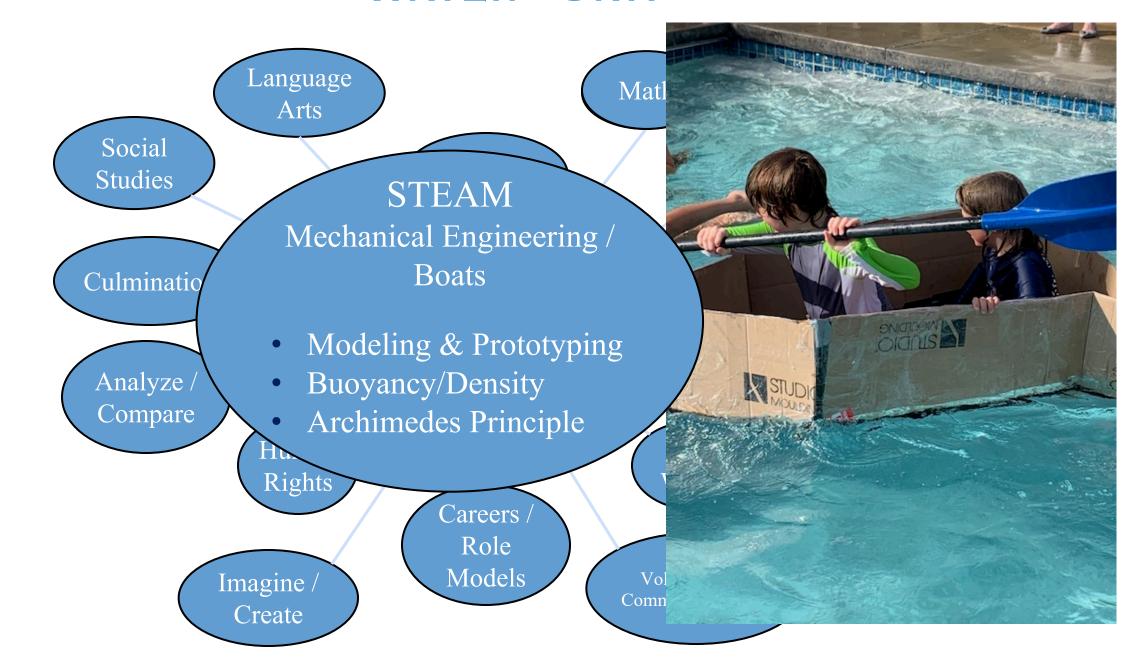
> roblem Solving

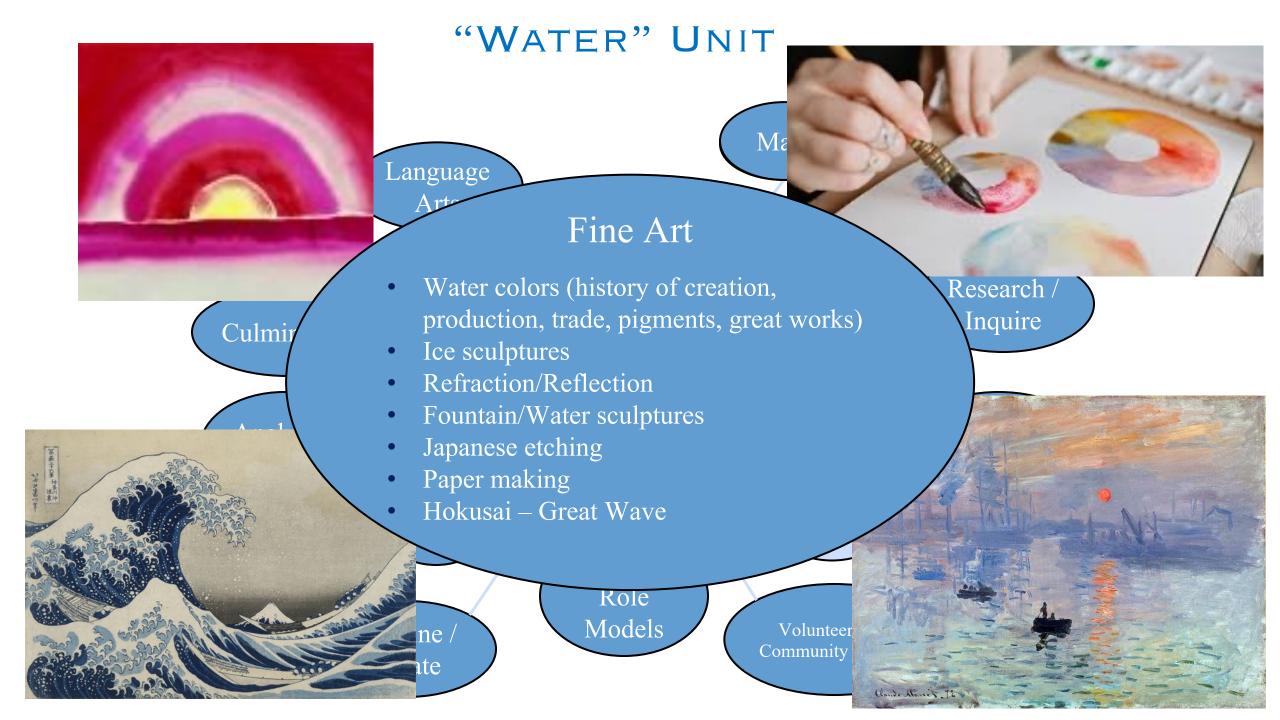
Role Models

Volunteerism / Community Service

Imagine / Create

"WATER" UNIT





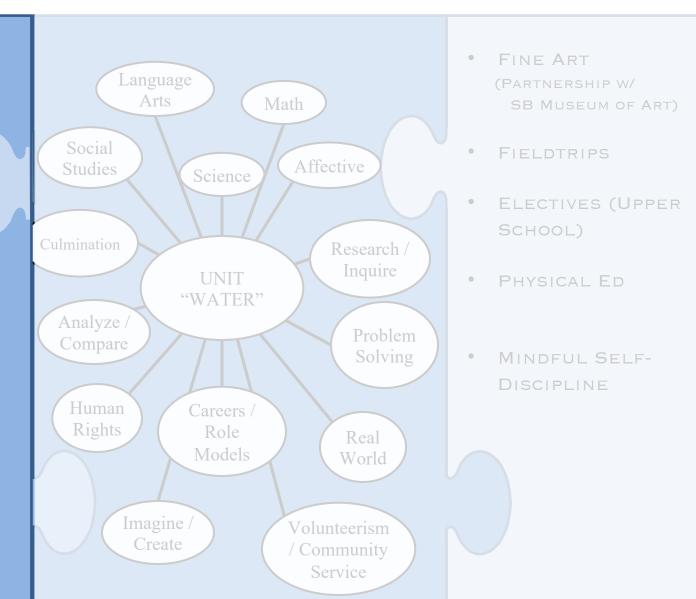


~ WORKSHOPS ~

~ MAIN THEMATIC UNIT ~

~ ENRICHMENT ~

- MATH
 WORKSHOP
- READINGWORKSHOP
- WRITINGWORKSHOP





WORKSHOPS

- Ability-Based
- Goal is specific skill development
- Structure is lengthy periods of time
- Varied Groupings
 - Whole group
 - Small group
 - Individual
- Dual goals of Procedural & Conceptual understanding
- Various ways to practice and produce
- Parse out and focus on skill
- Integrated when possible





READING AND WRITING WORKSHOP



READING GOALS

- Develop engaged readers who acquire and evaluate information
- Develop abstract reasoning skills
- Experience all genres of literature

WRITING GOALS

- Develop engaged writers who can express ideas with clarity and eloquence
- To be immersed in different forms of writing
- Develop strong and clear communication skills for both oral and written expression







MATH WORKSHOP



- Pursue conceptual knowledge alongside procedural skill and fluency
- Develop abstract reasoning skills for flexible and resourceful problem solving
- Ensure that students advance at a rate that reflects their growth and ability

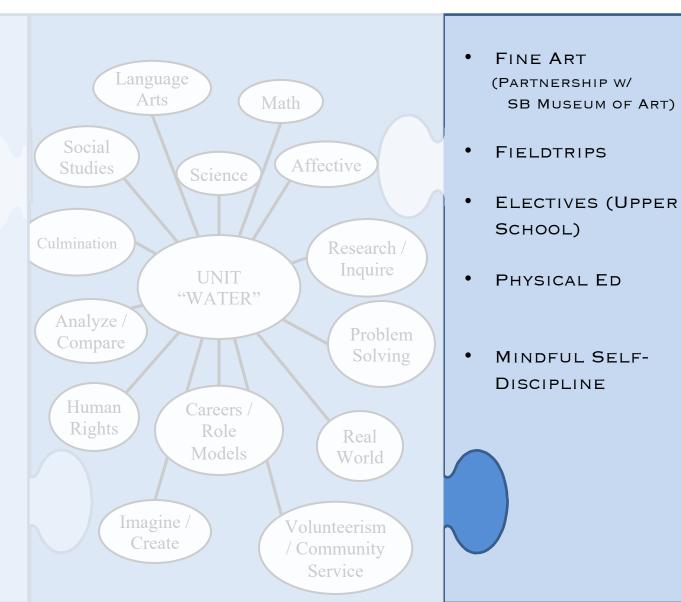


~ WORKSHOPS ~

~ MAIN THEMATIC UNIT ~

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 WORKSHOP





SPECIALISTS

- Fine Arts
- STEAM
- Physical Education
- Music
- Mindfulness







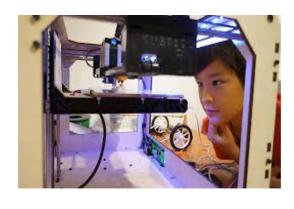


ELECTIVES - GRADES 5TH - 8TH

- Fencing
- Kinetic sculpture
- Chess
- Cooking
- Sailing
- ASL
- Debate
- Digital Photography















Nasri Academy for Gifted Children

Jocelyn Balaban, Director

www.nasriacademy.com



Admissions Process

Parents and/or families take a tour

Student Shadow

 Teachers fill out observation forms IQ 130 in anyone of the major areas on the WISC V or WPPSI

Committee reviews all information and makes a decision on acceptance

We are presently on rolling admissions



Mission

The Nasri Academy for Gifted Children is committed to providing an engaging, stimulating, and nurturing environment where the intellectual, academic, social, emotional, and physical needs of students are met in order to produce ethical world citizens. Through a curriculum that includes creativity, depth, complexity, and differentiation, students foster academic excellence and a passion for lifelong learning.

Class Set-up

- Nasri Academy's classes are on twoyear rotations.
- All levels work at least 1 to 2 grade levels above
 - Pre-K and Kdg.- Ages 4 and 5-LS1
 - 1st and 2nd grades- Ages 6 and 7-LS2
 - 3rd and 4th grades-Ages 8 and 9-LS3
 - 5th and 6th grades-Ages 10 and 11-US 1
 - 7th and 8th grades- Ages 12 and 13-US2



Educational Programming





All subjects are:

Departmentalized

- Specialists teaching individualized subjects
 - ELA, Lit, Reading, Math,
 Science, History, Spanish,
 Unit, Social and Emotional,
 Robotics, Coding
 - Drumline, Music, Theater, Art, PE
 - After School Classes
 - Drumline, Choir, Jazz
 Band, Robotics

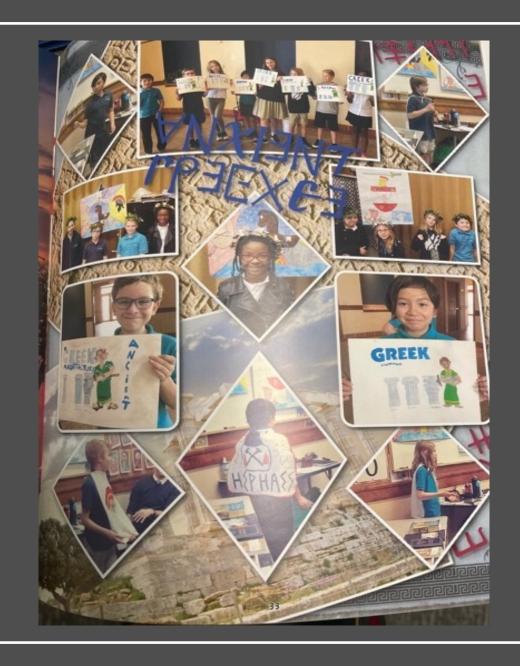
Differentiated

- Groupings set up in Math and Reading
- Assignments for students to meet their needs and learning styles

Units

- Used as our Social Studies
- Works from a Unit Binder and builds out the Unit as they teach
 - Each time it is taught it moves in varied directions
- We have a specialized trained gifted teacher that teaches the Units
- There are two Units taught a year per level
- Two-year Rotation
- Units Integrate
 - Geography
 - History
 - Investigation
 - Research
 - Hands-on Projects
 - Presentation
- Units are graded based on Rubrics





US1 Ancient Greece End of Unit Assignment and Presentation

- 1. Choose a deity Due April, 15
- 2. Research deity
- 3. Write a paper (two three typed pages, 12-14 font) Due April, 28 This will become part of your oral presentation.
- 4. Create at least one prop that represents your deity. You may (are encouraged to) have multiple props. At least one must be student created.
- 5. You will need to dress as your deity for the presentation.
- 6. Presentation date Week of May 17. Exact date and time to be announced.

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Nasri Academy for Gifted Unit Curriculum Cycle

2020-2021 2022-2023	Unit 1	Unit 2
Concept	Systems	Cause & Effect
LS 1-PreK/K	Australia	Inventions & Inventors
LS 2-1 st /2 nd	Arctic-Antarctic (Physics in Science)	Creative Dramatics
LS 3- 3 rd /4 th	Africa	Natural Forces/ Disasters
US 1-5 th /6 th	Immigration	Ancient Greece
US 2-7 th /8 th	Human Rights I	Human Rights II

2021-2022 2023-2024	Unit 1	Unit 2
Concept	Systems	Cause &Effect
LS 1-PreK/K	Community	Natural World
LS 2-1 st /2 nd	Colonial America	Ancient Egypt
LS 3- 3 rd /4 th	Nevada/US Government/Westward Expansion	Renaissance
US 1-5 th /6 th	Virtual Voyage Asia	Discovering Space
US 2-7 th /8 th	Biology	Banking, Business and Entrepreneurship (domestic & international)

As of September 24, 2020

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Questions and Contact Information