

1. What is our purpose?

**To inquire into the following:
Transdisciplinary Theme**

How our World Works: An inquiry into the natural world and its laws; the interaction between the natural world and human societies, how humans use their understanding of scientific principles; the impact of scientific and technological advances on society and on the environment. How the earth's surface is constantly changing by a combination of processes.

Central Idea

A hands on inquiry to understand the form and function of our art supplies and to explore how we can manipulate and change those materials through natural elements such as sun and water.

Summative assessment task(s):

What are the possible ways of assessing students' understanding of the central idea? What evidence, including student-initiated actions, will we look for?

Data Collection: In sketchbooks, a variety of art supplies will be studied and explored with the addition of water to determine properties of their physical make up and potential effects that can be created as the material is changed by water. Students will make predictions as to whether or not they think the supplies will change then follow up with the experiment and document the results.

Sun Prints: Students will create sun prints using a special sensitized paper and direct sunlight to witness the effects of sunlight on particular materials in art. A print will be created and students will record reflective notes in their sketchbook after the activity to record their process and response to what they see.

Student Reflection: Students will identify and display what they did, what they learned and what they thought throughout the unit. They will share surprises they encountered, and possible applications for the knowledge they have gained in a written assessment.

Class/grade: Art 2*

Age group:
Grade 2



School: American School of Bombay School code:

Title: Changes in Art (Water)

Teacher(s): Martens, Amy; Shah, Jayshree; Vora, Drishti

Proposed duration

number of hours: over number of weeks:
(Week 9, 4 Weeks)

2. What do we want to learn?

What are the key concepts (form, function, causation, change, connection, perspective, responsibility, reflection) to be emphasized within this inquiry?

Form, Change, Causation

What teacher questions/provocations will drive these inquiries?

What types of crayons do we have in the art room?
Which materials resist change from water?
What materials change when water is added?
What changes does the water cause in various materials?
How can the sun be used to change art supplies and materials to create a print?

What lines of inquiry will define the scope of the inquiry into the central idea?

- Composition of art materials
- Processes that can change/affect art materials
- How this knowledge affects how art materials are used in different projects

Planning the inquiry

3. How might we know what we have learned?

What are the possible ways of assessing students' prior knowledge and skills? What evidence will we look for?

What are the possible ways of assessing student learning in the context of the lines of inquiry?

What evidence will we look for?

Sketchbook study

Journal

Students will have the opportunity to list and explore a variety of art materials and observe whether or not adding water to them affects their appearance/functionality.

Student Reflection

Self Assessment



[Reflection.2012 Google doc](#)

4. How best might we learn?

What are the learning experiences suggested by the teacher and/or students to encourage the students to engage with the inquiries and address the driving questions?

-Watercolor resist drawing (before, after)

Students review crayon resist with wax crayons and watercolor. Note that the crayons are not changed by the addition of water.

-Introduce new supplies: watercolor crayons and watercolor colored pencils

-Sketchbook Study of various materials and water

-Exploration drawing with wax and watercolor crayons

Students create patterns by intentionally combining and using effectively the various materials they have experimented with

-Sun Prints

Students observe how sun can be used with the proper supplies to create lasting prints of objects

Group project- reviewing previous techniques and concepts

--Identifying who used which materials once water is added, working collaboratively

-Reflection sheet

What opportunities will occur for transdisciplinary skills development and for the development of the attributes of the learner profile?

Social (respecting others, sharing supplies, group decision making)

Thinking skills (Comprehension of the composition of art materials, Application of observations)

Research skills (Collecting Data)

5. What resources need to be gathered?

What people, places, audio-visual materials, related literature, music, art, computer software, etc, will be available?

Art supplies (watercolor supplies, sensitized sun paper, watercolor paper)

Links to classroom UOI (drawing on their class discussions on erosion, tsunamis etc)

I have not used a lot of outside resources with this unit as it is primarily experiential and hands on learning

How will the classroom environment, local environment, and/or the community be used to facilitate the inquiry?

**Do to the timing of grade 2 art classes we will need to go outside to ensure strong/consistent sunlight.

We will utilize the outdoor play spaces in addition to the art room.

6. To what extent did we achieve our purpose?

Assess the outcome of the inquiry by providing evidence of students' understanding of the central idea. The reflections of all teachers involved in the planning and teaching of the inquiry should be included.

Students recognize and understand that water affects art materials just as it affects and changes the earth.

They can identify a variety of materials before and after water is added.

They can make educated predictions as to what will happen when water is added to a particular material.

How you could improve on the assessment task(s) so that you would have a more accurate picture of each student's understanding of the central idea.

The final product created is a little unfinished-small pictures, direct the group project. Let students create their own, larger, final masterpiece based on what they learned in the material exploration.

Instruct students to select materials to draw with that will/won't be affected by water as they work

What was the evidence that connections were made between the central idea and the transdisciplinary theme?

Students applied knowledge of wax/watercolor crayons to predict whether water would affect other materials
Students interpreted data from observations in sketchbook

7. To what extent did we include the elements of the PYP?

Elements of PYP

What were the learning experiences that enabled students to:

- **develop an understanding of the concepts identified in "What do we want to learn?"**

Students successfully came to realize the affects that water can have on art supplies and how water itself can be a materials used in art to manipulate the creative results. They can identify materials after water is added based on their understanding of the changes that take place and can predict if water will change other materials.

- **demonstrate the learning and application of particular transdisciplinary skills?**

They began to cooperate as a team in the class project of decorating a sheet expressing what they have learned so far in art but could further develop their cooperation. Often there was a little friction when they began working at the back tables but they further develop their teamwork and cooperation to set an agreed upon plan.

- **develop particular attributes of the learner profile and/or attitudes?**

They did develop their risk taking skills in trying new materials and definitely engaged in inquiry based learning as they added to the initial material list I produced based on their wonderings. They were required to think carefully on what they know about the materials and then how to apply them based on that knowledge.

In each case, explain your selection.

This was a very successful unit in terms of learning and discovery but I would like to push further in producing a final product they are proud of rather than smaller individual studies. (2012 introduction of the sun prints and creating frames for them helped with this goal from last year)

Profile

PYP How the World Works

Students explore how various natural forces on earth can be used in art to create masterpieces and change materials.

Art Learner Profiles

Risk Taker: • I have courage to explore various new media and techniques. • I express my creativity confidently.

Thinker: • I use art techniques creatively. • I choose materials, techniques and processes depending on the result I want to create. • I think creatively, observe critically, and express passionately.

Inquirer: • I discover and acquire skills in the use of different media. • I explore new techniques and processes to communicate ideas and experiences. • I am curious and I will carry love of learning with me throughout life.

8. What student-initiated inquiries arose from the learning?

Record a range of student-initiated inquiries and student questions and highlight any that were incorporated into the teaching and learning.

"What about paint" (will water affect it- consider incorporating in the future)
"The color is spreading all over" (from using too much of the watercolor crayons
"WOW!" :) super impressed reactions to the sun prints

At this point teachers should go back to box 2 "What do we want to learn?" and highlight the teacher questions/provocations that were most effective in driving the inquiries.

[Please begin typing here]

What student-initiated actions arose from the learning?

Record student-initiated actions taken by individuals or groups showing their ability to reflect, to choose and to act.

Many students wanted to take the materials home to create on their own.... Due to physical material constraints and the sensitivity of the paper I couldn't let them do this unfortunately. In the future if this comes up I would have them try the experiment at home with whatever they have... maybe longer term sun exposure etc.. and notice the difference (permanency) with the supplies they used in school.

... ..

9. Teacher Notes

Teacher Notes

The students love adding water to the supplies and watching the changes happen. The second time I did this unit (2012) I added a bit more structure in creating a final product, and also included more engagements and activities (introducing sunlight and printmaking as well). Grade 2 started their year with data collection this year and I noticed a difference in the students attitudes toward approaching their data charts and making their predictions (did better than last year)

I added the sun prints in 2012 because I thought it would also tie into the unit. It worked really well after determining we needed to go outside for direct sunlight (experiment bombed with 2B on the first attempt inside- not bright enough direct light)-However that ended up being a great teaching point and discussion/takeway for that class as they realized it needed to be bright, direct sun and that sunlight can take many forms.