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## Abstract

Where is your school located? Why is it there? How many buildings are in your downtown? What does the downtown area look like? Who are your neighbors? Where are they from? These are just some of the questions geographers, planners, and architects might ask to discuss the dynamics of our environment. This mini-course is designed to introduce students to the basic principals behind these three interconnected fields. The purpose of this mini-course is to get students thinking about elements that make up their community and how these elements relate to other communities within their city, state, nation, and the world. We will also examine how areas change over time and the possible reasons for these changes. Student activities will include: creating maps of their desks, classroom and neighborhood block, touring the school block, and building a three-dimensional map of their school block.

## Course Description and Goals

### Introduction

The grade 1 New York State social studies program focuses on helping students learn about their roles as members of a family and school community. The students explore self, family, and school-different kinds of families that have existed in different societies and communities. Students also begin to locate places on map and globes and learn how maps serve as representations of physical features and objects. This mini-course is designed to introduce students to these concepts and reinforce them with fun activities derived from their community.

### Mini-Course Goals

The main goal of this mini-course is to introduce students to key concepts of geography and planning as related to the Grade 1 social studies curriculum.

The **primary objective** is to facilitate an understanding of place:

- ÿ Places are dynamic
- ÿ Places change over time
- ÿ We make the places we live in
- ÿ We contribute to our environments (they have something to do with their environments)

In exploring these ideas we will examine and discuss places at varying geographic scales (individual, community, and city) through **pictures, maps, models, and field trips**. We will also examine the students' role members of a **family**, members of a school **community**, and as **citizens** of the city of Ithaca, U.S.

\* The purpose of the hands on activities:

- 1) to keep them engage
- 2) to create something tangible for them to take away
- 3) to show how each individual component is part of a greater whole

### General Suggestions

The curriculum for this mini-course developed over time. Ms. Amato and I had a general idea of the direction for the course but needed to design each session on a weekly basis in order to integrate activities with other class work. This flexibility gave us a chance to evaluate previous sessions, discuss concerns, and brainstorm for the upcoming sessions.

In the end this course became tailored to the needs of Ms. Amato's class and for that reason was successful. I would suggest using the following session outlines as a framework for designing a mini-course that is most suitable for the context of each class.

Also the setting for our sessions was really important. We were able to utilize space in the front of the classroom and held our discussions in a space where the students either sat in rows facing me or in a circle facing each other. The close proximity aided in keeping the students attention.

As mentioned earlier this course was designed for 1st graders and as such I learned quickly that long explanations or discussions of concepts were very ineffective in keeping the students attention.

This mini-course would have not been as nearly as successful if not for the experience, knowledge, and kindness of Ms. Patty Amato. She was able to expand on material presented in our sessions and integrate them with ongoing classroom activities. In this manner, the students were able to work on sessions throughout the week and review concepts in their writing and reading requirements.

## Biography

My name is Sima Thakkar. I am a first year graduate student in the City and Regional Planning Department at Cornell University. I am pursuing a Master of Regional Planning degree with a concentration in international studies in planning.

I received a Bachelor of Arts degree in Urban and Regional Planning and Public Administration from Miami University in Oxford, Ohio.

This is my first attempt at designing and teaching a mini-course. It was challenge but the students made it all worthwhile Sharing my knowledge while simultaneously learning from the students has been invaluable to my educational experience at Cornell.

## Individual Session Descriptions

### Session 1: Introduction to Places: Places in Ithaca

#### Learning Objectives and Questions

- Definition of place-what is a place?
- Examples of more common places in town-what are some examples of places, what are places we know?
- Places can change over time-compare and contrast what we see
- Places can have meaning-my favorite place can tell you about me, where I am from, where my family is from

Duration: 50 minutes

#### Materials

- 8.5 by 11 digital color pictures of places around Ithaca
- Large sheet of paper and markers
- Pictures of historic Ithaca
- Binder

#### Activities and Procedures

In this introductory session I began by explaining what we would be doing in our session together. Next I began a discussion of Places. I ask the students if anyone could tell me what a place was and went around the circle to collect an answer from each student. On the white sheet of paper, I listed each student's response.

Then we viewed color pictures of popular places around Ithaca: Tops, Mall, Pool, Street, Playground, Falls, the Commons and GIAC. These were places that Ms. Amato and I thought the students, regardless of where they lived, would recognize. While viewing each place I asked the students to describe what they saw and how each place was different from previous places.

Next we looked at black and white images of pictures of Ithaca in the late 1800s. The historic pictures were of the similar places as in the contemporary pictures. The students were asked to describe what they saw and come up with a list of things in common and different in both pictures. For example, the contemporary street image was placed next to the historic image and the students mentioned the difference in cars and trees.

Finally I showed the students a picture of my favorite place, my house, and they talked about things they saw. Ms. Amato showed the class a picture of her favorite place, the beach, and again we talked about the place.

#### Suggestions

It is important to show pictures of places that are significant to the students, places they have been or can recognize. This could take research or simply asking the teacher (s) for places. After our session, I put the digital pictures in a binder so the students could review the places during the week. For each picture I attached a 1-2 sentence description of the place: This is Tops, a place where we can get food and supplies.

## Session 2: Families and Food: My Favorites Worksheet and Recipe

### Learning Objectives and Questions

- Review of places
- Review of historic places
- Review my favorite place and Ms. Amato's favorite place
- Introduce families, places and food-introduce the link between places and food

Duration: 70 minutes

### Materials

- All About Me Worksheet
- Large white sheet with All About Me Worksheet outlined
- Large sheet of paper with ingredients, recipe, and utensils listed
- Ingredients: puffed rice, raisins, potato sticks, sev, dalia, mild spice mixture
- Utensils: Large bowl, measuring cups, large spoon, cupcake cups,

### Activities and Procedures

In this session we introduced the students to the All About Me Worksheet. The worksheet was in landscape orientation and divided in five sections of favorites: color, food activity, place and book. I used the large paper outline of this worksheet as an example. I did not fill it out completely but sketched in a few favorites to guide them.

Next I explained that I had brought the ingredients and recipe for my favorite food, which was a healthy Indian snack made with the ingredients listed above. The activity also gave the students a chance to review direction words, such as first, second, etc and practice following a recipe.

While the students were filling out the worksheet, we had small groups come over to the cooking area and take part in the recipe. The last group cleaned up and served the snack in the small cups.

Finally we sent an additional worksheet home with the students that explained our activity during class and asked a family member to share his or her favorite. Ms. Amato had practiced interviewing skills with the students earlier in the week.

### Suggestions

The goal of this activity was not what food we made but to introduce the connection between food and places. Any snack will do so long as it is appropriate for the students and requires minimal cooking. I precooked a few of the ingredients before class and divided the recipe into easy to follow steps. We were able to integrate the worksheet for a family member with a larger project on families the class was completing.

### Session 3: Introduction to Maps: My Desk Worksheet

#### Learning Outcomes and Questions

- Introduce students to different types of maps
- Introduce students to basic mapping elements such as key, title, and orientation
- To get students to think about representation and symbols

Duration: 50 minutes

#### Materials

- Maps: Globe, Costa Rica souvenir map, and Downtown Ithaca map
- My Desk Worksheet (a sheet with a rectangle and place for name)
- A half sheet of 12 boxes of things found in a students desk: pencil, crayons, erasure, pencil box, ruler, a marker, a zip lock bag, three books, and empty boxes

#### Activities and Procedures

We started with a recap of last session and then began an introduction into mapping. First we took a look at the classroom globe and the students were asked to describe what they thought the globe shows. We showed them Ithaca in relation to the U.S and then to other countries (India and Costa Rica). Then we asked them what if wanted to take the globe away and put it in our pocket-pointing out the dimension of the globe versus a flat map. Next I showed a souvenir map of Costa Rica, which showed caricatures of activities all over the country. Finally we looked at a map of downtown Ithaca and noticed where the school is located along with other buildings in the neighborhood block. The students were asked to compare and contrast each of the maps reviewed.

Next we introduced the students the My Desk worksheet. We asked the students to name things in their desks, things they would put on a map to show another teacher or student what was in their desk and where. To save time we gave the students a half sheet of paper with boxed in pictures of things in their desk. Some of the pictures were of standard school supplies and others catered to the class context. We also left open spaces for the students to add anything.

We asked the students to imagine if we removed the top of their desk-what would they see and how would they show it on their map? They were instructed to cut, color, and glue the pieces on the map.

#### Suggestions

Originally we did not plan to spend a whole session on this activity but it required that much time. Ms. Amato and I planned what pictures we would use and she let me know what were the important supplies the students were likely to have in their desks. This included a zip lock bag of books, and various required texts.

## Session 4: Mapping the Classroom

### Learning Outcomes and Questions

#### *[Covered during the week] Introduction into community*

- Definition
- Ask what community means? Brainstorm a list on large paper, examples, parts, types

#### *Reintroduction to maps*

- Review definition
- Discuss parts: Directions, Key with symbols, Title
- Review examples of different types of maps-world, Nation, state, city of Ithaca, neighborhood
- Introduce the idea of their classroom as a community

Duration: 60 minutes

#### Materials

- Large white foam board
- Construction paper
- Tape
- 2 Large white papers
- Small pictures of each student

#### Activities and Procedures

To give this activity a concrete purpose we told the students that in the summer the janitors come into Ms. Amato's classroom and take everything so they can clean the room. To help them put things back in the right spot we were going to make a map of the major things in the classroom. We first asked what a map of the classroom might look like-what would be the important objects? We wrote all comments on the large white paper and then reviewed each at the end the activity. Then we showed the students the large white foam board, which had a blue and black strip along 2 edges. The black strip was the blackboard in the front of the room and the blue strip was the bulletin board in the rear of the room. We asked the students: if wanted to use the board as a map of the classroom, what in the classroom could be the blue and black strips. Earlier, Ms. Amato and I talked about the major elements of the classroom and I cut out abstract shapes out of construction paper to represent the major features. Each student was asked to name something they thought should be on the map and then asked where it should be placed on the map. We started out with the 4 corners of the room as anchors for the map: the door, a big gray file cabinet, the computer, and a round table. After those were added we included other elements such Ms. Amato desk, the easel, etc. Then each student was asked to put his or her desk on the map and we wrote a name for each.

#### Suggestions

Making the construction paper cut outs abstract was a great idea by Ms. Amato because it gave the students something to work with but the flexibility to imagine and change any of the shapes. I had come in earlier in the week and taken digital pictures of the students. These were sized to fit the desks and after the map was complete we added the pictures to each desk.

### Session 5: Neighborhood Tour-Walk Around the Block I

The last phase of this mini-course was to construct a three-dimensional model of the school block. Instead of having weekly sessions, we grouped the next three activities within a week and a half to maintain continuity. Ms. Amato and I had several planning sessions before we started this segment of the class and also in between each session. Overall the next 4 sessions took a lot of planning ahead.

#### Learning Outcomes and Questions

- Review different map types
- Review the difference between three dimensional and flat maps
- Review representation; introduce the students to the building footprint concept
- Thinking about what buildings in the school block; size and shape

Duration: 40 minutes

We grouped the next

Duration

Materials

- Large white sheet of paper
- Map of the block sheet

#### Activities and Procedures

We started by reviewing the My Desk and classroom maps and asked the students about the similarities and differences of each. Then reviewed the globe and the students to think about how it is the same and different to the flat maps. Next I explained that in our last session together we were going to make a three-dimensional map of the school block and outlined the steps we were going to follow to accomplish this. First the students were asked to brainstorm a list of all the buildings in the school block. Next we explained the idea of a building footprint to describe the difference between sketching the shape of a building and drawing its shape as a marker. We asked the students: if Ms. Amato and I wanted to make a map that should my foot, how could we draw it? On a large sheet of paper, Ms. Amato attempted to draw a three dimensional picture of my foot. After noticing it wasn't working we asked the students what were other ways to represent my foot. One student mentioned tracing, so then Ms. Amato traced an outline of my foot. We explained that by tracing the outside of my foot we had created a marker of its shape without drawing in the detail.

Then we returned to the list of buildings on the block and asked the students to think about what shapes we could use to show these building on a map. We came up with a few shapes and drew them on a large outline of the block.

Suggestions

Originally Ms. Amato and I planned on walking around the block on this day but the weather was not suitable so we ended up prepping the students for the walk. This turned out to be great because we were able to spend ample time reviewing map basics and explaining what we wanted to accomplish for the next session. The students were great throughout the discussion but by the end of sitting for the whole session, they were ready to be active! It is important to note-length of discussion time matters.

## Session 6: Neighborhood Tour-Walk Around the Block II

### Learning Outcomes and Questions

- Each student creates his or her own map of the block
- As a group we will walk around the block to notice things in our environment; buildings, street names, bushes etc

Duration: 60 minutes

#### Materials

- Clipboards
- Pencils and erasures
- Map of block worksheet; outline of the block with streets and the school marked
- Camera
- Extra adults

#### Activities and Procedures

The students were each given a clipboard and school block map. We discussed what the map had on it and where BJM was. Then we reviewed the building footprint concept, representation, and symbols again. Next we walked outside and the students were asked to face the school. We asked them to look at their maps and find the school. Then they were asked to turn around, facing the street, and asked to find the street on the map. The street names of 2 of the 4 streets bordering the block were marked on the map so we asked for the name. Basically, this was to orient the students to the map.

Then as a group we walked around the block stopping at major buildings, houses, street corners and playgrounds. At each stop the students were asked what for what shape (s) could be used to show that each building etc. We also asked the students: how could we label each building or house for someone not from this area? They came up with the writing the names and then shortening the names to just the first letter of each word. For houses the students recorded the numbers. At the end each student created his or her own map of the block.

#### Suggestions

Even with the previous prep session, we still were running short in time. It was great to have extra adults to help because some students needed extra time and assistance for certain stops. Also we used a digital camera take pictures of each stop and other elements to the block so that in our next session we could refer to the maps and the images.

In the previous week, Ms. Amato and I walked around the block to map out the stops and the main elements to the block. This aided in keeping the walk going quickly.

## Session 7: Creating a Base Map

### Learning Outcomes and Objectives

- Review what we saw on the neighborhood block tour
- Review building footprints, Key, symbols, and representation
- Collectively create a base map of the neighborhood block
- To think about the most important things in our environment, things we would want to show other people
- To think about the size and shape of what we saw and ways to represent that on a flat map

Duration: 50 minutes

### Materials

- Power point presentation; laptop and projector
- Long piece of white butcher paper measured to fit the table for the three dimensional map
- Various building shapes out of construction paper
- Each student's block map
- Large white paper as the key or legend

### Activities and Procedures

We started this session by reviewing one student's block map and talked about what were important features and what was missing. Next we showed the students a short power point presentation based on the pictures from the neighborhood block walk. There was a slide for each stop and things in the surroundings such as trees, street sign, and stoplight. For each slide of a stop the students were asked to name the building etc and asked what shape they used to show that site. After the power point, the butcher paper was spread out and the students we asked to sit around it. To begin the base map, we reviewed the steps we took to make the map of the classroom. The first step in this process was to decide what shapes to use to represent what we wanted to put on the map. The second was to look at the shapes provided in the Key and talked about what shapes to use and why. The final step was collectively choosing where each shape should go on the map. For this map we followed the same process as each student either volunteered or was asked to choose a shape to represent what we saw on our walk. We used the student's individual maps as reference and also referred back to the power point presentation we watched in the beginning of class. Each shape was then tape in place on the base map.

During the week the students made labels with building name and numbers as well as a key.

### Suggestions

The power point was fun and the students seemed entertained but it would have been nice have the images up while the students were creating the base map. Space and time were limiting factors as well being able to keep the students attention if the lights were dimmed. As mentioned earlier, the size of the paper used was decided by the length of the table for the three dimensional map. After the session Ms. Amato and I realized the map was too distorted to show the block clearly. Also the shapes used to represent the buildings on this map were derived from the shapes of the boxes we had collected for the three dimensional map. Ms. Amato and I spent a lot of timing planning the dimension of this map in order to make building the three-dimensional map easier. It is sometimes difficult balancing planning ahead with not wanting to design too much or neutralize creativity.

## Session 8: Creating a Three-Dimensional Map Part 1

### Learning Outcomes and Objectives

- Review objects on the base map
- Review the difference between a base and flat map; three-dimensional and flat
- Think about the shapes of the objects
- To individually choose and collectively decide on boxes for each building

Duration: 50 minutes

### Materials

- Many, many boxes; milk containers, half gallon juice containers, 12 and 24 pack soda boxes, pint size boxes etc.
- White butcher paper for wrapping
- Newspapers
- Markers
- Construction paper
- Scissors
- Glue

### Activities and Procedures

The first step was to review what things (buildings, streets, pool, and playgrounds) we chose to show on the base map. We reviewed the shapes and names as well as where each was on the base map. Next we reviewed the difference and similarities of the Globe and the base map. Next empty, white paper covered boxes of various shapes and sizes were displayed. The students were asked to think the size and shape of all of the buildings and then look for a white cover box to match it. Each student chose a box and then we collectively we decided on its fit. Adjustments were made as suggested by other students. We started with BJM and asked the students to think about which boxes would best show the school building.

After each student had a turn, we had a base map with boxes on top. The next step was putting the students building groups but each with a separate piece. We had 1 adult per group to help the students brainstorm ideas on how to make their box look like the buildings.

### Suggestions

Originally, Ms Amato and I planned on using brown wrapping paper, or brown paper bags, to wrap the boxes with but she realized it might be harder to paint and color on the brown paper so we switched to butcher paper. The butcher paper was thin and the box logos were very prominent so we decided to wrap each box in a thin layer of newspaper then white paper.

Also it is important to note that after this point I only participated in 1 additional constructing session. The majority of the painting, gluing, and coloring was completed during the week by the class. If the students were only able to work during the mini course sessions we would have had to added many, many more sessions.

## Session 9: Creating a Three-Dimensional Map Part 2

### Learning Outcomes and Objectives

- Think about ways to represent map objects
- Think about the size, shape, color of each object
- To help each other with ideas and suggestions

Duration: 60 minutes

### Materials

- Small scraps; wood pieces
- Construction paper
- Foam packing peanuts
- Easter grass
- Piper cleaners
- Toothpicks
- Popsicle sticks
- Tacky glue
- Tape
- Toilet paper and paper towel rolls
- Paint
- Sponges
- Any usable materials in classroom
- Clay

### Activities and Procedures

In this session we worked in small groups on various parts of the map. The class had been working on the map earlier in the week so our goal was to get as much done in our time together. I lead a group in designing and creating activities on the playground. First we listed all the things the students wanted to show on the playground. Next we walked to the base map and measured the space on the map for the playground. Then each student picked something they wanted to make with the materials available. After about 2 minutes of thinking each student got to work creating the different playground activities, such as the swings, slides, and monkey bars.

Another group was working on gluing the windows and doors on the building boxes, which had been sponge painted red to represent brick. Two students painted the streets on the base map and others were working on the houses.

At the end of the session we had a tray full of awesome playground activities and were one step closer to a finished product. A final touch to the three dimensional map was gluing pictures of each student and Ms. Amato to the school building.

### Suggestions

Again, this project took an enormous amount of time and effort from the students and the adults. We would not have been able to do this without the extra help and time spent during the week. In constructing the playground, collect as many materials as possible, even the more obtuse materials. I was amazed at the students' creativity in building these activities.

Ms. Amato organized an open house the following week for families to see the incredible work of the students. This was a great chance for the students to share their hard work with their families.

## Session 10: Science Center Fun: A Community Project

### Learning Outcomes and Objectives

- To learn about a successful community driven project
- To enjoy the afternoon

Duration: 3 hours

### Materials

- Tickets to the Science Center
- Rain Gear
- Extra Adults

### Activities and Procedures

With the generous support of the Graduate School Student Outreach Program, we were able to spend the afternoon at the Ithaca Science Center. Before we left, I told the students the story of how the Science Center came to be and the role of community members. We talked about the history of the Center and how it has grown over the years. The students learned that from the start the Science Center was a community driven project, with volunteers working on weekend to build the Center.

Then we walked (around 30 minutes) to the Science Center as a group. We participated in a workshop and explored the Center for the rest of the afternoon