



Lesson Study Lesson Planner

CONTEXT

The learners for this lesson are a group of 24 developmentally diverse kindergarten students. The lesson will last approximately 40 minutes, start to finish.

Kindergarten students will explore fairness and grouping through a small group (table groups of 4) math activity which includes a reflective discussion. In this activity, students will get a limited and unequal number of *blocks* to play with. Students may notice and/or grapple with unequal shares. They will stop to have a problem solving circle where they identify their own emotional state, and brainstorm ways to solve the problem of unequal shares. They will then be given the chance to regroup their manipulatives into equal shares after doing the community problem solving circle/ possible suggestion from the host teacher. They will have to negotiate the way to group their blocks so it feels equal or fair. After grappling to distribute resources and regulate their emotional state,, students will return to the blocks to continue playing.

RESEARCH QUESTION & THEORY OF ACTION

Can we help students develop their sociopolitical consciousness through play?

If we, as teachers provide opportunities for students to explore issues of equality through open-ended play, then students will begin to develop their sociopolitical consciousness.

GOALS

Equity goal:

Kindergarteners will recognize, grapple with, and generate solutions for unfairness through unequal distribution of resources.

How can kindergartners begin to develop their sociopolitical consciousness through play? (fairness)

Content Goal:

Kindergartners will compare the number of objects in a group to identify equal shares.

Social Emotional Goal:

Students will self-identify their emotional state, and begin to independently problem solve and self-regulate.

STANDARDS

CCSS.MATH.CONTENT.K.CC.C.6

Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

ANTICIPATORY PLANNING

We anticipate students will struggle with deciding how to respond to unequal groups.

We anticipate students may need support to identify their emotional state and consider the problem size.

We anticipate some students will grapple with redistributing their blocks.

We anticipate some students will forget the expectation of only using what is on their plate.

We anticipate some students will be slower to initiate the task than others, which may delay the realization that resources are unequally distributed.

PROCEDURE

Framing or Launching the lesson:

For today's shared reading, we are going to read a new book! We are going to read a book about the many different things we can build with blocks. Afterward, you will get a chance to build too. Give me a thumbs up if you've ever built something before... Wow! We have a lot of experts in Room 5 already.

Remember, if you want to share an idea about the book while I am reading- please raise your hand so that your words don't bump into mine. No one can hear if we all talk at once!

Teacher reads book- Dreaming Up

Students listen- raising hand for noticings etc.

Teacher will ask strategic questions for engagement and comprehension

Let's do a thumb rating - thumbs up if you love it, to the side for like, and down for ehh not my favorite. You will now have the chance to get creative and build your own creation at your table. Everyone has a plate with tools you can use on it. You will use these tools and materials to make your own creation.

Before I send you off to build, there are 3 things you need to know. *Hold up fingers*

1. Use only what is on your plate
2. Stay at your seat the whole time
3. Build anything you want!

During the lesson:

Unequal shares activity:

Students will be given precounted blocks in a seemingly random order. The amount students receive will be predetermined based on content or social emotional goals for individuals. The students will be sitting 4 to a table and have the opportunity to play with the blocks as they choose. Students may choose to reproduce the images from the mentor text, using language to describe their play. Students may notice their piles are all different amounts and some will talk about this at their table. Others may ask for teacher support with the noticing.

Students are dismissed to table spots to begin building - some have radically more supplies than others. Students (likely independently but may need teacher push) realize supplies are uneven and take issue.

Problem Solving Circle

**Attention grabber* Tell class to leave everything where it is and come to the carpet (?)* I noticed several friends are talking about the materials at their table. It sounds like we have a problem, and many people seem frustrated. Let's talk about how we're feeling.

I want you to think for a moment about what zone you're in right now. Hold it in your brain for a moment. Raise your hand if you're in red/blue/yellow/green.

Wow. Our graph is showing that a lot of people are in the yellow/red zone. That tells me that we have a big problem happening. Could someone in the red zone tell me why they're feeling that way?

Student explains that it's not fair.

Oh dear. Give me a silent symbol if you're having the same problem at your table... Wow a lot of people are having this problem. It sounds like the blocks were not given out fairly or equally. Kindergartners can solve problems all by themselves, so what do you all think? How can we solve this problem? Turn and talk to a partner to come up with a way to fix this problem.

Students turn and talk.

What do we think? What should we do to get us back to the green zone and solve our problem?

Students generate ideas - teacher asks for a thumbs up if they think they can go and try to make things fair.

Fair distribution activity

We have come up with some ideas to help us get in the green zone and make this feel fair. If you are having trouble and need help coming up with a strategy, please raise your hand.

Teacher circulates, helping push groups who are having difficulty generating ideas. Students will have 8-10 minutes (more if time permits) to make equal shares and build.

**Attention Grabber* Tell class there is 3 minutes left to build with the blocks.*

**Attention Grabber* Tell class it is time to clean up.* Kindergartners can count how many blocks they used. We will put all our blocks into the basket, counting each block as you place it in. I wonder how many blocks you have. .

Closing the lesson:

Class discussion on fairness

You all told me before that you were feeling _____, _____ and _____ when the materials were not shared evenly. We tried solving our problem by sharing the blocks evenly. How did it feel this time, when things were equal?

Raise your hand if you are in the BGYR zone. Wow! A lot of us made it back to the green zone. You solved this problem all by yourselves, and tried out a solution on your own. Way to go room 5!

I want to hear from someone who had more materials before we split them up. Was it hard to give some of your materials to a friend?

What was your strategy for sharing equally? How did you know the groups were equal in the end?

DIFFERENTIATION/ACCOMMODATION

Special Needs / IEP: The host teacher will have pre-lessons about self-identifying emotional state using the zones of regulation and assessing the size of the problem. The hands-on, small group nature of the task will welcome multiple strategies and encourage students to build ideas together.

Emerging Bilingual: Students will be able to use keywords from the previous lessons that support zones of regulation. The hands-on, small group nature of the task will welcome multiple strategies and encourage students to build ideas together.

Ready for challenge: Students will start with more resources to push them to grapple with the ideas around fairness, and what it feels like to give up resources to someone else. They will also be asked mathematical push questions such as “How can you be sure it’s equal?”

Focus Student Goals:

| Student | Assets | Content Goals | Equity Goals |
|---------|-----------------------------------|---|---|
| A1 | Will notice the unequal shares | Start to distribute materials to make equal shares. | Move toward fair distribution and express opinion about inequality in a constructive way. |
| G3 | Open to sharing and kind | Share opinions about grouping. | |
| D2 | Will be able to make equal shares | Accurately create numerically equivalent groups. | Move toward fair distribution despite having a resource advantage. Reflection on the experience of peers with less resources. |

CULTURALLY RELEVANT PEDAGOGY

The design of the lesson will help students develop socio political consciousness by helping students understand the experience of unfair distribution of resources and ways to redistribute. It will help them grow in empathy and perspective taking. Students will be pushed to experience unfairness, identify how it makes them feel, and grapple to find a solution that feels fair to everyone involved.

FORMATIVE ASSESSMENT

Lesson Title: Fair Play

Subject / Grade Level: Kinder

The teacher will ask open ended questions and provide opportunities for students to engage with peer reflection.

The teacher will hold a discussion about the experience to help students process the experience and push their thinking around fairness.

Teacher will ask mathematical push questions and ask students to explain their strategy for creating equal groups

SUMMATIVE ASSESSMENT

We will know the students have met the content goals of the lesson based on them comparing and identifying equal groups and unequal groups. We will know students have met this goal by observations of their conversation and experience at the tables.

We will know students have met the equity goal by their ability to consider the fairness of the unequal groups. We will be able to identify this by observations of their conversation and experience at the tables. We will also record student reflections in the follow up conversation.

We will know students have met the social emotional goal by their ability to self-identify which zone of regulation they are in at two different points in the lesson.

We will monitor the focus students interactions using our personalised observation note catcher.

MATERIALS & PREP

We will need:

- Keva blocks
- Anchor text - Dreaming Up by Christy Hale
- Chart student zones of regulation on bar graph

We will need to:

- Pre count blocks and decide amounts for students with specific content, SEL, or/and CRP goals.