

Transportation Curriculum Capstone

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ECE 312 Curriculum for Young Children II

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**Focused Curriculum Plan
ECE 312**

Curriculum Topic Transportation

STEP 1: CHOOSE A DEVELOPMENTALLY AND CULTURALLY APPROPRIATE CURRICULUM TOPIC

1. Will this topic allow for **active, constructive learner participation and involvement**? Explain.
 - Transportation is part of our everyday lives and children start to use buses and the subway early on.
 - Children have a natural curiosity and learn well when it connects to their lives.
 - It allows to actively analyze and take apart the modes of transportation, to role play, and to integrate their experience into the learning.
2. Will this topic foster **social interaction**? Explain.
 - Public transportation is a community form of transportation.
 - The natural interactions of getting on the bus, showing your ticket, offering a seat can be utilized to foster interactions.
3. Will this topic be **meaningful** to your learners? How does it connect to **their** real world? Explain.
 - Children in NYC are mostly familiar with public transportation.
 - They see the subway entrances and buses on their walks.
 - They are users or will become users of various forms of transportation.
4. Does the topic allow learners to **connect to prior knowledge**? Explain.
 - Most children have used transportation before and will have personal experience to build on.
 - Children who were part of daycare programs mostly had transportation on their curriculum before.
 - Every child has seen the streets, traffic lights, cross walks, and buses. That is where I can start my curriculum and connect their experience to what we are learning.
5. Will the topic allow learners to **develop problem-solving strategies and be creative**? Explain.
 - Different activities will be able to engage the students in problem-solving strategies. For example, setting up a bus in role play, or putting together a train.
 - The students will be involved in setting up the pretend play area and figure out what they need for their mode of transportation.
 - There will be opportunities to create art and think of ways to set things up and be creative.
6. Will the topic allow learners to **engage in self-regulation and be reflective**? Explain.
 - They will be able to discuss social interactions on transportation, and how to deal with those.

- This includes controlled opportunities to resolve conflict and to reflect on different behaviors.
7. Will the topic help learners to **build on/change their current understanding**? Explain.
- Children will build on their experience of transportation.
 - For public transportation we will introduce the concept of paying to ride.
 - The average four year old is 40inch tall and they are allowed to duck the subway turnstile until 44inch.
8. Does the topic allow learners **to gain deeper knowledge of general principles and explanations** of the world? Explain.
- They will expand on their knowledge on the size of the city and how to get around in NYC.
 - They will learn more about the different ways of getting from point A to B.
 - They will learn more about social norms.
9. Can children use the knowledge gained through this topic in **meaningful real world situations**? Explain.
- They will become better equipped to taking different forms of transportation.
 - They will become more aware of their surroundings, specially when crossing the street.
10. Does the topic provide opportunities for children to **practice and gain mastery**? Explain.
- Through this focus curriculum they will become more aware of their surroundings and how to use different forms of transportation like buses.
 - They will understand traffic lights and their roles.
 - They will learn how wheels work.
11. Can you present this topic in meaningful ways for diverse children with **developmental and individual differences**? Explain.
- Because there is a real life component to the unit every child can connect to it.
 - Through small group work I can attend to the different needs of each child.
 - The activities will have different components of instructions to help different types of learners, like verbal and picture instructions.
 - I will use scaffolding to help the development of each child.
12. Will this topic be **interesting and motivating to the learners**? Does it allow for **autonomy/choice**? Explain.
- The topic relates to their personal experience and their natural curiosity of wanting to know how things work around them.
 - There will be different approaches to the topic and it will be set up with different tiers to encourage learning on all levels.

- Activities are set up to build a sense of success and creation that will motivate further learning.

STEP 2: LEARN THE CONTENT:

1. Brainstorm with your colleagues. What information do you (the teachers) already know about this topic? List everything you can think of:

- Public vs. personal transportation
- Transportation for people and Transportation for goods
- Children see cars and use cross walks, might use bikes and scooters
- NYC has buses, subway and the ferry used by many New Yorkers for commutes.
- Children from different backgrounds might have encountered other forms of transportation, like trains and planes to visit family.

2. Gather information from various sources of research. List at least 3 resources for each of the following:

A. Children's literature

- Subway Christoph Niemann
- The Wheels on the Bus / Las ruedas del autobús by Elodie Pope
- I Really Want to See You, Grandma! By Tarō Gomi
- School Bus by Donald Crews
- ¿Qué hacen las ruedas todo el día?/What Do Wheels Do All Day? By April Jones Prince

B. Website Information

- <https://new.mta.info/safety-and-security>
- https://www.nycsubway.org/wiki/New_York_Transit_Museum
- <https://www.schools.nyc.gov/school-life/transportation>

C. Materials/Resources

- Transit Museum
- School bus inspection
- Subway map
- Invite community helpers (Bus drivers; police; firefighters) to explain their roles in the community that relates to transportation.

3. What did you *learn* from your research?

- Transportation is a big umbrella term
- Children under 44inch can ride subway and buses for free
- Children aren't allowed to use public transportation on their own before they're 8

4. What *misinformation* did you find in your original ideas?

- Transportation can range from bicycle to airplane
 - Need to be focused in the curriculum on what is useful and relevant to the class

- Not all students are able to use the yellow school buses.

STEP 3: IDENTIFY KEY CONCEPTS:

What are the Big Ideas/Overarching Questions to be explored in your topic (one sentence for each idea/question) The Big Ideas should be connected to deep understandings of the general principles and explanations of the world.

1. What kind of transportation do we use?
2. How do these forms of transportation work?
3. How do we use public transportation safely?

Identify and list **10** key vocabulary terms connected to this topic:

Bus, subway, fare, MetroCard, local, express, train, driver, safety, traffic

STEP 4: CONNECT YOUR TOPIC TO THE CONTENT AREAS.**WHERE IS THE MATH?**

1. Choose 2 of the following math content areas, and describe the Big Ideas and Enduring Knowledge that connects your topic to this content area:

- Geometry
 - Different types of transportation are made out of different shapes.
 - Looking at similarities and differences in these through geometric shapes.
- Counting and Cardinality
 - Identifying the forms of transportation includes being able to sort them
 - Students can sort and count (how many lines does each color of the subway have)

2. Choose 3 and List developmentally appropriate ways children can learn math in each of the following Learning Centers:

- VISUAL ARTS (Drawing, Painting, Sculpting, Writing)
 - Have shapes cut out to make vehicles
 - Have round shapes for wheels.
- SAND AND WATER PLAY
 - Use sand table to make tire tracks with toys
 - Count tire tracks and find out how many vehicles have been used.
- BLOCK BUILDING
 - Build a bus that fits all the students
 - Build a train with different number of cars
 - Build streets with a set number of bus stops and start adding to them

WHERE IS THE SCIENCE?

1. Choose 2 of the following science skills/content areas, and describe the Big Ideas and Enduring Knowledge that connects your topic to this skill/content area:

- Earth and Space
 - Transportation takes us places.
 - What kind of transportations do we use to get to different places
 - Gaining spatial understanding and geography
- Physical Properties
 - Different forms of transportation look and function differently
 - Some use fuel, electricity or our legs
 - Learn how the wheel works

2. Choose 3 and List developmentally appropriate ways children can learn science in each of the following Learning Centers:

- SAND AND WATER PLAY
 - Using different materials, the students build boats and see how they swim
- BLOCK BUILDING
 - Have a city carpet, where the students can build the city and figure out ways of getting from A to B
 - Find different forms of transportation to use in the city
- WOODWORKING/CARPENTRY
 - Children build a car on top of a working wheel set and test their drivability

WHERE IS THE SOCIAL STUDIES?

1. Choose 2 of the following content areas, and describe the Big Ideas and Enduring Knowledge that connects your topic to this content area:

- Civic Ideals and Practices
 - Learning the rules on public transportation
 - Staying safe when using different forms of transportation
 - Community helpers
- Time, Continuity and Change
 - Public transportation follows a schedule
 - Different times of the day and different days have different schedules

2. Choose 3 and List developmentally appropriate ways children can learn social studies in each of the following Learning Centers:

- DRAMATIC PLAY (Housekeeping, Dress-up, Role Play)
 - Change dramatic play area to a subway station. Children can explore paying for tickets, using turnstile, taking turns
- VISUAL ARTS (Drawing, Painting, Sculpting, Writing)
 - Children draw different community helpers and discuss their roles
- LIBRARY/LITERACY
 - Read books about how to use the bus and subway
 - Read books about community helpers

Step 5: Implementing the Curriculum Topic:

Launch/Introduction (How you begin the curriculum topic):

Describe 1 activity:

- During circle time, ask children what they did this morning and how they got to the school.
- Write down the different forms of transportation.
- Ask them about other forms of transportation they know.

Meeting Time (How you sustain and expand the topic):

Describe 1 activity:

- Have a box full of transportation toys.
Children take out toys and discuss them.
- Sort the toys into different categories (land/water/air, color, size, etc)

Creative Arts Activities (Visual Arts, Music, Dance, Drama):

Describe 1 activity:

- Have a number of different geometric shapes prepared that the students use to make a vehicle by gluing them together.
- Have pictures of different vehicles hung up in the classroom for children to reference.
- Hang their creations with the pictures.

Read Aloud: Find 2 picture books: 1 fiction and 1 non-fiction):

Describe a literacy extension activity for each book:

- I Really Want to See You, Grandma!
By Tarō Gomi
 - After the read aloud, have a discussion about who they would like to visit and how they would visit them.
 - Have family send you digital pictures to print out or bring in pictures
 - Make a collage of people to visit.
- What Do Wheels Do All Day? / ¿Qué hacen las ruedas todo el día?
By April Jones Prince
 - After the read aloud, have children build their own vehicle with wheels
 - Test the vehicles out in the block area

Shared Reading (Songs and/or Poems) Describe 1 activity using either a poem or songs:
(Include a separate document of the poems or song used)

Learning the song wheels on the bus (Las Ruedas del Bus) in both English and Spanish.
Supported by the book by Elodie Pope that has both lyrics

Appendix

The Wheels on the Bus

The wheels on the bus go round and round.
Round and round.
The wheels on the bus go round and round,
all through the town.

The doors on the bus go open and shut.
Open and shut. Open and shut.
The doors on the bus go open and shut,
all through the town.

The horn on the bus goes toot, toot, toot.
Toot, toot, toot. Toot, toot, toot.
The horn on the bus goes toot, toot, toot,
all through the town.

The chickies on the bus go pio, pio, pio.
Pio, pio, pio. Pio, pio, pio.
The chickies on the bus go pio, pio, pio,
all through the town.

The momma on the bus goes shush, shush, shush.
Shush, shush, shush. Shush, shush, shush.
The momma on the bus goes shush, shush, shush,
all through the town.

Las Ruedas del Bus

Las ruedas del bus girando van.
Girando van. Girando van.
Las ruedas del bus girando van,
por toda la ciudad.

Las puertas del bus se abren y cierran.
Abren y cierran. Abren y cierran.
Las puertas del bus se abren y cierran,
por toda la ciudad.

La bocina del bus hace tut, tut, tut.
Tut, tut, tut. Tut, tut, tut.
La bocina del bus hace tut, tut, tut,
por toda la ciudad.

Los pollitos del bus dicen pío, pío, pío.
Pío, pío, pío. Pío, pío, pío.
Los pollitos del bus dicen pío, pío, pío,
por toda la ciudad.

La mami siempre dice shh, shh, shh.
Shh, shh, shh. Shh, shh, shh.
La mami siempre dice shh, shh, shh,
por toda la ciudad.

Activity Plan

Designed by: Elena Wild

Curriculum Topic: Transportation

OVERVIEW/FRAMING									
Build Your Own Vehicle									
<p>TOPIC <i>Explain how the topic of this activity is developmentally and culturally appropriate for the group of learners for whom you are designing it.</i></p>	<ul style="list-style-type: none"> • Transportation is part of our everyday lives and children start to use buses and the subway early on. • Children have a natural curiosity and learn well when it connects to their lives. • The activity connects the natural curiosity of everyday life activities and objects to the creativity of young children 								
<p>BIG IDEAS/OVERARCHING QUESTIONS <i>What kinds of questions will be explored and/or what new connections and ideas will be engaged through this activity?</i></p>	<ul style="list-style-type: none"> • What kind of transportation do we use? • Students will discuss different forms of transportation <ul style="list-style-type: none"> ○ Students will use creativity to build their own forms of transportation • Students will learn about geometric shapes 								
<p>CONTENT FOCUS: <i>Identify which content area(s) will be addressed in this activity</i></p>	<table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">Visual Arts</td> <td style="width: 25%;">Music</td> <td style="width: 25%;">Movement/Dance</td> <td style="width: 25%;">Drama</td> </tr> <tr> <td>Emergent Literacy</td> <td>Mathematics</td> <td>Science</td> <td>Social Studies</td> </tr> </table>	Visual Arts	Music	Movement/Dance	Drama	Emergent Literacy	Mathematics	Science	Social Studies
Visual Arts	Music	Movement/Dance	Drama						
Emergent Literacy	Mathematics	Science	Social Studies						
<p>LANGUAGE AND CONTENT OBJECTIVES</p>	<ul style="list-style-type: none"> • Identify geometric shapes • Create different forms of transportation • Define different vehicles • Compare different geometric shapes 								

KNOWING THE LEARNERS	
AGE RANGE:	4 – 4.5 year old
CURRENT DEVELOPMENT:	Four year old children can use scissors and glue. Their creations begin to resemble real objects. They are increasingly able to figure out how things fit together, they can

<i>What do you know about the current growth of learners in this age range for the content focus?</i>	typically name six to eight colors and a few shapes. They are interested in different shapes; they can typically count to 20 and beyond.
<i>What misunderstandings might children in this age range have about the topic/content and how do you plan to address this?</i>	Transportation and vehicle are big umbrella terms. Students might have confusion about the differentiation between forms of transportation, like the difference between a bus and a truck.
SOCIO-CULTURAL CONTEXT: <i>What do you know about this group of children in terms of their cultural backgrounds, learning styles, languages spoken, and learning experiences to date?*</i>	8 students: 4 girls and 4 boys. 4 students are from Ecuadorian and Honduran descent. 1 Student is of Chinese descent. 2 Students are dual language learners (Spanish and English). 1 Student needs to focus on gross motor movement.

MATERIALS & LEARNING ENVIRONMENT PREPARATION		
MATERIALS	LEARNING ENVIRONMENT	EVENTS/RESOURCES
<i>What materials will you need to teach this activity?</i> <i>List all books and materials, including any used during the launch/reflection and during set up and cleanup</i>	<i>What modifications will you need to make to the classroom to support this activity? (e.g., centers, bulletin boards, meeting spaces)</i>	<i>What events or resources, including people, might you need to arrange in advance?</i>
What Do Wheels Do All Day? / ¿Qué hacen las ruedas todo el día? By April Jones Prince Different construction paper cut into shapes (Circle, half circle, rectangle, square, triangle) Glue sticks, construction paper, markers Geometric magnetic toys	Free up one table for the small group activity. Hang print outs of forms of transportation around the classroom. Free up student gallery to hang up students work. Have whiteboard ready in meeting area.	Instruct teacher's assistant to help during small group activity.

* Note: You are designing this activity for the three children observed for your Student Profiles assignment.

Print outs of forms of transportation		
Transportation toys		

THE LEARNING EXPERIENCE	
<p>The launch <i>How will you engage the children in this learning experience? How will you introduce the concepts and vocabulary of the topic? How will you describe the procedures of the learning activity? What will you say and do?</i></p>	<ul style="list-style-type: none"> • Read aloud during circle time <ul style="list-style-type: none"> ○ What Do Wheels Do All Day? / ¿Qué hacen las ruedas todo el día?/ By April Jones Prince ○ Discuss the different forms of transportation shown in the books. • Introduce the different geometric shapes and build a vehicle on the whiteboard. • Invite children to come to the designated table in small groups during choice time to make their own vehicle.
<p>The activity <i>List the step-by-step procedures. What will the children be doing? What will you say or do to facilitate and scaffold their learning? Be specific and detailed in your description.</i></p>	<ul style="list-style-type: none"> • In small groups of 2-3 students instruct students to create their own forms of transportation. <ul style="list-style-type: none"> ○ Ask what kind of vehicle they want to make and encourage them to look at the printouts and toys for inspiration. ○ Ask what shapes they need and let them choose from prepared materials. • Students will put together shapes to make vehicles <ul style="list-style-type: none"> ○ Once they are happy with their shape, they can glue it on to a piece of paper and write their name on it. <ul style="list-style-type: none"> ▪ Some students will be able to write their name independently ▪ For some students the teacher will write their name with pencil and encourage them to trace it.

<p>Reflection <i>As the activity wraps up, what opportunities will you offer the children to respond to and reflect on this activity?</i></p>	<ul style="list-style-type: none"> • After all students had a chance to create their own vehicle, I will collect them and hang them up. • During the next group discussion, I will invite students to view their work. • We will discuss the different vehicles created and tally them up.
<p>Possible Extensions <i>What could you do on another day to build on this activity?</i></p>	<ul style="list-style-type: none"> • Students can use different open ended materials to create more vehicles. • Students can use materials to build 3D vehicles and use them in the block area.
<p>Multimodal Engagement <i>Identify and explain the ways in which this activity offers opportunities to use at least three different learning modalities (kinesthetic, tactile, linguistic, visual/spatial, auditory, musical)</i></p>	<p>Visual: The book, printouts of vehicles, and the toys are visual aids that can be used and analyzed to make their own with geometric shapes. I will visually perform the task before asking the students to build vehicles themselves.</p> <p>Tactile: Different construction paper is used to give different tactile experiences (for example to differentiate between wheels and body of a vehicle). The magnetic toys give another opportunity to experience a different tactile sensation.</p> <p>Kinesthetic: The students will physically put together their shapes. There will be large cutouts that can be put on the floor and to use their whole body to build their vehicle.</p>
<p>Differentiation <i>How will you modify this activity for learners with different learning styles and/or special needs (SLLs, physically active, etc.)?</i></p>	<ul style="list-style-type: none"> • For students who might struggle with the shapes, there will be larger cut outs to help their developing motor skills: They can use their whole arm instead of just their hand to put them together and they can then use small ones or I copy it to a smaller version to hang up. <ul style="list-style-type: none"> ○ I will add the magnetic geometry toys for children who enjoy the sensory experience of putting those together instead of construction paper. ○ I will ask them to trace their shape on paper and do it for them if it is too advanced for their current skill level. • Students will be able to take printouts off the walls with my help to put the shapes over them as a visual guide of building one themselves.

GROWTH AND LEARNING

How will this learning experience support the children's growth and learning in the following domains? Use your knowledge of child development.

Cognitive/thinking	Students will be able to put together different shapes and engage their thinking. They will develop an understanding of different shapes and how they can be added to make new shapes.
Physical	The learning experience will develop their fine-motor skills by strengthening their small muscles in the hands by putting together shapes and using glue. They will gain increased precision preparing them for writing.
Social/emotional	The discussion and reflection will increase their turn taking skills. They learn to work together in small group settings.
Language/literacy	Read aloud and discussion will encourage literacy development. They will ask and answer questions about vehicles. They will write or try to write their name to help develop writing skills.
	----- List 10-15 target vocabulary words: Wheel, car, truck, bus, bicycle, vehicle, circle, square, rectangle, triangle
Content Area(s)	Learn about different vehicles. Learn about wheels and where they are on vehicles.

STANDARDS/GOALS <i>What Pre-K Common Core Learning Standards are addressed in this activity?</i> <i>Use the PKFCC to respond.</i> <i>Be specific—choose those standards that are actually targeted by this learning activity (e.g., can development in regard to the standard be measured by the evidence gathered (authentic assessment) during this learning activity?)</i>	
Domain 1: Approaches to Learning	PK.AL.1 e. Uses “trial and error” method to figure out a task, problem, etc. PK.AL.3 a. Uses materials/props in novel ways to represent ideas, characters and objects PK.AL.5. c. Modifies strategies used to complete a task
Domain 2: Physical Development and Health	PK.PDH.3. b. Maintains balance during sitting, standing, and movement activities PK.PDH.5.a. Demonstrates ability to use fine motor skills (e.g., engages in finger plays, uses materials such as pencils, paint brushes, eating utensils and blunt scissors effectively)
Domain 3: Social and Emotional Development	PK.SEL.2 d. Exhibits self-confidence by attempting new tasks independent of prompting or reinforcement PK.SEL.3. b. Seeks guidance from primary caregivers, teachers and other familiar adults PK.SEL.4. c. Shares materials and toys with other children PK.SEL.6. c. Uses materials purposefully, safely and respectfully as set by group rules
Domain 4: Communication, Language, and Literacy	PK.AC.1. a. Participates in small or large group activities for story-telling, singing or finger plays PK.AC.3. a. Uses vocabulary relevant to observations
Domain 5: Cognition and Knowledge of the World	PK.MATH.13. [NY-PK.G.2.] Names shapes regardless of size PK.ARTS.16 c. Shares and talks about personal artwork

AUTHENTIC ASSESSMENT

What will you do to gather evidence to assess each child's developmental progress?

How will you determine whether or not individual children are getting the Big Ideas and/or exploring the Overarching Questions?

Evidence may include responses recorded during a group discussion, a visual arts project, a performance, etc.

Your assessment activity MUST be connected to the Big Ideas and Overarching Questions.

- The student gallery with the creation of each child is used as initial assessment to identify where reinforcement of the ideas is needed first.
- In group discussion I will ask students what vehicle they want to build for the dramatic play area.
- I ask them what shapes will need and plan it out on our whiteboard.
- With cardboard, we will build two vehicles (in groups of 4).
- Through building a second vehicle I can assess their understanding of vehicles that we discussed.
- The whiteboard functions as a planning and recording tool to see what shapes they recognize and use.

Activity Plan

Designed by: Elena Wild

Curriculum Topic: Transportation

OVERVIEW/FRAMING									
How Fast Is Your Vehicle?									
<p>TOPIC <i>Explain how the topic of this activity is developmentally and culturally appropriate for the group of learners for whom you are designing it.</i></p>	<ul style="list-style-type: none"> • Transportation is part of our everyday lives and children start to use buses and the subway early on. • Children have a natural curiosity and learn well when it connects to their lives. • The activity connects the natural curiosity of everyday life activities and objects to the creativity of young children 								
<p>BIG IDEAS/OVERARCHING QUESTIONS <i>What kinds of questions will be explored and/or what new connections and ideas will be engaged through this activity?</i></p>	<ul style="list-style-type: none"> • What kind of transportation do we use? • How do wheels work? 								
<p>CONTENT FOCUS: <i>Identify which content area(s) will be addressed in this activity</i></p>	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Visual Arts</td> <td style="text-align: center;">Music</td> <td style="text-align: center;">Movement/Dance</td> <td style="text-align: center;">Drama</td> </tr> <tr> <td style="text-align: center;">Emergent Literacy</td> <td style="text-align: center;">Mathematics</td> <td style="text-align: center;">Science</td> <td style="text-align: center;">Social Studies</td> </tr> </table>	Visual Arts	Music	Movement/Dance	Drama	Emergent Literacy	Mathematics	Science	Social Studies
Visual Arts	Music	Movement/Dance	Drama						
Emergent Literacy	Mathematics	Science	Social Studies						
<p>LANGUAGE AND CONTENT OBJECTIVES</p>	<ul style="list-style-type: none"> • Hypothesize how speed is created. • Draw conclusions about how fast the cars went down the ramps. • Compare the different results of the car speed and ramp heights. • Summarize their findings. 								

KNOWING THE LEARNERS	
<p>AGE RANGE:</p>	4 – 4.5 year old
<p>CURRENT DEVELOPMENT: <i>What do you know about the current growth of learners in this age range for the content focus?</i></p>	<p>Four year old children’s large-muscle skills are expanding. can use scissors and glue. Their creations begin to resemble real objects. They are increasingly able to figure out how things fit together. They have curious about similarities and differences in people and how they live.</p>

<p><i>What misunderstandings might children in this age range have about the topic/content and how do you plan to address this?</i></p>	<p>Transportation and vehicle are big umbrella terms. Students might have confusion about the differentiation between forms of transportation, like the difference between a bus and a truck. Students might have confusions about how vehicles are operated.</p>
<p>SOCIO-CULTURAL CONTEXT: <i>What do you know about this group of children in terms of their cultural backgrounds, learning styles, languages spoken, and learning experiences to date?*</i></p>	<p>8 students: 4 girls and 4 boys. 4 students are from Ecuadorian and Honduran descent. 1 Student is of Chinese descent. 2 Students are dual language learners (Spanish and English). 1 Student needs to focus on gross motor movement.</p>

MATERIALS & LEARNING ENVIRONMENT PREPARATION		
MATERIALS	LEARNING ENVIRONMENT	EVENTS/RESOURCES
<p><i>What materials will you need to teach this activity?</i> <i>List all books and materials, including any used during the launch/reflection and during set up and cleanup</i></p>	<p><i>What modifications will you need to make to the classroom to support this activity? (e.g., centers, bulletin boards, meeting spaces)</i></p>	<p><i>What events or resources, including people, might you need to arrange in advance?</i></p>
<ul style="list-style-type: none"> • Assortment of toy cars, trucks, buses • Blocks, Ramps, boxes • Flipchart, paper, markers 	<ul style="list-style-type: none"> • Clear out block area. • Bring flipchart to area. 	<ul style="list-style-type: none"> • TA needs to supervise the other students during small group activity.

* Note: You are designing this activity for the three children observed for your Student Profiles assignment.

THE LEARNING EXPERIENCE

<p>The launch <i>How will you engage the children in this learning experience? How will you introduce the concepts and vocabulary of the topic? How will you describe the procedures of the learning activity? What will you say and do?</i></p>	<ul style="list-style-type: none"> • In small groups of two to three students, invite them to the rug. <ul style="list-style-type: none"> ○ Present them with the toy vehicles. ○ Ask them what they are, how they are different, how we could sort them. ○ Ask about their predictions on which would be slower, faster, or the same. <ul style="list-style-type: none"> ▪ Write down the predictions.
<p>The activity <i>List the step-by-step procedures. What will the children be doing? What will you say or do to facilitate and scaffold their learning? Be specific and detailed in your description.</i></p>	<ul style="list-style-type: none"> • Take out the blocks and boxes to build a ramp <ul style="list-style-type: none"> ○ Build an example. • Let the students experiment with the acceleration of the toys. • Record the results of the students experiments.
<p>Reflection <i>As the activity wraps up, what opportunities will you offer the children to respond to and reflect on this activity?</i></p>	<ul style="list-style-type: none"> • Go over the results and discuss what surprises them/what was like expected.

<p>Possible Extensions <i>What could you do on another day to build on this activity?</i></p>	<ul style="list-style-type: none"> • Introduce “Ramp and Pathway” blocks to the block area where students can build their own marble slides and figure out which constructions make the marbles go faster or slower.
<p>Multimodal Engagement <i>Identify and explain the ways in which this activity offers opportunities to use at least three different learning modalities (kinesthetic, tactile, linguistic, visual/spatial, auditory, musical)</i></p>	<ul style="list-style-type: none"> • Kinesthetic: The students are actively building the ramps and letting the vehicles go down. • Visual/spatial: The students can watch the vehicles and see how they are going down • Linguistic: We are discussing the results and finding explanations of what is happening, as well as writing the results down to compare.
<p>Differentiation <i>How will you modify this activity for learners with different learning styles and/or special needs (SLLs, physically active, etc.)?</i></p>	<ul style="list-style-type: none"> • The ramps and toys can be both scaled up and down to make them more accessible to different stages of physical development. • The activity can be done with different numbers of students to ensure the right scaffolding. • To ease sensory overload the activity can also be done with an individual student where they have greater control over what and how much is happening at once.

<p>GROWTH AND LEARNING <i>How will this learning experience support the children’s growth and learning in the following domains? Use your knowledge of child development.</i></p>	
<p>Cognitive/thinking</p>	<p>In the activity students will ask critical questions and make predictions. They will sort, record, and analyze results.</p>

Physical	Students will use their gross motor skills and walk around the set of the experiment. They will use their fine motor skills to grab and release toy vehicles and grow their hand-eye coordination.
Social/emotional	Students will work together and increase their turn taking skills.
Language/literacy	Students will formulate their predictions and develop their skills to explain what and why something happened. ----- List 10-15 target vocabulary words: Ramp, speed, fast, slow, heavy, light, roll, drive, car, truck, bus, motion
Content Area(s)	Students will learn about gravity and speed. They learn about weights and how things are faster than others when going down a ramp.

STANDARDS/GOALS

What Pre-K Common Core Learning Standards are addressed in this activity?

Use the PKFCC to respond.

*Be specific—choose those standards that are **actually targeted** by this learning activity (e.g., can development in regard to the standard be measured by the evidence gathered (authentic assessment) during this learning activity?)*

Domain 1: Approaches to Learning	PK.AL.3. c. Experiments to further knowledge PK.AL.4 c. Actively explores how things in the world work
Domain 2: Physical Development and Health	PK.PDH.2. a. Demonstrates appropriate body awareness when moving in different spaces (i.e., aware of their own body) PK.PDH.2. b. Exhibits appropriate body movements when carrying out a task
Domain 3: Social and Emotional Development	PK.SEL.3. a. Interacts with significant adults PK.SEL.4. c. Shares materials and toys with other children
Domain 4: Communication, Language, and Literacy	PK.AC.1. b. Asks questions PK.AC.3 a. Uses vocabulary relevant to observations
Domain 5: Cognition and Knowledge of the World	PK.SCI.2 a. Explores forces (pushes and pulls) on objects, such as those caused by gravity, magnetism, and mechanical forces (e.g., a string attached to an object being pulled or a ramp to increase the speed of an object) PK.SCI.12. [K-2-ETS1-3.] Analyzes data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs

AUTHENTIC ASSESSMENT

What will you do to gather evidence to assess each child's developmental progress?

How will you determine whether or not individual children are getting the Big Ideas and/or exploring the Overarching Questions?

Evidence may include responses recorded during a group discussion, a visual arts project, a performance, etc.

Your assessment activity MUST be connected to the Big Ideas and Overarching Questions.

- In the large group we will reflect on the results of our experiments
 - The recordings will help me assess the different groups
- Using “ramp and pathway” blocks I will ask students which marble will be faster, using a steep and flat ramp. I will record their answers before conducting the experiment.
 - I will repeat the experiment with different heights, but still visually clear which is steeper, to make sure, students aren't just repeating what the one's before them said, I will mix up the order every time.

Activity Plan

Designed by: Elena Wild

Curriculum Topic: Transportation

OVERVIEW/FRAMING									
Match the Community Helper to Their Vehicle									
<p>TOPIC <i>Explain how the topic of this activity is developmentally and culturally appropriate for the group of learners for whom you are designing it.</i></p>	<ul style="list-style-type: none"> • Transportation is part of our everyday lives and children start to use buses and the subway early on. • Children are exposed to traffic and are interested in the different roles of community helpers • Children have a natural curiosity and learn well when it connects to their lives. • The activity connects the natural curiosity of everyday life activities and objects to the creativity of young children • 								
<p>BIG IDEAS/OVERARCHING QUESTIONS <i>What kinds of questions will be explored and/or what new connections and ideas will be engaged through this activity?</i></p>	<ul style="list-style-type: none"> • What kind of transportation do we use? • Who in our community can help us? • Students will learn about different roles in society. 								
<p>CONTENT FOCUS: <i>Identify which content area(s) will be addressed in this activity</i></p>	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Visual Arts</td> <td style="text-align: center;">Music</td> <td style="text-align: center;">Movement/Dance</td> <td style="text-align: center;">Drama</td> </tr> <tr> <td style="text-align: center;">Emergent Literacy</td> <td style="text-align: center;">Mathematics</td> <td style="text-align: center;">Science</td> <td style="text-align: center;">Social Studies</td> </tr> </table>	Visual Arts	Music	Movement/Dance	Drama	Emergent Literacy	Mathematics	Science	Social Studies
Visual Arts	Music	Movement/Dance	Drama						
Emergent Literacy	Mathematics	Science	Social Studies						
<p>LANGUAGE AND CONTENT OBJECTIVES</p>	<ul style="list-style-type: none"> • Identify different community helpers and vehicles • Compare different community helpers and vehicles 								

KNOWING THE LEARNERS	
<p>AGE RANGE:</p>	4 – 4.5 year old
<p>CURRENT DEVELOPMENT: <i>What do you know about the current growth of learners in this age range for the content focus?</i></p>	<p>Four year old children’s large-muscle skills are expanding. can use scissors and glue. Their creations begin to resemble real objects. They are increasingly able to figure out how things fit together. They have curious about similarities and differences in people and how they live.</p>

<p><i>What misunderstandings might children in this age range have about the topic/content and how do you plan to address this?</i></p>	<p>Transportation and vehicle are big umbrella terms. Students might have confusion about the differentiation between forms of transportation, like the difference between a bus and a truck. Students might have confusion about which community helper fulfills which role in society.</p>
<p>SOCIO-CULTURAL CONTEXT: <i>What do you know about this group of children in terms of their cultural backgrounds, learning styles, languages spoken, and learning experiences to date?*</i></p>	<p>8 students: 4 girls and 4 boys. 4 students are from Ecuadorian and Honduran descent. 1 Student is of Chinese descent. 2 Students are dual language learners (Spanish and English). 1 Student needs to focus on gross motor movement.</p>

MATERIALS & LEARNING ENVIRONMENT PREPARATION		
MATERIALS	LEARNING ENVIRONMENT	EVENTS/RESOURCES
<p><i>What materials will you need to teach this activity?</i> <i>List all books and materials, including any used during the launch/reflection and during set up and cleanup</i></p>	<p><i>What modifications will you need to make to the classroom to support this activity? (e.g., centers, bulletin boards, meeting spaces)</i></p>	<p><i>What events or resources, including people, might you need to arrange in advance?</i></p>
<ul style="list-style-type: none"> • My Neighborhood by Maddie Frost • Figures of Community helpers (or flashcard) • Basket • Figures of community helper's vehicles (or flashcard) • Whiteboard 	<ul style="list-style-type: none"> • Prepare basket and Whiteboard before group meeting • Have TA set up the community helper figures during the read aloud 	<ul style="list-style-type: none"> • Instruct and equip TA to set up the scavenger hunt

* Note: You are designing this activity for the three children observed for your Student Profiles assignment.

THE LEARNING EXPERIENCE

The launch

How will you engage the children in this learning experience? How will you introduce the concepts and vocabulary of the topic? How will you describe the procedures of the learning activity? What will you say and do?

- Read aloud during circle time
 - My Neighborhood by Maddie Frost
- Discuss the community helpers mentioned and what they drive
 - Write down answers on whiteboard
- Invite students to look into the basket full of community helpers

The activity

List the step-by-step procedures. What will the children be doing? What will you say or do to facilitate and scaffold their learning? Be specific and detailed in your description.

- Students will pick one community helper's vehicle from the basket
 - Ask who they think would drive that vehicle from the discussed community helpers
- Students will one by one go on a scavenger hunt to find that community helper.
 - The community helpers will be set out over the classroom on top of shelves and tables which are on eyelevel of the students
- Once they return, they put them in the middle of the circle until every student had a chance to go.

Reflection

As the activity wraps up, what opportunities will you offer the children to respond to and reflect on this activity?

- We will look at the community helpers and their vehicle together and discuss where and if we have seen them before on the street or a community walk.

<p>Possible Extensions <i>What could you do on another day to build on this activity?</i></p>	<ul style="list-style-type: none"> • Fieldtrip to a community helper, for example the fire station or have a fieldtrip in front of the school to look at the school bus in detail. • Have them write letters to themselves and send them home via mail.
<p>Multimodal Engagement <i>Identify and explain the ways in which this activity offers opportunities to use at least three different learning modalities (kinesthetic, tactile, linguistic, visual/spatial, auditory, musical)</i></p>	<ul style="list-style-type: none"> • Linguistic: Students can express themselves in the discussion. • Auditory: Through the read aloud students will learn about the community helpers. • Visual: Students will be able to visually see the community helpers and their vehicles. • Kinesthetic: Students will navigate the space in the circle and classroom to find their matching piece.
<p>Differentiation <i>How will you modify this activity for learners with different learning styles and/or special needs (SLLs, physically active, etc.)?</i></p>	<ul style="list-style-type: none"> • The activity will also be available as a memory game, that can be place 1:1. • The discussion will help students scaffold each other by helping to find the right answers when students aren't sure which vehicle belongs to the community helper. • When they get up to find their community helper, the TA is on standby ready to assist them and point them in the right direction.

GROWTH AND LEARNING

How will this learning experience support the children's growth and learning in the following domains? Use your knowledge of child development.

<p>Cognitive/thinking</p>	<p>Students will make connections between community helpers and vehicles based on how they are similar (for example colors) and deducting what the vehicle is used for.</p>
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Physical	The activity will develop their gross motor skills through walking through the classroom and being aware of obstacles. They will develop their fine motor skills through grabbing and placing figures.
Social/emotional	The activity is going to increase their turn taking skills, both through the discussion and taking one figure out at a time.
Language/literacy	The read aloud and discussion will encourage their literacy development. They will ask and answer questions about community helpers.
	List 10-15 target vocabulary words: Police car, fire truck, school bus, ambulance, community helper, police officer, fire fighter, bus driver, EMT, bus driver
Content Area(s)	Learn about different work vehicles and associated community helpers.

STANDARDS/GOALS

What Pre-K Common Core Learning Standards are addressed in this activity?

Use the PKFCC to respond.

*Be specific—choose those standards that are **actually targeted** by this learning activity (e.g., can development in regard to the standard be measured by the evidence gathered (authentic assessment) during this learning activity?)*

Domain 1: Approaches to Learning	PK.AL.1 A: e. Uses “trial and error” method to figure out a task, problem, etc. PK.AL.4: a. Asks questions using who, what, how, why, when, where, what if PK.AL.5: b. Seeks assistance when the next step seems unclear or appears too difficult
Domain 2: Physical Development and Health	PK.PDH.1: b. Compares and contrasts different sights, smells, sounds, tastes, and textures PK.PDH.2: a. Demonstrates appropriate body awareness when moving in different spaces (i.e., aware of their own body)
Domain 3: Social and Emotional Development	PK.SEL.4: b. Interacts with other children (e.g., in play, conversation, etc.) PK.SEL.6: a. Displays an understanding of the purpose of rules
Domain 4: Communication, Language, and Literacy	PK.AC.1: b. Asks questions PK.AC.4: d. Expresses understanding of words used in read-alouds, in conversations and in descriptions of everyday items in the world
Domain 5: Cognition and Knowledge of the World	PK.SOC.3: a. Recognizes community workers and their roles and responsibilities (e.g., asks questions about and shows an interest in the community jobs) PK.SOC.3: c. Identifies the tools and equipment that correspond to various roles and jobs

AUTHENTIC ASSESSMENT

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Your assessment activity MUST be connected to the Big Ideas and Overarching Questions.

- Provide paper with community helper's vehicle on one side
- Let students choose one paper
- Discuss which vehicle they chose, and which community helper uses it.
- Let them draw the community helper

- Bind the students work together into a book with the title "our community helpers".

- Show the book at the next day's group discussion and add to the library afterwards.

Commentary

Describe topic of your Focused Curriculum

The curriculum topic is transportation. It is intended for a prekindergarten classroom with students ranging from four to four and a half year old. It focuses on the different aspects of transportation and covers questions like what kind of transportation do we know and how do they work, to who uses and operates them and how do we use them safely.

Implementation of Activity Plans

I intend the activity plan to start with the math activity, followed by science and concluding with social studies. The math activity plan involves students creating their own vehicle with wheels out of geometric shapes. Their mode of thinking about cars and buses, etc. can then be used to explore speed in the science activity. The science is experimenting with the speed of toy vehicles when going down a ramp. Using the natural curiosity of children to engage in exploration. Going from the more general vehicle and understanding we will move into the concrete with the activity plan on social studies. We will discuss community helpers and what forms of transportation they use.

Relationship of the Activity Plans

All activities are about vehicles with wheels. They are driven by the curiosity and creativity of young children and their increasing interest in figuring out how things work. The second and third activity promote working together and taking turns, an ability that develops and increases as they get older. The students live in New York City, where they are exposed to a lot of traffic and cars and can relate their experiences to what we are learning. Wherever possible, I included bilingual books and songs in Spanish to

include the home language of several students. All the activities can be scaled up or down to support the different stages of development of motor skills.

Strategies and Connections

The activities are designed to start with either a read-aloud or a discussion, this gives me the opportunity to see how much the students already know on the topics. I will present the activity and start with a demonstration of what I want the students to do. Everyone has their own learning style and I am integrating different aspects of learning, all activities have some active part where the students are hands-on. There are visual and verbal instructions and a demonstration to help scaffold the learning tailored to the individual child. Activities like gluing and creating, experimenting and building with blocks, as well as puzzles and matching games are natural parts of the classroom. Using these familiar tools helps to introduce the new concept in a way that is part of the everyday life of the classroom.

Assessment

For an initial assessment I have the students work; the student gallery, the flipchart with their predictions and results and I will create a book with their drawings. These are my artifacts as evidence of their learning. We will also be discussing the concepts in small groups and during meeting time to see what students knew before the activity and what they have learned since. This will include a repetition of the activity in a different form to assess if the knowledge has been generalized and they are able to use it in an adjusted setting.

Conclusion

It was a great experience to create these activities and the curriculum. One challenge was to not overthink it. The concepts that we are teaching exist all around us. Throwing a ball or something falling involves physics. Talking about the weather and the date teaches about the passing of time and the changing of seasons. As an early childhood educator, it is important to take these everyday experiences to teach children these concepts and help them generalize that knowledge. It is not about complicated worksheets but about using what children are fascinated by and turning it into an activity they can interact with and succeed.