Phase III Learning Case Study: Project-Based Learning | **PSY 205 Educational Psychology Learning Plan Template**

Teacher Name: Lisa Neff	**Grade & Subject:** Kindergarten & Math

Name of School: Midwest Elementary School

Background of School ("culture"):
Midwest Elementary School is a school located in Bismarck, North Dakota. Bismarck is a town with about 73,112 people with 90.32% of the population being Caucasian, and 3.85% Native American and 2.52% African American. In Bismarck 95% of the population speak English with the rest of the population speaking a variety of languages.

Midwest Elementary is a middle-class school with a mixture of high-class students and low-class students. There are 275 students attending Midwest Elementary School with grades K-5 and are going to be taught reading, writing, math, science, social studies, and art in the general education classroom. The students also spend time in gym, music, library, and the counselor.

The staff at Midwest Elementary school is made up of a majority of female teachers with approximately two male teachers. The staff is made up of trained teachers with new innovative ideas. The staff is a mix with new teachers and experienced teachers and the school implements student teachers as an extra resource for the students. There are also instructional aides that are involved with assisting various students.

The students at Midwest Elementary School are overall in a thriving environment. The students have behavioral issues at times, and there are different approaches to handling these situations within the classroom. Parental involvement is an important aspect to Midwest Elementary School and there are a variety of ways that parents can be involved inside of the classroom and outside of the classroom.

PBL Unit Name:	Specific Standards:
<u>Shapes House</u> **How can we show others that shapes are in a room?**	• K.G. 6 Compose a new shape by combining two or more simple shapes. (Example: Use two triangles to make a square.) • K.G. 1 Describe objects in the environment using names of shapes and solids (squares, circles, triangles, rectangles, cubes, and spheres). • K.G. 2 Correctly name shapes and solids (squares, circles, triangles, rectangles, cubes, and spheres) regardless of their orientations or overall size. • K.G. 3 Identify shapes and solids (squares, circles, triangles, rectangles, cubes, and spheres) as two dimensional or three-dimensional

What Resources Will the Students Need (describe all resources and learning materials necessary for your project (e.g., Internet sites, colored paper, graduated cylinders, etc.)

- Colored construction paper
- Pipe cleaners
- Tape
- Empty Shoe Boxes

- Tin foil
- Scissors
- Glue
- Markers
- Black sharpies
- Buttons
- Pompoms
- Straws
- Popsicle sticks
- Styrofoam
- Foam paper
- Beads
- Pencils
- Notebooks

What Resources Will the Students Need (describe all the resources/materials needed for your students to learn):

- Student 1 (Roy): Roy needs directions that are clear and understanding, an example of what is expected, and have him ask questions to make sure he understands what is expected. He excels in writing because he likes making up stories. He enjoys reading when it books that interest him. He needs more assistance in Math and English because they are hard for him at times. He needs reminders to stay on task because his mind wonders. He enjoys working with a group of his peers; he likes learning from them.
- Student 2 (Christine) She excels in areas where she has the ability to work by herself and be creative. She enjoys math because she is able to work by herself and also work ahead. She struggles emotionally in school in feeling accepted and being able to make friends.
- Student 3 (Chad): Chad has ADHD and would need extra assistance in certain areas. He would benefit if he had flexible seating, sensory materials, a calm down area, a visual schedule, visual timer to help him stay on task. He excels when he is able to stand and move about the classroom. Having an instructional aide doing check-ins with Chad to make sure he is on task. Providing short walks for him to take, if he is getting off task. A short walk will be given by an instructional aide that is assisting with him.

Students Will Do (describe what will be done during the unit in the order they will be done):

1. In this project, the students will learn about the different geometric shapes in the world around them.
2. They will conduct observations, both at home and in school environment, of everyday items and structures to identify how shapes exist in our world. They will write in their notebook of their observations.
3. Using the information from their observations, the students will be in small groups and each group will create a model room, of their choice.
4. The room will be made from empty shoe boxes, colored construction paper, markers, buttons, pompoms, pipe cleaners, tin foil, straws, popsicle sticks, Styrofoam, foam paper, and beads. The groups each will

Describe How This Will be Developmentally Appropriate for:

- Brain Development: These children are in early to middle childhood. Their prefrontal cortex is still developing so they are constantly growing with their level thinking and self-regulation. In order to keep these children's brain advancing through development, it is important that this lesson allows they to reason, control their thinking and stretch their attention. Students are able to reason throughout this project by discussing the project with their peers, choosing what room to create and how they want to do it. They will need to control their thinking by focusing for longer periods of time and controlling their actions. For this lesson, students will have to use their creative skills to build a room with thought. Due to the length of the project and creative skills involved, students will need to stretch and improve their attention skills.

have their own room to make and are allow to build it how every they choose.

5. They can use all of the materials provided or some, it is up to them of what items they use.
6. They are required to use all of the shapes we have learned (squares, circles, triangles, rectangles, cubes, and spheres). They can use one shape more than once but must have all six shapes for the room to be complete.
7. The groups will present to each other then they will present to community members.
8. Their rooms will be on display for their parents and community members to explore them.
9. The students will be required to explain their rooms and what shapes are in them.
10. Through a combination of seeing the room models and listening to the students, the community members will be informed of the attributes of shapes and how one might encounter them in the real world.

Roy and Chad will require extra focusing reminders to stay on task. Chad has ADHD and so for educators it would be helpful to keep that in mind pertaining to the specific tasks that you ask of him. Chad needs to have interest in what he is doing otherwise he loses focus and gets off task. This project will be helpful because they get to choose what they would like to be built into their rooms. This project will really bring out Christine's and Roy's creative side. I understand that these students are Kindergartener's and will need extra reminders for focus and attention. Finally, this PBL will increase neuronal connections within the student's brain that further develops the prefrontal cortex resulting in more effective problem solving skills.

- Cognitive Developmental Stage: These students are in Piaget's Preoperational Stage. It focuses on students beginning to recognize words as images in the real world. They are beginning to see things through someone else's perspective. This you can see when they are sharing ideas of what they are going to create. For Vygotsky's Zone of Proximal Development, students like Christine may have a difficult time working within a group. Students like, Roy will be at ease working together. Students like, Chad may have a challenging time as well in a group because of his attention span. As the teacher, I will pay close attention to their interactions with their groups. This PBL activity is something that they will not be able to master alone, they do need each other to complete it. Scaffolding will be present as well, when observing the students, I may have to change instruction to fit their needs but the task will stay the same, even having an instructional aide join the class for this group project would be beneficial, to students like, Chad. I will set up the material on a table so the students will be able to come get whatever they need. I will have simple guidelines needed for this assignment.
- Emotional Developmental Stage: These students are constantly developing through Erikson's Developmental Stages, currently they beginning to move from the Initiative versus guilt stage to the Industry versus Inferiority stage. In this Industry vs. Inferiority stage, the students are beginning to master their knowledge and intellectual skills. They struggle through school because they have feelings of incompetence and unproductiveness. On the plus side, their friend group becomes greater and more significant. Although for some students like, Christine, they may have trouble making friends so she struggles emotionally in school. As the teacher I will try to give positive

	feedback, along with encouraging words. The groups will be 2-3 students so everyone can have a say in the project. • Identity Development: These students are around the ages of 5-6, so I would place them in the Identity diffusion stage, which is the identity status in which individuals have neither explored meaningful alternatives nor made a commitment. The identity components that come with that are gender identity and relationship identity, in regards to their family relationships. • Moral Development: These students are in Kohlberg's preconventional reasoning level. This level is revolved around punishment, obedience, individualism, instrumental purpose, and exchange. Which means, individuals pursue their own interests but let others do the same. What is right involves equal exchange. Children obey because adults tell them to obey. Moral thinking is often tied to punishment. People are nice to others, so that others will be nice to them in return.