Learning Shapes Through Movement

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**Introduction**

For our thematic unit, we have decided to combine movement and shapes. For our focal point, we have decided to use various different group activities that will provide a basis of fundamental shapes such as, circle, square, triangle and rectangle.

Kindergarten is a time when children are beginning to notice the world around them and are starting to recognize certain objects. Despite this type of basic recognition, kindergartener’s are not able to abstractly understand how shapes fit into their lives. For example, children of this age are not yet able to understand that the shape of a doorway is a rectangle or that the cap of a water bottle is in the shape of a circle. Not only is our goal to have kindergartener’s understand basic and fundamental shapes, but also for them to understand them further through using movement with their bodies.

The lessons that are implemented throughout this project are hands-on, where the students will be engaging in multiple intelligences, such as, bodily-kinesthetic, intra and interpersonal, spatial intelligence and linguistic intelligence, to understand shapes, themselves and others. Students will be learning about shapes through activities such as “Simon Says”, labeling cardboard cut-outs, sidewalk chalk, movement and journal expression.

We focus on group activity because not only is kindergarten a time for children to be learning things, but it is a time for them to be interacting with others and building relationships and linguistic skills at a young age. This is a critical time for their development as people who are just coming into their own, and trying to understand how they fit in to society. Using movement will not only give the students a better understanding of shapes, but of their role in society and how they can manipulate the
world around them using their bodies. As a result of shared knowledge of the children, we hope that that the class will come to an understanding of the movement that is similar to Marion North’s ideas in the book, *Body Movement For Children*, that states,

> Movement, the primary, most elementary, most primitive medium Can be used – either for individual or group formulation. It is not the Doing of the activity which is important here, but the liking of the Inter being and the outer form. Initial expressive movements (the spontaneous activity shown in gesture and stance) are transformed into the appropriate forms of patterns and rhythms and become not signs of emotion but symbol.

At the end of the project, once students have a good understanding using movement to analyze and synthesize shapes, students will be grouped together and asked to make a pattern using the shapes they have learned over the course of the lesson. This final presentation will give the teacher a good evaluation of how well the lesson has worked over the course of the week.

The unit will take place in a kindergarten classroom environment, where the students will not be seated at their desks as in a traditional style classroom. When traditional type teaching is taking place, discussions will be held on the carpet in the classroom where students will be seated in a circle. Most teaching will take place through visual aids, such as in the cardboard cutouts, tracing and movement lessons.
Objectives

1. Students will learn to recognize, analyze and generalize fundamental shapes.
2. Students will collaboratively work together in groups to synthesize their understanding and recognition of shapes, while using their interpersonal intelligences.
3. Students will engage in movement to explore how they can use their bodies to make sense of shapes using Gardener’s theory of bodily-kinesthetic and spatial relationships.

Activities

Day 1: Introduction To General Shapes

Activity #1
- Big cardboard cut-outs of the 4 shapes brought into class
- Students will sit in circle and teacher will first start off with the circle cut-out
- Explains to the students what the shape is, characteristics of the shape and the name of the shape
- Then students will be asked to look around the classroom and think of other things in the world that are the same shape as the circle
- All recognized shapes will be written inside of the circle
- This will continue for each shape

Day 2: Collaborative Group Activity

Activity #1/Review
- Teacher reviews shapes by presenting the cardboard cut-outs, and will ask students what shape is being held up
- Students will be asked to interact with one another about what shape the teacher is holding up
- In the peer interaction, students will not be asked to give the teacher their answer, they will be asked to give their friends answer of what they thought the shape was
- Will force the students to listen to one another and to express complete sentences (ex: “Anna said that the shape was a circle”)

Activity #2
- Break students into 5 groups
- Each group will be assigned a certain shape
- In these groups, students will trace, color and cut-out their specific shape
- When done with this, students will rotate around to each station until they have completed all shapes

Homework Assignment: Pick your favorite shape and bring something in from home that represents that shape.

- Teachers will display artwork and all work done with shapes on the wall designated “Learning Shapes!”

Day 3: Incorporating Movement Into Learning Shapes

Activity #1/Review
- Let students present what they have brought in to class - tell class why the object brought in is that shape by describing the characteristics of it, and why they picked that object.

Activity #2
- Pre-discussion of movement and how this will be incorporated into shapes – explain to students that shapes do not just exist on paper, but that they can make shapes with their bodies
- Movement warm-up, where students will warm-up certain parts of their bodies by stretching and being aware of their muscles
- Teacher will ask students if they can make certain shapes with their bodies, just to get an idea of what students are visualizing in their minds up to this point
- Using positive reinforcement to encourage the students to use their bodies to make shapes, the teacher will show students how to make a square (or any other shape) with their bodies
- The teacher will go show students other shapes and ask them to mimic with their own bodies

Activity #3
- Teacher will incorporate the game of “Simon Says” into the lesson using movement with previously learned shapes
Activity #4
- Students will then go back to their desks and write in their journals what shapes they have drawn with their bodies in the movement exercise
- 4 or 5 students will then be asked to volunteer to present what they have written in their journals
- Students will have to show the class the shapes they have drawn, and use full sentences to tell everyone what they did in the movement exercise (“Today in movement, I learned how to make a square, triangle, rectangle and circle with my body”)

Day 4: Movement in Group Activity

Activity #1/Review
- Movement will be reviewed from the day before as individual students are called on voluntarily to be “Simon”
- Once game is done, students will be broken up into groups of 2

Activity #2
- In groups, students will go outside and will be given sidewalk chalk
- Partner #1 will have to use movement to make a shape, and Partner #2 will have to trace the outline of the shape that was made
- Partners will switch on and off until the allotted time is up, which would be around 15-20 minutes

Activity #3
- Once inside, students find another partner and are given a long sheet of white paper and pencils/marker
- Partner #1 will have to make 2 out of the 4 shapes, and Partner #2 will trace shapes made on the white paper
- Partner #2 will make the remaining 2 out of 4 shapes, and Partner #1 will trace shapes made on the white paper
- Partners will then color in shapes after they are done

Activity #4
- Students will be asked to go back to their journals and write about what they have done, and then volunteers will be asked to present to the class what they did with the sidewalk chalk and white paper in full sentences
Day 5: Last Day of Movement Using Dance

Activity #1
- Students will again engage in the game of “Simon Says”, with volunteers being called on to be “Simon”

Activity #2
- Students will be broken up into groups of 4
- The group, as a whole, will be responsible for mapping out a pattern of the 4 shapes (all groups will have a different pattern)
- Once they have their patterns, they will then present, as a group, their patterns to the class using movement
- Teachers will then ask the class what shapes they saw, asking for volunteers to make the shapes they remember seeing from the presentation

Evaluation

The evaluation process will be based on social interactions, improvement, effort, communication skills, journal entries and their final presentation. Most of the evaluations will be done through teacher observations because it is hard to evaluate students when there are not tests or quizzes involved in the lesson plan. We think this thematic unit will work because the activities are broken down into steps that the students will be able to grasp easily. The activities are hands-on and fun enough for the student’s to not even realize that learning is going on. They are utilizing multiple intelligences, and using movement has always proven to be a very successful tool in getting small children to learn. For example, from Alex’s experience in her Education Through Movement class, she learned firsthand the effect that movement can have on children’s learning abilities. She went to the Hartford Middle Magnet School, and worked with 3rd graders that were
in the process of learning the ideas of how movement can be used as a language. The 3rd grade class that was learning movement came to Trinity and watched a performance that Alex’s class was putting on. Another 3rd grade class also came and watched the performance. Both classes were then asked to fill-out a survey of basically how they thought movement could be used as a language. The class that had been learning movement understood the performance and the ideas that had been taught to them. The other class that had not learned about movement, walked away from the performance not knowing anything about movement and demonstrated to have no knowledge on what the performance was about.

This curriculum project will also be successful because based on the Connecticut State Guidelines for Mathematics from grades K-1, this thematic unit “identifies, classifies, models, discusses and describes the “properties of plane and solid shapes using concrete and pictorial models, explore spatial relationships using activities that involve direction, orientation, combining, dividing, and transforming shapes with concrete and pictorial models” and identifies geometric shapes found in the world around them. Also, based on the Connecticut State Guidelines for Movement Elements and Dance Skills, students will “demonstrate understanding of spatial concepts through defining and maintaining personal space, demonstrate kinesthetic awareness and concentration in performing movement skills and demonstrate accuracy in memorizing and reproducing simple movement phrases”.
Teacher Observations

Teachers will keep a rubric sheet so they can monitor the student’s performance and progress from day to day. This rubric will be only for teachers as a guide, and students will not be aware that they are being monitored and graded. The rubric will include improvement, grasping skills, effort, participation, communicates ideas and works with others. Students will be evaluated on a 1-3 scale, with 1 being poor performance and 3 being excellent performance.
Sources

Division of Teaching and Learning. Bureau of Curriculum and Instruction.
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Great Britain. 1971

Primary Games: The Fun Place to Learn! “Sammy’s Shapes”
http://www.primarygames.com/storybooks/sammy/start.htm

State Department of Education. Division of Teaching and Learning.
Bureau of Curriculum and Instruction. “Content Standard 1 through 7 in Microsoft Word”.
http://www.state.ct.us/sde/dtl/curriculum/tracemps/dance/tmapdnce.doc
Learning Shapes Through Movement

-Schedule-
Day 1: Introduction to General Shapes

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- This will continue for each shape
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- This will force the students to listen to one another and to express complete sentences (ex: “Anna said that the shape was a circle”)

**Activity #2**

- Break students into 5 groups
- Each group will be assigned a certain shape
- In these groups, students will trace, color and cut out a specific shape
- When done with this, students will rotate around to each station until they have completed all shapes

**Homework Assignment:** Pick your favorite shape and bring something in from home that represents that shape.

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  - Teacher will ask students if they can make certain shapes with their bodies, just to get an idea of what students are visualizing in their minds up to this point
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Activity #4
- Students will then go back to their desks and write in their journals what shapes they have drawn with their bodies in the movement exercise
  - 4 or 5 students will then be asked to volunteer to present what they have written in their journals
  - Students will have to show the class the shapes they have drawn, and use full sentences to tell everyone what they did in the movement exercise ("Today in movement, I learned how to make a square, triangle, rectangle and circle with my body")
Day 4: Movement in Group Activity

Activity #1/Review
- Movement will be reviewed from the day before as individual students are called on voluntarily to be “Simon”
- Once game is done, students will be broken up into pairs

Activity #2
- In groups, students will go outside and will be given sidewalk chalk
- Partner #1 will have to use movement to make a shape, and Partner #2 will have to trace the outline of the shape that was made
- Partners will switch on and off until the allotted time is up, which would be around 15-20 minutes

Activity #3
- Once inside, students find another partner and are given a long sheet of white paper and pencils/marker
- Partner #1 will have to make 2 out of the 4 shapes, and Partner #2 will trace shapes made on the white paper
- Partner #2 will make the remaining 2 out of 4 shapes, and Partner #1 will trace shapes made on the white paper
- Partners will then color in shapes after they are done

Activity #4
- Students will be asked to go back to their journals and write about what they have done, and then volunteers will be asked to present to the class what they did with the sidewalk chalk and white paper in full sentences
Day 5: Movement and Dance

(Activity #1)
- Students will again engage in the game of “Simon Says”, with volunteers being called on to be “Simon”

(Activity #2)
- Students will be broken up into groups of 4
  - The group, as a whole, will be responsible for mapping out a pattern of the 4 shapes (all groups will have a different pattern)
  - Once they have their patterns, they will then present, as a group, their patterns to the class using movement
  - Teachers will then ask the class what shapes they saw, asking for volunteers to make the shapes they remember seeing from the presentation