

TITLE:

Dance and Probability

DEVELOPED BY:

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ART FORM: Dance/Movement Drama Music Puppetry Multi-disciplinary / _____**OBJECTIVE(S)/GOAL:**

Children will be able to:

- explore the concept of probability and chance
- use data collected to create dance sequences based on chance
- observe and record the sequence to be performed

CHILDREN'S PRIOR KNOWLEDGE NECESSARY FOR THIS EXPERIENCE:

- Familiarity with the story and characters of *Giraffes Can't Dance*
- An understanding of more likely and less likely and the concept of chance

VOCABULARY:**Arts Vocabulary**

Movement

Dance phrase

Choreography

Character

Curriculum Content Vocabulary

Chance

Probability

Pattern

Observation

MATERIALS NEEDED:

Dice, coin, or spinner

Book: Any book with at least three characters (for this experience: *Giraffes Can't Dance* by Giles Andreae)

MAIN EXPERIENCE:

Introduction

Gerald has a problem, he can't dance. Every year the other animals get together for the annual jungle dance. They all laugh at Gerald and he gets very embarrassed. At the end of the story he meets a cricket who tells him that everyone can dance if they find the music they love, the music in their heart.

Warm-up

Ask the children to become the character and explore the movement of Gerald.

Can you show me your long giraffe necks? – Stretch and reach; What about your knobby, wobbly knees?

Use the character exploration to create a pattern dance. Dance lends itself to pattern very easily.

In this story, Gerald was not a good dancer until he learned to listen to the music he loved, the music in his heart. Let's all find the music in our heart.

Using a strategy that asks the children to create the movement, filter their choices and choose movement that everyone can do altogether and safely.

How does this make you want to move? Can you show me how this beat makes you want to move? I see arms moving... let's try this move...

- A. Up and over
- B. Slide to the side
- C. Turn around, turn around

Now let's put our A-B-C movements into a dance sequence so we can create our pattern.

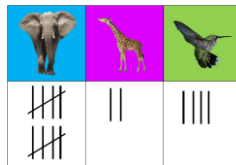
Main Experience

This dance experience introduces probability and recording of data to help create a dance phrase, allowing chance to help dictate the choreography.

For this experience, a coin, die, or spinner may be used. Create a spinner with three characters from the story represented for each of the three significantly-different-sized spinner segments (but these could also be any action or movement). Ask the children to create a movement that will be used to represent each character/animal. Gerald's move looks like this: reach high; the elephant's movement could be a stomp; and the movement for the bird could be a fluttering twist.



Ask the children which animal are we more likely to land on, the elephant or the bird? *Which are we less likely to land on, the bird or the giraffe? We would spin our spinner a set number of times, let's say 16...and we might land on the elephant 10 times, the giraffe 2 times, and the bird 4 times.*



We would then create a probability dance by consecutively doing the movements we created to represent each character corresponding with the number of times the spinner stopped on that character:

- Elephant – Stomp – 10 times
- Giraffe – Reach high – 2 times
- Bird – Fluttering twist – 4 times

Closing

Ask the children to perform the probability dance sequence.

INTENTIONAL QUESTIONS:

Open-Ended (i.e. children contributing possibilities, thoughts)

How did we predict which animal/character the spinner would land on most often?
If we did this again, what do you think is most likely to happen? Why?

Application to Other Areas (i.e. making connections to other areas)

Scientific process: Record data, observe and record observations

MODIFICATION:

When working with older children, give them a dance problem to solve.

Give them the pattern template and ask them to work in a small group to solve the problem. It might look something like this:

Dance Sentence

Axial	Axial	Locomotor	Axial	Axial	Locomotor
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Move your upper body 2 times (axial) / Locomotor movement / Move your lower body 2 times (axial) / Locomotor movement. Repeat.

Now teach your pattern to another group. This is great cooperative learning.

You could ask the children to link them together in some way, or to use the movement they generated to create a new pattern.

For a Kindergarten class give children blank dance sequence charts and ask them to be observers and watch their classmates and record what they are seeing.

Observation – recording and collaboration are important parts of STEM thinking.

Observation Form

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