

## Using Drama to learn Science : A Thematic approach : Exploration

## (with Life and living processes as scientific focus)



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| Strategy               | Description of Strategy  | Key learning   | Possible activities   | Suggestions for  |
|------------------------|--|--|---|--|
|                        |  | objectives   |   | question starters  |
| 1. On the table<br>(1) | Examining objects (often<br>unusual or to be used in<br>an unusual way)<br>Group/s are presented<br>with an object under the<br>Easicope/ Digital<br>microscope/ Visualiser<br>The teacher models open<br>questions –what could it<br>be? Why is it that colour?<br>I wonder what it might be<br>used for?<br>Another approach is to<br>ask each child to reflect<br>and prepare a shared<br>thought : "I wonder<br>ifbecause" | To explore objects, to<br>speculate and evaluate<br>evidence to identify<br>objects.<br>To observe and listen<br>carefully.<br>To take turns and share<br>ideas. | <ul> <li>Place an interesting object e.g. Gourd into a bag. Slowly reveal using the Easiscope to support the development of observation skills. Questions that could be asked.</li> <li>What could it be?</li> <li>Why do you think it is that?</li> <li>What does alook like?</li> <li>Any other ideas?</li> <li>Revealed a bit at a time.</li> <li>Could it be a?</li> <li>Ahas Has this got?</li> <li>What might it be?</li> <li>Which questions are answered by the physical appearance of the object?</li> <li>What further information might we need to identify/ be sure?</li> </ul>   | What could it<br>be?<br>How might it<br>work/move/feed?<br>What further<br>information might<br>we need?<br>What do other<br>people think? |
| 1. On the table<br>(2) | Group/s are presented<br>with an object. The<br>teacher models open<br>questions –what could it<br>be? Why is it that colour?<br>I wonder what it might be<br>used for?  | To raise questions<br>To explore and collect<br>evidence to describe an<br>object or living<br>organism.   | Teacher/ another pupil is a Plant Hunter returned from an<br>expedition with an unusual specimen.<br>Children in a circle. Plant Hunter gathers the children round<br>and introduces them to the specimens e.g. Picture plant.<br><i>What do you think these are? What might they be? Are they</i><br><i>alive or dead? Animal or plant?</i><br>Teacher in role models and describes aspects of the<br>specimens. Children are Scientists and have their note books.<br>Teacher encourages them to record in their own way. E.g. 'It<br>is in soil. Let's write it down/ did you make a record of that?'<br>Are there any bits that are not so alive?<br>Why might that be?<br>How does it feel? Should we touch it? It might have toxic sap! | What do you<br>think?<br>What might it/they<br>be?<br>How do you<br>know?<br>How might we find<br>out?                                     |





| 2. Spontaneous<br>role play. | In small groups children<br>develop arguments about<br>science in everyday life.<br>By working 'in role' they<br>can explore views and<br>ideas which may be<br>different from their own. | To explore ideas and<br>possibilities about how<br>to look after living<br>things (for example in a<br>zoo, or protecting those<br>taken out of 'normal'<br>habitat).<br>To take turns. | <ul> <li>What questions have you got?</li> <li>Is there something in the pod?</li> <li>Why is it that shape?</li> <li>Does it eat things?</li> <li>What could we do to find out about its shape?</li> <li>Does it live in a hot place/ cold place?</li> <li>Are insects attracted to it? How might that be?</li> <li>What doesn't it have? Any flowers?</li> <li>Has it got liquid inside?</li> <li>How could we find out?</li> <li>Divide the children into small groups e.g. five per group. Give the children a range of characters e.g. look after a particular animal.</li> <li>All children who look after the same animal research and role play what they will do to look after that animal.</li> <li>Got to feed the animals in the zoo.</li> <li>How many animals live in our enclosure?</li> <li>What do they eat?</li> <li>How much do they eat?</li> <li>Do they eat the same food everyday?</li> <li>How are they fed?</li> <li>What else do they need apart from food?</li> </ul> | What could they<br>do?<br>How do you think<br>they feel/worked it<br>out?<br>How much should<br>we?<br>How might we?<br>What else might<br>they?<br>How might we find<br>out? |
|------------------------------|---|---|--|---|
| 3. Hot seating               | Where teachers or<br>children are placed 'in<br>role' as experts to answer<br>questions from their<br>peers.  | To explore problems<br>and make reasoned<br>decisions.<br>To ask questions and<br>listen carefully.<br>To listen and respond  | <ul><li>Who shall we put in the hot seat?</li><li>Hot seat children to find out what animal they are (not shared at beginning of activity).</li><li>Introduce problem scenarios.</li><li>E.g. Zoo runs out of fish. Weather becomes very cold.</li><li>Children have dropped rubbish into the cage of their animal.</li></ul>  | Should we?<br>What might<br>happen if?<br>Why do we<br>think?   |





|                        |                             | appropriately to others    | Children choose children to hot seat on the different             |                      |
|------------------------|-----------------------------|----------------------------|---|----------------------|
|                        |                             | ideas.                     | scenarios.  |                      |
|                        |                             | To respect what others     | Final problem: a baby seal has been found on the beach. It        |                      |
|                        |                             | may think.                 | seems very poorly. <i>Discuss in small groups –what kinds of</i>  |                      |
|                        |                             |                            | questions would we need to ask?                                   |                      |
|                        |                             |                            | Should they bring it to the zoo or not?                           |                      |
|                        |                             |                            | What will it eat? Why is it ill? Might we catch it?               |                      |
|                        |                             |                            | Hot seat the Zoo keeper of different animals.                     |                      |
| 4. Mind Movies         | Using audio and/ or         | To use a variety of        | Children are asked to close their eyes and listen.                | What can you         |
|                        | visual stimuli to support   | senses to build up an      | Play (e.g. howling wind) sounds from Antarctica.                  | hear/ see/ feel?     |
|                        | the children to imagine     | imaginary picture of a     |   | How do you know      |
|                        | themselves in different     | place.                     | What kind of place are we?  | this place is like   |
|                        | places/ situations.         |                            | What sounds can they hear?  | that?                |
|                        | Group/s listen to a         |                            | What can they see/ hear/ feel?                                    | Is it hotter/ colder |
|                        | description/ sounds of a    |                            | What do they think the place is like?                             | than here?           |
|                        | location. Whilst their eyes |                            | How is it different to where you live?                            | How do you           |
|                        | are shut the group/s can    |                            |   | know?                |
|                        | be asked questions about    |                            | Ask the children to open their eyes. Show a picture of the        | How else is it       |
|                        | what they can hear/see      |                            | Antarctic.  | different to here?   |
|                        | so they can build up their  |                            |   |                      |
|                        | own picture in their mind.  |                            | The picture may help them imagine being in a different place.     |                      |
| 5. Freeze-frame        | A freeze-frame is a frozen  | To use bodies to enact     | Ask the children to get into groups of 6. Ask them to be a tree.  | What are             |
|                        | moment. Group act out a     | and communicate            | I hought tap the different parts.                                 | you/what kind of     |
|                        | phenomena, on hearing a     | about ideas.               |   | tree?                |
|                        | cue e.g. "freeze" or a clap | To explore ideas about     | What are they? What do they do? Why are they important?           |                      |
|                        | the group/ individual       | now things work (eg:       | Ash the shilder to thick of a portion legitime of the s. Obilders | How are you          |
|                        | stops and holds their       | different parts of a plant | Ask the children to think of a particular type of tree. Children  | athered Why?         |
|                        | position. This allows the   | different parts of a plant | might want pictures of different types of tree.                   | others? why?         |
|                        | class in turn (through a    | or compare different       |   |                      |
|                        | carouser) to examine and    | kinds of tress).           | Ask the groups to look at the freeze frame. What type of tree     |                      |
|                        | shows and thinks            |                            | do other groups think they are and why?                           |                      |
| 6 Miming               | Dairs/ groups/ individuals  | To explore and douglan     | Divide the children into groups of four. Ask them to act out      | M/hat can you        |
| 0. Willing<br>Movement | mime movement allowing      | ideas on how things        | bow frogsnawn changes to a frog                                   | see/ hear/ feel?     |
| wovement               | them to explore different   | change (e.g.:              | Ask the group to choose a significant moment                      | SEE/ 11Edi/ 1EE1?    |
|                        | them to explore different   | change (e.g.,              | Ask the group to choose a significant moment.                     |                      |



|                 | types/ ways of moving      | frogspawn going          | Thought tap.  | What is around        |
|-----------------|----------------------------|--------------------------|---|-----------------------|
|                 | affected by different      | to become a frog).       | Questions the teacher might ask are listed in next column.  | you?                  |
|                 | circumstances.             |                          |   | What is like to live  |
|                 |                            |                          | After each group has 'demonstrated' how their frogspawn becomes a frog, it is appropriate to have a reflective    | where you do? Or      |
|                 |                            |                          | discussion and consider what questions did the activity raise?<br>How might they find answers to these questions? | are?                  |
|                 |                            |                          |   | How do you feed       |
|                 |                            |                          | Watch a video clip of the life cycle of frogs.  | and/or move?          |
|                 |                            |                          | How might your mime change now you know more.   |                       |
|                 |                            |                          | Pair up the groups and ask the children to watch and question   |                       |
|                 |                            |                          | each other about what they are showing and how they may   |                       |
| 7 Madelline     |                            | To build up a model of   | have further developed their mime.  |                       |
| 7. Modelling    | nhysically (re)creating a  | how a an organism        | stem Position them as the stem (trunk) of the tree. Ask them  | showing?              |
|                 | model of an object and     | develops or works (e.g.  | to chant 'I support'.   | What does             |
|                 | illustrating how it works. | : explore seed           | Ask a further four to be roots. Position them sat at the base of  | this/that illustrate? |
|                 |                            | germination or moving    | the stem with legs (roots) spreading away from the trunk. Ask   | What would you        |
|                 |                            | a large object from one  | them to chant 'I take up water'   | show next?            |
|                 |                            | part of the Island, over | Ask four to be leaves. Position them (perhaps on a chair  |                       |
|                 |                            | it is rocky)             | extending their arms outwards from the trunk ). Ask them to chant – 'I make food'                                 |                       |
|                 |                            | 11 13 TOORY).            | Ask the children how they might show flowers. What might  |                       |
|                 |                            |                          | they chant?   |                       |
|                 |                            |                          | How might their chants change in different situations? E.g.   |                       |
|                 |                            |                          | winter/ summer.   |                       |
| 8. Mini-        | The teacher tells the      | To familiarise           | Teacher in role as Mary Anning (wearing a head scarf,   | What is it? What      |
| nistorical play | group a story –wnich       | inemselves with          | carrying wicker basket and a large tossil). Lake the children   | do you notice?        |
|                 | the story members of the   | To explore ideas on      | a fossil. How might you feel? What is it like to discover   | found anything        |
|                 | aroup become the           | scientific thinking      | something? What did Mary Anning do that makes her an  | like that before?     |
|                 | characters in the story –  | To better understand     | extraordinary scientist?  | What could it be?     |



| they could be given a      | the nature of science. | How would she |
|----------------------------|------------------------|---------------|
| prop/ costume item to      |                        | feel?         |
| signify who they are or a  |                        |               |
| simple line to say. There  |                        |               |
| might be moments in the    |                        |               |
| story when whole groups    |                        |               |
| are engaged or moments     |                        |               |
| when they could offer      |                        |               |
| their thoughts on the      |                        |               |
| events of the story e.g. a |                        |               |
| meeting, Through this      |                        |               |
| enacting the story is      |                        |               |
| brought to life.           |                        |               |