



Crazy Animals

Summary

One day a young child brought a new book into class for her 'show and tell'. It was a book which mixed up the heads, middle and legs of a set of animals to make a whole collection of 'crazy animals'. The teacher had an idea about investigating how many different animals could be made. Another teacher thought of including a dice to explore the possibility of making these animals. Another thought of naming the animals to add interest and to make recording and publication easier. Yet another realised the algebra possibilities. This lesson is truly the composite of creative teachers sharing and learning from each other.

Features

Discuss the part these features play in the lesson. Are there other features important to you?

- Group work
- Materials
- Working Mathematically connections
- First hand data
- _____
- _____
- _____

Lesson Stages

1. Animal Books
2. Dice games
3. Computer simulation
4. Predicting whole and part giraffes
5. Adding a third animal
6. Analysing data
7. Publishing

Issues or Discussion Points

- This lesson could be presented as a pencil and paper style of question about combinations and arrangements which is usually reserved for Year 11. The tweak of providing animal booklets has opened the mathematics to children as young as Year 1, who deal with it quite satisfactorily at their level.
 - Is mathematics truly as 'hard' as we make out?
 - Would it be easier for the Year 11 students if we also used structured materials at that level?
- The synthesis of this lesson into the rich whole that it is, has occurred because teachers have been provided with time to share, discuss and explore as professionals on a journey to learn how to teach. What provision do we make within our school/district/system to regularly grow together in this way?

Straw Vote

After teaching the lesson, please rate each of the following features (out of 10) as to its contribution to the overall quality of the learning experience. This exercise will provide a basis for staff discussion.

1. First hand data _____
2. Group work _____
3. Problem solving _____
4. Recording and story writing _____
5. Graphing using the children's bodies - kinaesthetic learning _____
6. Software simulation _____
7. Working Mathematically opportunities _____
8. Hands-on materials _____
9. Symbolic representation _____
10. Insight into children's intuitive probability understanding _____
11. Algebra link _____