LITERACY AND NUMERACY
IN
PDHPE
ACHPER CONFERENCE 2013
Presented by Morgan C. Davies
Numeracy into playground games

1. Number hunt

**Equipment:** number cards (1-30), number line,

Hide a set of number cards (one per student) in the playground. The students have to find a number and bring it back to an agreed point.

<table>
<thead>
<tr>
<th>Early stage one</th>
<th>Arrange themselves on the number line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1</td>
<td>Arrange in patterns – e.g. even numbers sit, odd number stand</td>
</tr>
<tr>
<td>Stage 2</td>
<td>Multiples of 3, 4, 5, 6 – hands on heads</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Use larger numbers</td>
</tr>
</tbody>
</table>

2. Find the number

**Equipment:** number cards x 2

- Place cards around the playground and there should be a couple of copies of the numbers
- Teacher asks a question to the class and they have to run and stand by the appropriate number
- If they get the answer wrong – get students to explain their answers
- Use different locomotor skills to move around the area

<table>
<thead>
<tr>
<th>Early stage one</th>
<th>Jump to a number that is smaller than 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Run to the number that is one more than 6</td>
</tr>
<tr>
<td>Stage 1</td>
<td>Skip to a number that is between 5 and 8</td>
</tr>
<tr>
<td></td>
<td>Jump to the number that is double 3</td>
</tr>
<tr>
<td>Stage 2</td>
<td>Run to the number that is 18 less than 30. <strong>12</strong></td>
</tr>
<tr>
<td></td>
<td>Hop to the number that is double 23. <strong>46</strong></td>
</tr>
<tr>
<td>Stage 3</td>
<td>Side gallop to a prime number between 21 and 31. <strong>23</strong> and <strong>29</strong></td>
</tr>
<tr>
<td></td>
<td>Square root of 25. <strong>5</strong></td>
</tr>
</tbody>
</table>

3. Farmer, Farmer, may we cross your golden river!

**Equipment:** number cards 1-50

- One student is named ‘farmer’ and stands in the middle of the designated playing area
- The other students stand at one end of the playing area
- The students call out ‘farmer, farmer, may we cross your golden river?’
- The farmer replies... see table below
- Student(s) of the number called get a free run across to the other side
- On the teacher command, the remaining players must run to the other side without being caught by the farmer
- If a player is caught, they join the farmer (build up tag) and they take a turn making up a question

<table>
<thead>
<tr>
<th>Early stage one</th>
<th>If your number has a 2 in it</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1</td>
<td>If your number is an odd number</td>
</tr>
<tr>
<td>Stage 2</td>
<td>Equals the sides on a hexagon. <strong>6</strong></td>
</tr>
<tr>
<td>Stage 3</td>
<td>Equals 20 when added to 8. <strong>12</strong></td>
</tr>
</tbody>
</table>
4. Factor it in

**Equipment:** laminated cards with 2, 3, 4 and 5, questions

- Place students into 4 groups – one on each corner
- Teacher calls out a question - if the answer is in the area they are standing, the students perform an action devised by the teacher e.g. 10 star jumps, 10 squats, 10 basketball jumps and 10 mountain climbers
- Students who are in a corner that is a factor of that number will move to another corner. Movements include: jumping, skipping, walking, hopping or marching.

| Early stage one | Is the number before 6  
|                 | Is the number 7 less than 10  
| Stage 1         | Is an even number  
|                 | Times (multiply) these two numbers to make 6  
| Stage 2         | Is a factor of 12  
|                 | Is an odd number  
|                 | Say a number that is a multiple of 2, 3, 4 or 5.  
| Stage 3         | The number of angles in a pentagon  
|                 | The number of 20's in 100  

Literacy in playground games

1. Ready Set Spell

Equipment: mini whiteboards, markers, cones

- Mark a starting line, where all students are spread out with their mini whiteboards
- Scatter the crayons an equal distance away from each student (along a line approx 20-30 metres away)
- Teacher calls out a word and on the command "Ready, set, spell" the children run to the crayons, selecting one and then run back to their whiteboards, write the word down, run back to the middle to place the crayon back and return to the start. Continue on until they have spelt out 10-20 words.
- Call different types of locomotion along with the spelling word. e.g. Teacher calls out, "Skip, Banana" or "Hop, exercise".

2. Boggle

Equipment: laminated alphabet letter, cones, whiteboard and marker for scoring

- Divide the class into two teams
- The students of each team are given a different letter of the alphabet
- The teacher says a word and the pupils in both teams whose letter occurs in the word named, run to a set of cones
- They take their places in the order in which their letter occurs in the word
- When the pupils have taken their proper position, they call out the letters they represent, spelling the word
- The first group to complete the word and spell it correctly wins one point for their team.
- If the letter occurs twice in the same word, that pupil representing that letter takes his place where the letter first occurs in the word and shifts to the second position, so as to help complete the word.
3. **Hop to it!**

**Equipment:** chalk, whiteboard and marker for recording

- Draw several hopscotch boards on your playground. Add a letter to each square
- Divide students into groups of 4-6. Ask each group to stand by a different hopscotch board
- The first person in each group may hop on any letters in any order to spell a word. The other students follow in turn. Each player must spell a new word.
- Ask groups to rotate and play on each of the hopscotch boards.

**Example:**
- In the diagram above, students could spell: son, stop, top, ton, pay, lay, not, pot and more.
- They may also spell these words if they can hop over letters without touching them: tops, snap, play and others.

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WASTNORE
STOPNALY
MIDECHSL
FROAGBID
NHETOAKS
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4. **Letter Rush**

**Equipment:** Letters of the alphabet with extra letters for the vowels, whiteboards and markers

- scatter one set of letters around the designated playing field
- split the class into even groups of 5-6 and line them up in relay formation
- on the whistle, the first person from each team runs to collect a letter, brings it back to their group, tag the next team mate who runs to collect another letter until there are no letters left to collect
- The team must then try to spell out a word with the letters their team has collected (some teams may have more letters then others if they ran faster)
- Each group gets: 2 points for words with 2 letters e.g. at, in.
  - 3 points for words with 3 letters e.g. ran, she.
  - 4 points for words with 4 letters and so on.
- Have the students tally up and record their points for each round.