



Using Learning Metaphors to Support Talk & Reflection on Learning

Victoria Symons and Deborah Currans
Wooler First School, Northumberland

Project aims

In Year One of the project we worked with Victoria's Year 4 class to focus on marking ladders as a tool to support children's self-assessment of their writing.

Dimensions of the study

This year our class of 27 Year 2 and Year 3 children have been trialling the use of learning metaphors to support them as they reflected on their learning.

Summary of findings

Children can use and understand the complex vocabulary of the 5Rs through the use of learning metaphors but they need to be involved in the process of creating their own visual representations to make it meaningful to them.

The children have gained a wider vocabulary for talking about their learning.

If we want the children to recognise, discuss and begin to transfer their learning we have to provide them with regular opportunities to stop and reflect.



PROJECT FOCUS

Tools for learning

5 R FOCUS

RESPONSIBILITY



READINESS



RESOURCEFULNESS



RESILIENCE



REFLECTIVENESS



CONTEXT

The school

Wooler First School is situated in the small market town of Wooler, at the foot of the Cheviot Hills. The town of Wooler is a very close community and is relatively isolated. Wooler First School is larger than most local First Schools in the area and pupil mobility is low. Our catchment area has increased significantly in the last year following the closure of two local First schools. Currently there are 93 pupils in school, but there is a falling roll due to the impact of rural depopulation, an ageing population and a falling birth rate.

Uptake of Free School Meals (FSM) is generally low, with some parents using seasonal employment to supplement their income, taking them just above FSM entitlement. However, the current recession has seen the percentage of FSM increase from 6% to 14% this year.

The school's ethnic mix is White British, so we are working closely with Northumberland's Cultural Diversity Team to ensure that our children gain a wider view of life in a multicultural society. Currently there are 15% of children on the Special Educational Needs (SEN) register, with two statemented children.

This is the second year of the school's involvement in the Learning to Learn in Schools Phase 4 project.

Year groups involved

Throughout this project our class of 27 Year 2 and Year 3 children have been trialling the use of learning metaphors to support them as they reflected on their learning.

Personnel involved in the project:

Victoria Symons and Deborah Currans are the staff involved in the project.

We have both worked at the school for four years. This is the second year of our involvement in the project and we have been developing an idea that emerged last year during our work on Marking Ladders to support children's self-assessment of their own writing.

Victoria moved from Year 4 to a Year 2/ 3 class in September 2008, so this class has been the focus for our research. Deborah is the Head Teacher of the school and has been working alongside Victoria to develop this project.

THE PROJECT

Year One Project

At Wooler First School, we feel it is important to involve children in their own learning and our aim has been to develop and place more emphasis on self-assessment procedures.

In Year One of the project we worked with Victoria's Year 4 class to focus on Marking Ladders as a tool to support children's self-assessment of their writing.

A Marking Ladder lists all the things which should be evident in the children's writing and helps them evaluate their own work before submitting it for marking.

We found that Marking Ladders are a useful tool to help children focus on the process of writing and supports them when they are assessing their own work.

Moving forward

The final section of each Marking Ladder included a 'wish', where the children were expected to use the self-assessment they had undertaken during the main part of the Marking Ladder to identify their next step(s) for learning. We found that the children were not using this section effectively and in fact were not keen to do this.

We hypothesised that if we could find a way of encouraging the children to talk about their learning, they would be more willing and find it easier to complete the 'wish' section of the Marking Ladder.

We had read an article by Ruth Deakin Crick (2007) and been interested in her discussion of the use of 'animals' as learning metaphors. We decided to try this with our Year 4s in July 2008 by working with them to link an animal to each of the 5Rs. We started to use the 'animals' alongside the Marking Ladders to encourage the children to talk about the learning that they thought they had been engaged in during their writing task. We also asked them to write a story about one of our animals to start to introduce the 5Rs to the younger children in the school.

Unfortunately, we had to stop at that point as our Year 4s transferred to Middle School to start Year 5.

Developing this rationale

In September 2008, we decided to continue our work on Marking Ladders, but extended it to include Year 2, 3 and 4. However, for our focus area for the second year of the project we chose to continue our work on the use of 'animals' as learning metaphors with Victoria's new class of Year 2 / 3 children.

Research Question

How effective are learning metaphors in helping children to talk about and reflect on their own learning?

We hoped that by the end of the project the children would:

- begin to recognise the type of learning they have been engaged in;
- start to recognise the type of learning that is needed for a particular activity;
- begin to transfer this knowledge to other areas of their learning/the curriculum.

RESEARCH PROCESS

Evidence collected

We collected a range of qualitative data. This included:

- Mind maps (Nov 08 and July 09) of the children's thoughts / views about learning
- Pupil View Templates (Nov 08 and July 09)
- Children's pictures of what they think learning is
- Teachers' diary
- Interviews (teacher/child)

Diary of teachers' choices

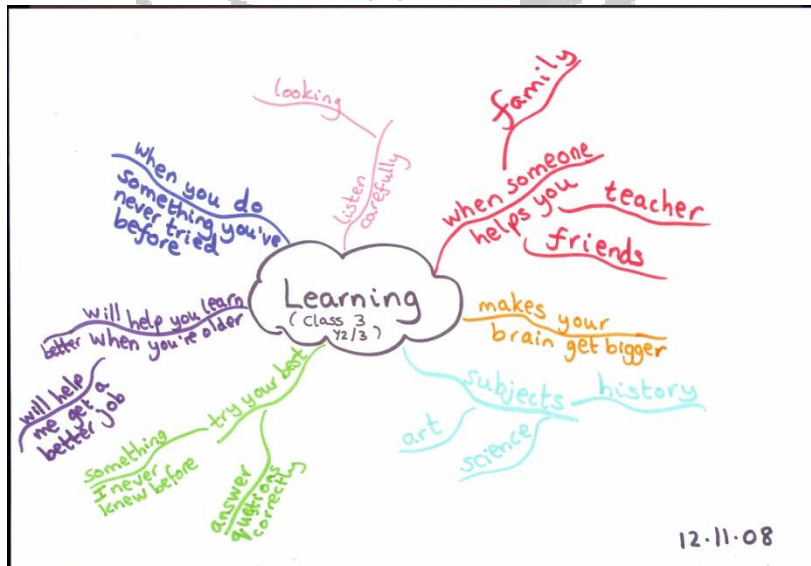
November 2008

1. Mind Map:

We started the project by working with the children to create a mind map. We asked them to tell us about 'learning' but there were lots of 'blank' faces, so we used a series of questions to prompt. These were:

- 'What is learning?'
- 'How do you learn?'
- 'How do you know when you are learning?'

The result can be seen below.



Mind Map showing pupils' understanding about learning in November 2008

2. Pupil View Template:

All children completed a Pupil View Template on 'Learning'.

3. Picture:

We modified an idea we had seen Elaine Hall use with our Year 4s last year. At the time Elaine had asked the children to draw cartoons (six pictures) of themselves learning. We asked each child to draw a picture of what they think learning is.

December 2008

1. Children's interviews:

The children interviewed each other asking the question, 'What is learning?'

2. Thinking skills activity based on the Christmas story – pictures from stories.

At the end of the session we briefly discussed 'Readiness', 'Resourcefulness', 'Resilience', 'Responsibility' and 'Reflectiveness' and what the terms meant. The children were then asked if they thought they had used any of these skills.

Examples of the children's comments include:

W – "Resourcefulness – cos I was getting the ideas out of my head."

C – "Readiness and Resourcefulness – because I needed the resources of a pen and pencil and ready to draw once you stopped."

A – "The Reflective one – you read the bit and we had to think about what to do."
 Victoria – "Do?"
 A – "Well like draw."

January 2009

1. Session 1

We asked the children to design animals to represent the 5R words because we wanted to give them an opportunity to develop their understanding of each of the 5R words and take ownership of the metaphors as we had found the children's ownership of a tool to be important in our research on marking ladders.

2. Session 2

Recap of 5R words. The children worked with a partner to see which words they could remember (oral). They were then asked to discuss the meaning of each word with a partner.

As a class we looked at the children's animal pictures of each word and decided which animal was the best representation of each word. The class then chose an animal to represent each word and agreed a definition. These were:

- Jaguar (Readiness) because it is always ready to catch its food;
- Owl (Reflectiveness) because it looks like it is thinking;
- Elephant (Responsibility) because they look after each other;
- Giraffe (Resourcefulness) because it can reach up to get its food;
- Bear (Resilience) because it always tries to get the honey or the fish.

They then drew the animals and cards were made to represent each of the Rs. These can be seen to the right.

3. Session 3

The children worked in pairs to plan and write a story about one of the animals.

<p>Elephant</p> 	<p>Jaguar</p> 
<p>Responsibility Look after your work and always try your best!</p>	<p>Readiness Ready to do your work and work hard!</p>
<p>Giraffe</p> 	<p>Owl</p> 
<p>Resourcefulness Make sure you have everything you need to do your work and use your imagination!</p>	<p>Reflectiveness Thinking about your work and making your work better!</p>

<p>Bear</p> 
<p>Resilience Work hard, always try your best and don't give up!</p>

February 2009

Small cards with pictures of the five animals (definitions of the words on the back) were attached with velcro to the children's tables for easy access and as a reminder.

Large pictures of each animal (definitions of the words on the back) were stuck on the wall to allow easy access during plenary sessions.

The cards were used as a reflective tool and were used at different opportunities during the day to discuss learning.

March – June 2009

Thinking time was introduced at the end of each day. Using the animal cards on the wall as a prompt, the children were asked to reflect on their learning and choose an animal(s) that they thought they had been like during the day. They were also asked to explain how and why.

July 2009

In the summer we repeated the mind map and Pupil View Template exercises to explore any differences in the students' perspectives.

At this point, although the children were able to talk about learning in more detail than they had done in November, they were not referring to the animals so we decided to collect some additional data. This involved, individual interviews – pupil/teacher



The Summer Mind Map activity

We asked the children to draw the animal(s) that they thought had helped them most with their learning this year and then write down why/how they thought it had helped them.

DISCUSSION OF RESULTS

Findings

When we talked to the children in July they were more aware of what learning is and could say what they think it is. This can be seen in the pupil view templates below:

FOR LEARNING



Pupil views templates

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However we noticed that they were using their own words rather than the vocabulary we had given them. Although they could articulate what the animals were for if they were asked about how they were learning they would always talk about 'concentrating', 'understanding' and 'doing something new'.

By the end of the year children had a wider view of what learning is and a greater range of vocabulary to describe it. Children recognised that learning happens rather than just 'learning is learning' or 'learning is good/fun'.

One child was even heard to exclaim in November,

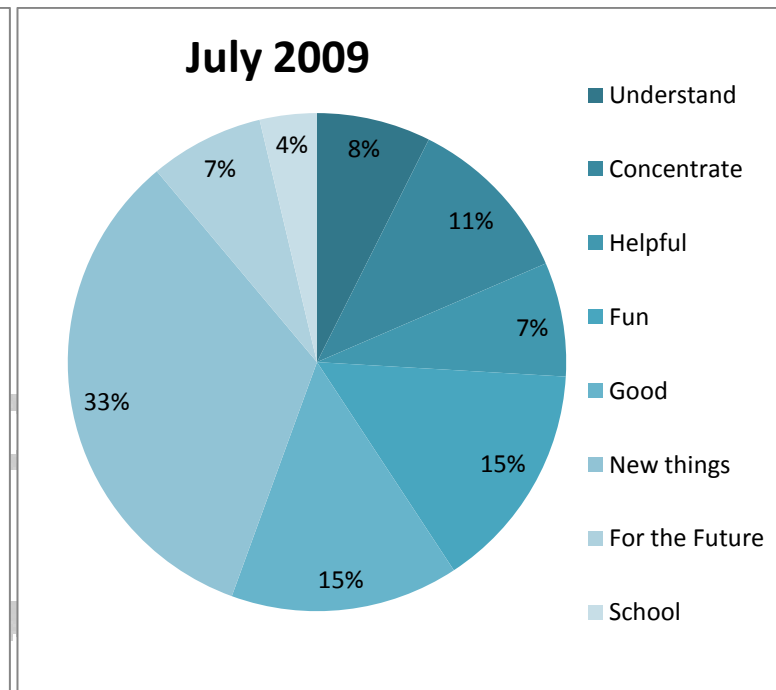
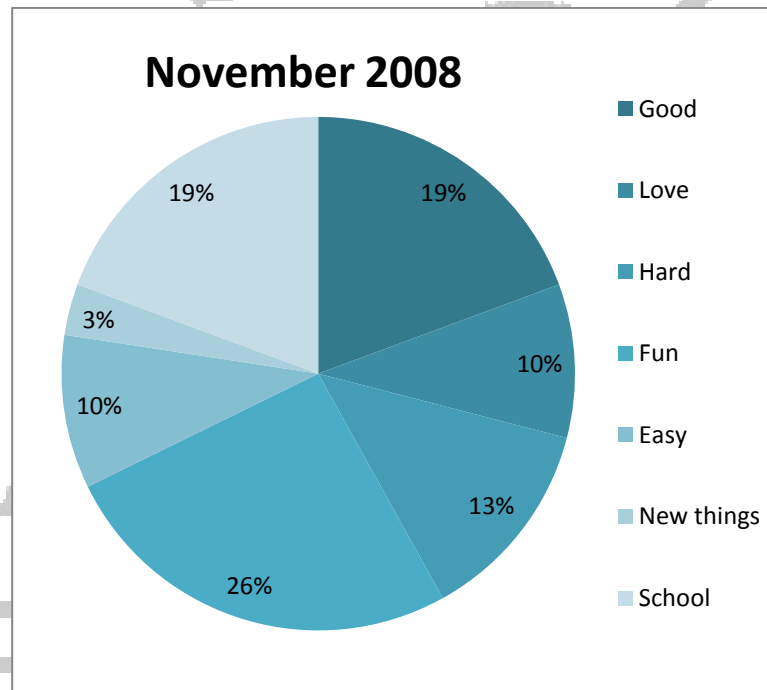
"but Mrs. Currans.....learning is learning" (K Y3 girl)

We recognised that this was representative of a lack of interest and knowledge about the learning process.

The language the children used had completely changed. For example:

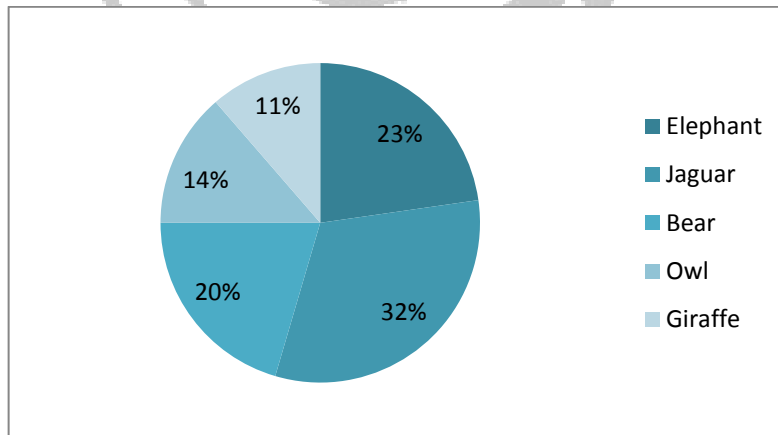
Nov – good, love, hard, fun, easy

July – understand, concentrate, helpful, fun, good, new things, for when you are older.



Tally charts showing the words children used about learning in the Pupil View Templates in November and July (before and after the intervention)

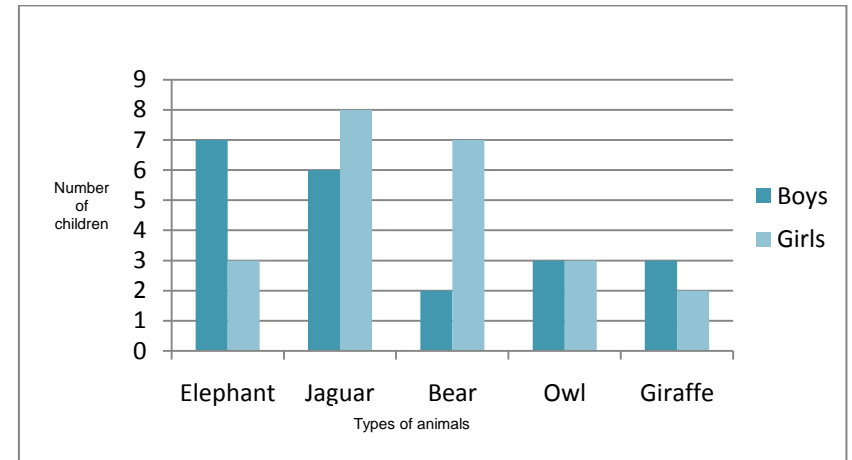
We wanted to know whether the animals had any impact on the children's thinking about their learning, so we asked them to draw the animal they thought had helped them most during the year. The results are presented below:



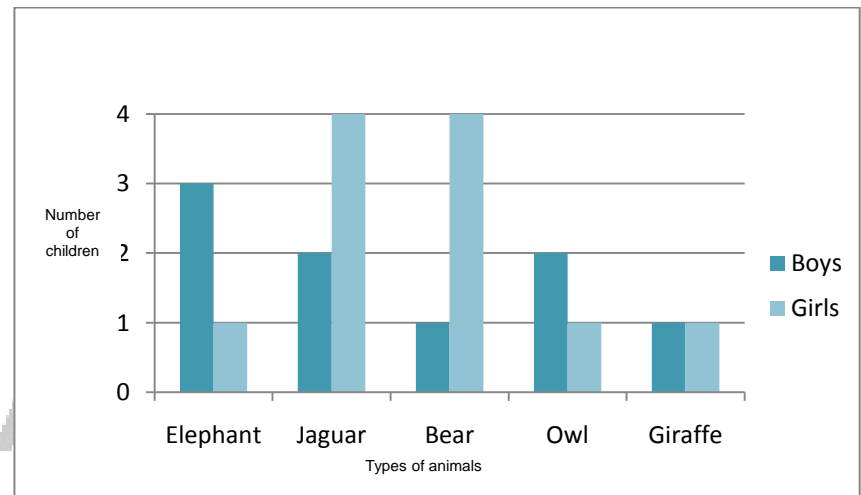
Pie chart of whole class pupil 5R preference

The Jaguar (readiness) was the most popular overall. It was particularly preferred by the girls. Interestingly, the elephant (responsibility) was preferred by the boys. An initial gender difference was the fact that the bear (resilience) was seen to be more popular with girls. These results can be seen in the graphs below for the whole class.

Additionally the data was explored for the different age groups it included (frequencies are given). The Year 3 pupils and the Year 2 pupils were seen to have quite different preferences.

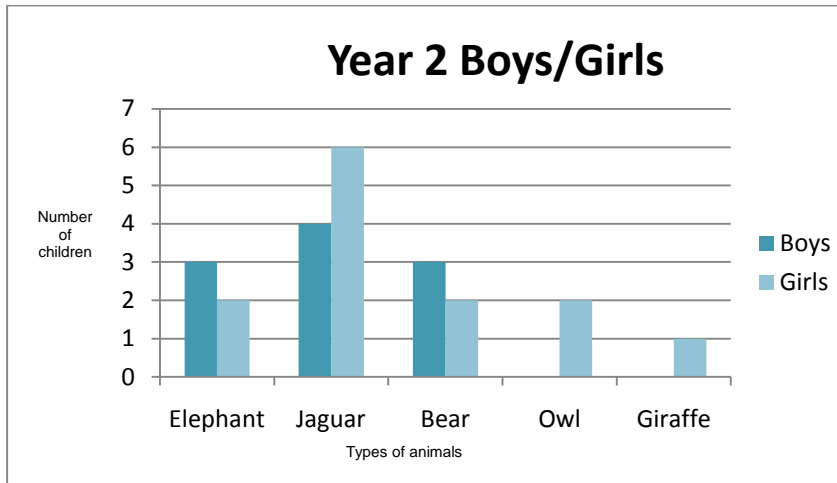


Bar chart showing gender differences for the animals representing the 5Rs (whole class)



Bar chart showing gender differences for the animals representing the 5Rs (year 3 members of the class)

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Bar chart showing gender differences for the animals representing the 5Rs (Year 2 members of the class)

As well as looking at the statistics we also wanted to find out whether they were linking the animal to their learning. All of the children chose an animal and linked the reasons for this choice to learning. Here are some examples:

Jaguar (Readiness)

"The jaguar has helped me because it helps me to be ready to do my work or to do sport or listen and learn." (H, Y3 girl)

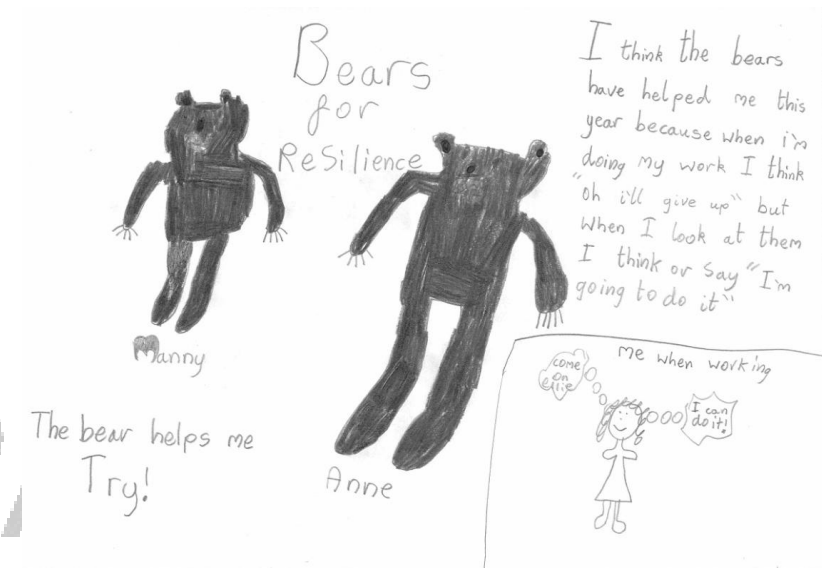
"I think that I have used a jaguar because we have got all the things I need for lessons like numberlines and wordbooks and multilink and books." (C, Y2 girl)

Elephant (Responsibility)

"I think the elephant has helped me a lot because it reminds me to be careful with my work.....I think that the elephant helps me with my work because it reminds me to be responsible for all my mistakes." (R, Y2 boy)

"The elephant helps me look after my work and try my best. It gives me confidence to do things I've never done before." (J, Y3 boy)

Bear (Resilience)



Drawing by one of the pupils to explain her choice of favourite R: the bear

"I think the bear has helped me because it made me keep on trying." (W, Y2 boy)

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"Bear because it always helps me try my best and don't give up because I can do better." (G, Y3 boy)

We did not think that putting the animal pictures on the table had been helpful as the children didn't appear to use them. However, talking to the children in the interviews revealed they had been referring to the pictures far more than we had expected:

"The elephant helps me look after my work and the jaguar helps me be ready and reminds me to be ready.....They give you confidence to do things you've never done before." (H, Y3 girl)

"The 5 Rs are readiness, responsibility (he points to animal cards on table). It's just to help you with your work." (R, Y2 boy)

"It (points to the animal cards) helps you with your work because if you forget what readiness means you can just look on your table because we've all got the 5 animals." (R, Y2 boy)

"The elephant (favourite)....because when I just look at the picture I'm learning responsibility." (R, Y2 boy)

"It gives me a lot of confidence. It helps me when I need to be a bit better with my work." (J, Y3 boy)

"I like the bear because when I am doing my work I look at the bear and think I'm not gonna give up because sometimes I think I will give up and then I look at the bear and think 'no' I won't give up." (E, Y3 girl)

CONCLUSIONS

We have found children can use and understand the complex vocabulary of the 5R's through the use of learning metaphors. However, they need to be involved in the process of creating their own visual representations so they have a deeper understanding and ownership of the metaphors used.

Through the introduction of the animals as learning metaphors for the 5 Rs we have provided the children with a wider range of vocabulary to talk about their learning.

The animals gave the children the opportunity to talk about the process of their learning. Consequently they became more able to articulate their views on learning.

We have realised it is good to stop and give the children time to reflect on learning and how and where it has or is taking place. As class teachers we often think that this is something we do. However in plenary sessions although we frequently talk about the content of the lesson or reflect on it, often we do not take time to reflect on the type of learning that has taken place. Using the animals allowed the children a time to think, discuss and identify the process of learning.

Next steps

Victoria will continue this process with her class as they move into Year 3 and 4 by putting the animal cards back on wall to remind children and using them at the end of each week to reflect on learning. She will also conduct a survey to see if the children feel it would be helpful for the animals to remain on their tables.

Deborah will introduce the concept of the animals to the Y1/2 class she is teaching this year.

On a Friday both class teachers will take time to stop and reflect with the children on learning through the week with the aim of working towards keeping a learning log in the future.

Summary

Children can use and understand the complex vocabulary of the 5R's through the use of learning metaphors but they need to be involved in the process of creating their own visual representations to make it meaningful to them.

The children have gained a wider vocabulary for talking about their learning.

If we want the children to recognise, discuss and begin to transfer their learning we have to provide them with regular opportunities to stop and reflect.

REFERENCES

Deakin Crick, R, (2007) Learning how to learn: the dynamic assessment of learning power, *The Curriculum Journal*, **18**(2): 135-153

CAMPAIGN
FOR LEARNING

