AUCHINRAITH PRIMARY SCHOOL

POSITION STATEMENT:
Curriculum for Excellence - Maths and Numeracy
August 2012

‘To face the challenges of the 21st century, each young person needs to have confidence in using mathematical skills and Scotland needs both specialist mathematicians and a highly numerate population.’ Building the Curriculum 1

The purpose of this position statement is to collate our reflection on developing practice in session 2011 – 2012. It aims to support new staff in active learning approaches which are being embedded within the school and to develop a shared understanding of how we envisage quality experiences for our pupils.

The following points highlight:

Key developments in teaching and in children’s learning towards a more active approach in terms of:

- The importance of **mathematical talk** and **children talking mathematically**
- Children **thinking mathematically to apply skills** in different areas of maths and across learning
- Deepening leaning by **making connections** and linking concepts

- A range of ways in which evidence is being gathered and shared.

- Implications and next steps for development in Session 2012 - 2013

Key developments in teaching and in children’s learning towards a more active approach

*The importance of mathematical talk and children talking mathematically*

- The tasks we provide encourage children to discuss **how** to approach the task
- Increased interaction between the children to enable them **to learn from each other**
- Questioning comes from the children as well as the **variety of ways we use questions** to take learning forward
- **Sharing the learning outcomes** helps to focus talk and discussion
- Through games and collaborative work children are using maths in **appropriate contexts**
- Children seem to have **more ways to talk about their learning**
- Talk becomes **a means for children to process learning in their own words**. They are more willing and able to talk about experiences and question each other about their learning.
- Children are **more confident** in helping each other and seem less **afraid to get things wrong**.
- We need to **go with the flow** and not be too precious about doing exactly what was planned
• Staff interest in visiting other classes to observe how active learning happens in other classes.
• Children ask more ‘Why?’ questions and don’t just accept what they are taught is the end
• Introductions and plenaries are more discussion based
• Children are given more time to discuss.

Children thinking mathematically to apply skills in different areas of maths and across learning
• A wider use of various strategies for learning and recognizing that children learn in different ways: by investigating, exploring, challenging, doing, picking concepts apart, looking at calculations from different view points and in different contexts.
• Active learning is process orientated rather than outcomes orientated
• Children are more aware of why and what they are learning and how their skills can be used outside Maths.
• More thought about all of the factors in a child’s learning environment.

Deepening learning by making connections and linking concepts
• While playing the games children are more inclined to talk about what they are doing and make connections about their learning and how it applied to the real world.
• It helps children use their learning in realistic settings and in this way they see the relevance and importance of what they are learning
• Less rote teaching of teaching and more understanding of the links and connections between multiplication and division
• Making links to previous lessons to enable children to see how it ties up and to make progression easier.
• Children can apply basic knowledge of concepts and use this to investigate more complex calculations and problems.
• They are working towards a deeper understanding of number bonds and linking numbers to the outside environment.

A range of ways in which evidence is being gathered and shared
The range of ways in which evidence is gathered reflects the wider range of activities in which children are engaged. Evidence includes:

Listening to interaction, measured by children’s success
Children discussing their own learning, explaining rules to other, self and peer assessment
Questioning, discussion
Written assessment
Observational notes
Worksheet, jotter, PPMs and pupil books
Learning diary, logs
AiFL strategies - Traffic lights, lolly sticks, thumbs up / down
Work on walls
Quick fire
Photographs
Games to demonstrate understanding
Implications and next steps for development in Session 2012 - 2013

• Consolidate language and extend children’s use of language
• Become more confident in using resources and cards
• Familiarity with I Planner
• More independent working for children
• Implement Early Level and work with Nursery to ensure seamless transition
• Work with Beyond Number
• Work on word problems
• More structured assessment to ensure progression
• Learning logs for children
• Continue to build confidence of teaching Maths in a more active way whilst taking account of all learning styles
• Closer monitoring of group wok (games)
• Suitable challenge and support
• Continue to develop thinking skills and/or confidence to discuss ideas
• Encourage active participation from all children – listening, talking, thinking, doing
• To build on present success by developing skills further.

August 2012
OXGANGS PRIMARY:

A draft set of aims shared by all staff

Our aims

- To enable children to enjoy maths, to help them make links and connections and apply their learning to the real world.
- To develop children’s confidence in sharing their ideas, articulating their thinking and talking about decisions, strategies and their successes in maths
- To enable children to explore a variety of experiences in a supportive climate
- To help children build up a wealth of strategies to use in a range of situations

Key features of effective sessions have included:

A Play – based approach
The use of ICT
Not one correct way of doing something
Actively engaging children in their learning
Making links inks to real life
Explorative activities
Using maths conversations – to teach others, explain learning and thinking
Using concrete materials which show links and engaged all the children
Talking partners
Children demonstrating understanding
Being able to teach one concept e.g. ‘simplified’ linking addition and subtraction then being able to differentiate / challenge at processing stage.
Specific visuals e.g. more than / less than crocodile
Children being given ownership, choice, freedom in their learning, sharing their thinking and given challenges to arrive at an answer
A draft set of aims shared by all staff
Key features of effective sessions have included: