



# Cueensland Government K./ndergarten I ewsletter

**SEPTEMBER 2021** 

# How we can introduce numeracy in the early years

Does using the word "mathematics" in early childhood make you feel uneasy? What kind of maths can 4 and 5-year-olds really do?

# What's the difference between numeracy and mathematics?

Let's start by taking a closer look at these terms. According to the Australian Curriculum, Assessment and Reporting Authority (ACARA), "Numeracy encompasses the knowledge, skills, behaviours and dispositions that students need to use mathematics in a wide range of situations. It involves students recognising and understanding the role of mathematics in the world and having the dispositions and capacities to use mathematical knowledge and skills purposefully." (ACARA 2021)



So, mathematics is the abstract study of topics such as numbers, structure and space, while numeracy is the practical, day to day application of mathematical concepts.

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# FROM THE NOMINATED SUPERVISOR'S DESK

Here we are in September already!!

We recently had a past family donate some lovely resources from a teacher friend of theirs. We have taken out the things that our children here at the Centre may be able to use. But there are some things that we can't use so if anyone would like to take anything, they can be found near the sign in kiosk, so you are welcome to help yourself to whatever you need.

Thank you so much to all of the parents who have been so helpful when their children are unwell, keeping them away from the Centre and bringing in medical clearances



for their return. It is important for us to try to contain any cross infection of germs as illness can take hold and spread quickly. Please continue to keep up the wonderful awareness of illness and keep your children at home if they are unwell or displaying any signs related to Covid-19 or

other infectious ailments. We do understand this can be trying and frustrating for parents taking time off work however in order to keep the general health of the Centre in a stable place we need to follow our exclusion policies for not accepting ill children.

## **UPCOMING EVENTS**

# <u>SEPTEMBER</u>

**Child Protection Week** 

**Friday 10**<sup>th</sup> **September** – Dress in white and bring a gold coin donation

### Crazy Hair Day

**Wednesday 15<sup>th</sup> September** – Make your child's hair as crazy as possible and bring a gold coin donation to help us raise funds for Cystic Fibrosis!

### Talk Like a Pirate Day

Friday 17th September – Dress up as a pirate.

# **World Peace Day**

**Tuesday 27<sup>th</sup> September** – Children will participate in activities

# **COMMUNITY LINKS/EVENTS**

# **Naughty Little Kids**

If you are looking for a fun little adventure to do as a family, I can recommend a visit to Naughty Little Kids at Peak Crossing. The kids (and **Brooke**) loved being so hands on with the baby goats and really loved the taste tests at the end of the tour.

They run farm tours every Sunday between 1pm and 5pm. On one of the tours you will get to pat and feed our kids, milk a goat by hand, have ricotta made in front of you, learn about goats, and sample gelato.

Cost of tour —

Adults: \$15

Children (under 18): \$5 (12 mths & under are free),

Families (Two adults and six children): \$35

Times: Sunday 1pm – 5pm, except public holidays.

You will find the farm at: 1531 Ipswich-Boonah Rd,

Peak Crossing QLD 4306

You can call our office on : 07 5467 2752 — 8:30am

to 4:00pm

\*\*\*\*\*\*\*You need to book online\*\*\*\*\*\*







#### CHILD PROTECTION WEEK

This week is Child Protection Week, we will be participating in white balloon day on Friday the 10<sup>th</sup> September. All children are asked to wear white and bring a gold coin donation so we can fundraise for **Braveheart**, who does great work to protect children who suffer from abuse.

Kindy will be participating in Australia's biggest child safety lesson on Tuesday the 7<sup>th</sup> at 9am. This lesson teaches the kids about protecting their bodies and learning when it is ok to say no. Braveheart came out and did a show for us and we purchased an information kit from them filled with activities that the children will participate in over this week.



Thank you to all of our Dads who came in to celebrate **Father's Day** with us. The kids loved doing their shape paintings and sharing in a morning tea with you.





Brooke and Candice NOMINATED SUPERVISORS



# NURSERY NEWS Reading

Our toddlers have shown a big interest in early reading, by self-selecting and looking through story books. Babies, toddlers, preschoolers, and even older children all benefit from having a caregiver read to them. You don't even need a large personal library of books to get started.

Think beyond the store — you can find a wide variety of books at your local library, secondhand shop, or Little Free Library. You can even encourage your child to borrow books from, and lend them to, their friends.

Babies ages 12 to 18 months may find books with pictures of other children doing everyday things interesting. Same goes for books that have animals, television characters, or other familiar



scenes in them. For this age group, you may look for books that have more detailed pictures and a simple story or progression of events. We celebrated **Book Week** from

23rd August by reading our favourite stories and exploring new ones too. Children were invited to dress as their favourite character from a story.



### Dress ups

Children love to explore the dress up rack, they self-select their favourite item and have carers to help them to put them on. Dress up encourages creative





thinking, social and communication skills, while learning about different types of people in our community.

# **Cognitive Development**

We have been providing lots of cognitive learning spaces for the children like building blocks, ring stack, activity centres, and sorting.

These activities help your child's ability to think, understand, communicate, make memories, imagine, and work out what might happen next.

This is because play is one of the main ways that your child explores the world. Children at play are experimenting, thinking, solving problems, and learning all the time.

Spending time playing with your toddler is especially good for your toddler's cognitive development. That's because playing together builds your relationship and sends a



simple but powerful message - you are important to me.



This message is key to helping your toddler learn about who they are and where they fit in the world. It also gives your child confidence to keep exploring and learning about the world.

#### Father's Day

We hope all our Dads had a very happy Father's Day - from all of us at **St Brendan's** we hope you enjoyed your special day and gifts!

# Spring

As a new season starts, we will be learning all about, warmer weather, flowers and insects, exploring and hands on sensory experiences. Spring-time – when the whole wide, blooming, cheeping, croaking, wriggling world is coming back to life and the sun is shining more – brings out the outdoor adventurer, discoverer, and scientist in every toddler!

Until next time

Miss Sylvia, Miss Rehana and Miss Suvada.

#### **TODDLER NEWS**

We would like to welcome **Alex**, **Louis**, **Evander** and **Cali** into the **Toddlers' Room**.

## **Science Week**

Infants and toddlers are natural scientists. They are curious and they love to explore and learn. Science is not just a body of knowledge. It is a way of thinking and acting, a way of trying to discover the nature of things. Science learning at any age involves curiosity, exploration, and discovery. These come naturally to most infants and toddlers. We did a few experiments to let them learn science!

# **Colour Changing Milk**

Some very unusual things happen when we mixed a little milk, food colouring, and a drop of dish detergent. We let the toddlers experience making their own experiment with colour changing milk.



They were amazed watching the changes to the different colours. They watched as the magic happened such that they wanted to do it again and again.



#### Vinegar Volcano

We made a realistic looking volcano and the toddlers were very excited to watch as the volcano erupted. We poured a small amount of vinegar into the volcano to create the baking soda and vinegar reaction, then watched as the volcano erupted. We kept adding vinegar a little at a time and watching as the vinegar reacted with the baking soda until the volcano no longer erupted any longer.

# The Science Bit:

When baking soda is mixed with vinegar, a reaction takes place and makes a vinegar "volcano". The two chemicals, acetic acid (in vinegar) and sodium bicarbonate, mix and react to create carbonic acid. This chemical is very unstable and instantly breaks down to carbon dioxide and water. The bubbles that we see are the carbon dioxide escaping from the mixture.







#### Red Nose Awareness Day

On 13th August we did lots of red themed activities to help learn about the importance of Red Nose Day. We had some red play dough on the tables. We have been really into play dough recently and love getting our fine motor skills going as we mould the play dough with our hands and fingers into all sorts of shapes. Having red play dough today excited us as it was the same colour as the clothes we were wearing. We also ate red fruits and had red jelly!

During group times, we spoke about the importance of Red Nose Day and how it was a special day for us to give money to the sick children in hospital to help them get better.







Miss Anna and Miss Nusrat

## JUNIOR KINDY NEWS

Play and learning are intertwined. The educators nudge into children's play to take it from where they are to where they could be. In our Junior Kindy room, the children are learning so many things as they busily play with their friends and educators. Here is the summary of children's learning experiences for the last few weeks:

Science experiments: We performed different science experiments to teach children the concept of chemical reactions and changes in nature. The children





participated in Magic Milk science and volcano eruption experiments and learned about the science of nature as we talked about different materials, natural changes and weather conditions. We explained to the children how weather changes over time and performed rain and cloud experiments with shaving foam and paint.

Eye hand coordination: We organised activities to develop children's eye and coordination skills. They practised putting beads in threads and learned to maintain eye hand coordination. The children made necklaces and other jewellery pieces by putting beads in threads and pipe cleaners. The children also threw objects in containers from a distance and developed fine and gross motor skills. Outdoor play: Outdoor play is always fun for the children where they explore nature and natural resources. They played with sand, water and in the garden and learned to appreciate the qualities of nature. Most of the Junior Kindy children liked to spend time on the swings and took turns to have a swing. They help one other on the swings by pushing each other to go higher and learning to be kind.

Amanda's Coffee shop: Role play helps children learn social skills and to be empathetic while in a fun and engaging environment. In the Junior Kindy room, the children's favourite area for role playing is home corner where they find meaningful materials such as cooking stuff, toy babies and dress up costumes. Amanda was



running a coffee shop and Zahlia and Delsa were customers. The children learned to interact with others in a fair way as Amanda prepared and served coffee to Zahlia and **Delsa**. The children are learning to be kind and fair.

Rocks: We thank Henry's mother for allowing Henry to show his beautiful rocks to his friends. The children looked at the rocks and learned about the textures, colours and weights of rocks. We provided a weighting scale and children measured the weight of rocks to understand the concept of heavy and light objects.

We as educators nudge into children's play to scaffold their learning and we believe that young children achieve all Early Years Learning Framework Outcomes while they are immersed in their play. We children's update learning experiences everyday would like feedback from our families.



Thank you.

Miss Pari, Miss Tania and Miss Penny

#### KINDY NEWS







#### Science week

We started **Science Week** by asking the question "What is Science?". The children soon discovered that science is many things. Science encompasses all sorts of things both living and non-living. Science teaches us as human beings

about the world in which we live and how to connect to it. During **Science Week**, the children participated in a number of experiments including rain clouds, slime making, magnets and exploring how things move.

#### **Book Week**









The children were encouraged to bring a book from home and to dress up as a character from their book. The teachers read the books to the children and the class discussed the stories. **Book Week** was lots of fun with many of our families getting involved and providing some awesome costumes.

# **Shapes Around Us**









The children develop an understanding of shapes and what they are. They have learnt about the four primary shapes which are the circle, square, triangle and rectangle. The children then participated in a variety of rich and meaningful learning experiences based on the four primary shapes. The first activity was matching the words of the shapes with a large shape. Then, when the children had an understanding of each shape, they were encouraged to draw the shapes on the white board. Following on from this, the children developed an understanding that shapes are all around us. All children had the opportunity to participate in a shapes scavenger hunt and explore different shapes in the learning environment. The children used shapes as stencils to make artworks and explore the lines of shapes.

#### Transition To school

Very soon, I will be starting on transition statements. A transition statement contains information about your child and their developmental milestones. The purpose of the transition statement is to give your chosen school a snapshot of your child, their interests and abilities. Transition statements use data collected over the year about your child and is a very important part of your child's transition to school. Your school and your child's classroom teacher will use the transition statement as a guide for knowing how to meet your child's needs at school. I will approach you with a consent form to create a transition statement. Once I have consent to create the transition statement, it will be created and shared to a network called a "portal" where your chosen school will be able to access information from the transition statement. Your child's transition to school will begin in the last term of school where they will have the opportunity to explore and become familiar with the school environment and the teaching staff. If you have any more questions or would to like to know more about the transition to school process, please come to talk to me.

#### **Hot Weather**

The weather is heating up again so I would ask all parents to please encourage their children to wear sun smart clothing, a hat and to drink plenty of water.

If you have any questions about the program or would like to share any ideas please come and discuss them with me.

Kind regards,

#### **Andrew and Bella**

Kindergarten Room

How we can introduce numeracy in the early years.... (Cont'd from page 1) by Karthika Viknarasah

# How is numeracy approached in the Early Years Learning Framework?

There are many references to numeracy in the Early Years Learning Framework, which include:

- Numeracy is the capacity, confidence and disposition to use mathematics in daily life.
   Children bring new mathematical understandings through engaging with problem solving."
- Outcome 2: Children demonstrate spatial awareness and orient themselves, moving around and through their environments, confidently and safely.
- Outcome 3: Children create and use representation to organise, record and communicate mathematical ideas and concepts.
- Outcome 4: Children contribute constructively to mathematical discussions and arguments.

 Outcome 5 : Children demonstrate an increasing understanding of measurement and number using vocabulary to describe size, length, volume, capacity and names for numbers

Early numeracy is so much more than recognising numbers and learning to count. Some of mathematical concepts described in the EYLF include:

- Spatial sense
- Structure and pattern
- Measurement
- Data
- Connections and exploring the world mathematically

# How does this apply to very young children and babies?

You may be wondering what kind of mathematics a baby could understand.

At 4 months old, a baby realises that two shapes or **objects** side-by-side are actually separate objects. This is the beginning of one to one correspondence and counting skills.

At 12 months old a child can begin to predict the **sequence of events** such as the sound of running water in the bathroom means bath time. This is the emergence of an **understanding of time and sequence**.

# Subitising - the foundations for addition and subtraction

Subitising is an important skill that educators can help foster in young children. Subitising is when you are able to look at a group of objects and realise how many there are without counting. This skill helps children to understand what numbers mean or how many 'things' a number refers to. It can develop children's pattern recognition as well as develop cardinality (knowing that the last number-word used in counting determines the total number of items in the set).

By separating and combining numbers through subitising, children lay the foundations for addition and subtraction. It also helps children to understand order irrelevance.

- Using dice, dominoes and cards can help children build subitising skills.
- Using fingers to sing counting rhymes or play games as well as games involving hidden items can also help foster subitising skills.

### Introducing numeracy through music and movement

Another great way that mathematics can be included in an early learning setting is through music and movement. Probably the closest connection between music and math's is that they both use patterns.

Music has repeating choruses and sections of songs and in math's patterns are used to explain and predict the unknown. Research also shows that children who learn their academics through music retain the information better than those who learn the same concepts by verbal instruction. It is also easier to remember information when it is put into a rhyme or song (*Elofssonet al. 2018; Holmes & Hallam, 2017*).

Think of the hand washing song that you might use in your own setting.

Why use a song?

Because it facilitates memory and sequencing. You might have other processes that you have set to music.

#### Making mathematical learning visible to families

By making mathematical learning visible to families when we communicate our program with them, we can help families to see how easily numeracy skills can be included as part of day to day activities.

Using dice, dominoes and cards can help children build subitising skills.

Using fingers to sing counting rhymes or play games as well as games involving hidden items can also help foster subitising skills.

For example, explaining the mathematical learning that is taking place during a cooking experience such as measuring, estimating, volume and time, can help families to understand how they can practise these skills at home as well. Educators can also discuss with families the importance of talking children through these experiences and helping children to recognise these concepts while they are participating in order to help cement their understanding.

# Why it's important for early educators to be mathematically proficient

Being proficient and confident with math's lays the foundation for lifelong learning. As children become more numerate and experience feelings of success and even joy in their early mathematical experiences, they gain confidence as learners. This intrinsic motivation can encourage children to challenge themselves even further. In order for us to be able to teach mathematical concepts in a play based setting, we need to be knowledgeable and comfortable with using mathematics in our everyday lives and applying numeracy in early childhood settings.

# References:

ACARA. (2021). Retrieved 6 July 2021, from https://www.acara.edu.au/