Implementation guidelines for indicators of preschool numeracy and literacy
in government preschools

Government of South Australia
Department for Education and Child Development

Contents

What are the expectations of preschool sites?

2015

All preschool leaders and teachers will become familiar with the indicators of preschool numeracy and literacy (the indicators) during 2015. Teachers may use the indicators to inform their practice. They are not expected to use the indicators to monitor and report on children's learning and development.

2016

From the beginning of 2016, preschool teachers will be required to use the indicators to inform their planning and teaching, to monitor children's numeracy and literacy development, and to inform the *Statement of learning* for discussion with and reporting to families. The information will also be used to support the transition of children from preschool to school.

How will sites be supported to meet these requirements?

» Sites will be supported by early years experts from the Office for Education and Office for Children and Young People
» Preschools will receive two printed copies of the updated indicators during Term 2, 2015
» Introductory sessions on the indicators will be provided from Term 2, 2015
» Professional learning, resources and support materials will be made available
» Sites and partnerships will be supported to develop familiarisation and implementation plans.

What are the responsibilities of preschool leaders and teachers?

Preschool leaders are responsible to the education director for leading the familiarisation process in their preschool during 2015 and for ensuring implementation of the indicators from 2016.

Teachers are responsible to their preschool leader for engaging in the familiarisation process during 2015 and for implementing the indicators from 2016.

How is numeracy and literacy defined today?

The national early childhood curriculum Belonging, Being & Becoming: the Early Years Learning Framework (EYLF) describes numeracy and literacy as follows:

Numeracy is the capacity, confidence and disposition to use mathematics in daily life. Children bring new mathematical understandings through engaging in problem solving. It is essential that the mathematical ideas with which young children interact are relevant and meaningful in the context of their current lives. Spatial sense, structure and pattern, number, measurement, data argumentation, connections and exploring the world mathematically are the powerful mathematical ideas children need to become numerate. (EYLF p. 38)

Literacy is the capacity, confidence and disposition to use language in all its forms. Literacy incorporates a range of modes of communication including music, movement, dance, storytelling, visual arts, media and drama, as well as talking, reading and writing. Contemporary texts include electronic and print-based media. In an increasingly technological world, the ability to critically analyse texts is a key component of literacy. Children benefit from opportunities to explore their world using technologies and to develop confidence in using digital media. (EYLF p. 38)

The indicators are underpinned by the principles, practices, and learning outcomes in the Early Years Learning Framework.

Think about

What theories, philosophies and understandings inform your practices about numeracy and literacy learning?

Does your site's definition of literacy and numeracy reflect the descriptions in the EYLF?

Do families see numeracy and literacy in the same way as the teachers?

Why have the indicators been developed?

The Early Years Learning Framework identifies that positive attitudes and competencies in literacy and numeracy are important aspects of communication and are vital for children's successful learning. The foundation for these competencies is built in early childhood.

The consultation that took place during the development of the DECD B-18 Numeracy and Literacy Strategy (the strategy) identified that parents and families wanted to better understand the numeracy and literacy achievements of their children. It also identified that teachers were seeking greater consistency in assessment and reporting practices.

The strategy identifies the need for indicators to support the tracking and monitoring of children's numeracy and literacy development (p. 25).

The indicators of preschool numeracy and literacy have been developed for teachers to use in a continuous cycle to identify, plan for, assess, monitor and report on each child's learning and growth.

The indicators have been developed to support teachers to extend and enrich every preschool child's numeracy and literacy learning.

Specifically, the indicators will assist teachers to:

» recognise and describe children's numeracy and literacy understandings and learning

» plan for each child's numeracy and literacy learning

» monitor and assess each child's numeracy and literacy learning

» identify children at risk in their numeracy and/or literacy learning

» share and report on observations of children's numeracy and literacy development

» reflect on and improve pedagogy for numeracy and literacy learning.

What are the indicators of preschool numeracy and literacy?

The indicators recognise that all children come to preschool with numeracy and literacy capabilities, which they demonstrate in their own unique way. They provide significant identifiers of children's numeracy and literacy learning and development at preschool.

The indicators:

» describe how a child sees, interacts with and explores their world

» identify aspects of numeracy and literacy learning that can be observed in the day to day learning context of a preschool

» are interconnected and not sequential.

The indicators connect with the Australian Curriculum general capabilities continua for numeracy and literacy. The learning continua in the Australian Curriculum describes the knowledge, skills, behaviours and dispositions that students can reasonably be expected to have developed at different stages of schooling.

More information is available at:

» www.australiancurriculum.edu.au

» www.earlychildhoodaustralia.org.au/wp-content/uploads/2014/01/ECA_ACARA_Foundations_Paper_FINAL-web.pdf

How are the indicators represented?

The indicators are represented in four concentric circles on the numeracy and literacy indicator charts. (p. 17-18)

» The child and the Early Years Learning Framework

» Learning processes

» Indicators

» Key elements

The child and the Early Years Learning Framework are positioned at the centre. The chart includes learning processes that underpin children's numeracy and literacy learning, indicators of numeracy and literacy learning and key elements that clarify the indicators.

The indicator chart is provided with guidelines for implementation and examples of practice. These three components need to be considered together to build teachers understandings of the indicators and to identify the implications for practice.
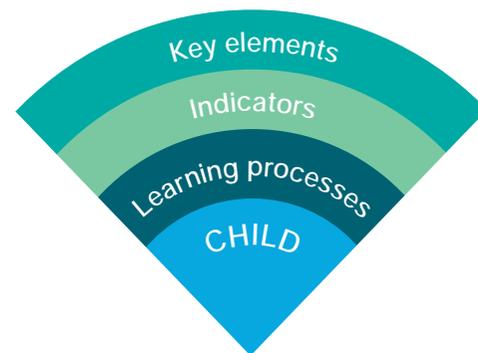
Numeracy

Literacy

The child and the EYLF
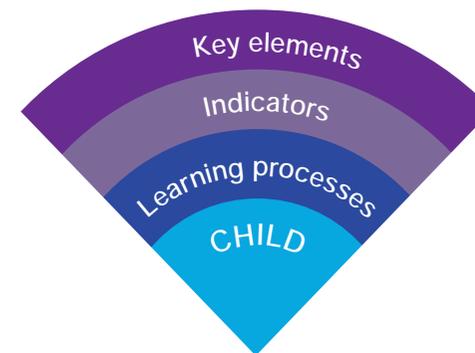
"Belonging, being and becoming are ways of thinking about children's entitlements as unique persons, active participants in their families and communities and capable learners from birth. Children are belonging, being and becoming all the time in ways that are indivisible and interconnected."[1]

"Involvement is a state of intense, whole hearted mental activity, characterised by sustained concentration and intrinsic motivation. Highly involved children (and adults) operate at the limit of their capacities., leading to changed ways of responding and understanding leading to deep level learning."[2]

Placing the child and the EYLF at the centre of the chart identifies that a child's learning is dynamic, complex and holistic, and recognises each child as a capable and competent learner who brings their diverse experiences, perspectives, expectations, knowledge and skills to their learning. The EYLF describes the principles, practices and learning outcomes that are fundamental to early childhood pedagogy and curriculum decision making.

Teachers need to think about how they consider the child and the EYLF in their teaching, planning and assessment approaches.

Talk and reflect about

What do I know about each child?

Do I see each child an as active participant and decision-maker?

Do I hold high learning expectations for every child?

1   Doc. 2, Educators Belonging, Being & Becoming: Resources CD 1 Material drafted by Charles Sturt University (CSU) Early Years Learning Framework Consortium, 2009
2   Early Years Learning Framework, 2009

Learning processes

Learning processes are specific learning behaviours that facilitate children's numeracy and literacy learning.

The learning processes in the indicators of preschool numeracy are interconnected and relate to all four numeracy indicators. In numeracy the learning processes are:

» noticing

» sorting

» patterning

» wondering

» communicating

» reasoning

» generalising

» visualising

» comparing.

The learning processes in the indicators of preschool literacy are interconnected and relate to all four literacy indicators. In literacy the learning processes are:

» communicating

» creating and making meaning

» encoding and decoding

» reflecting critically.

Teachers need to think about the extent to which their interactions, routines and the environments they provide support children's learning. They need to consider the learning processes when they plan for, assess and document learning.

"What is included or excluded from the curriculum affects how children learn, develop and understand the world."[4]

Indicators

The indicators of preschool numeracy and literacy provide eight indicators: four for numeracy and four for literacy. The indicators describe how a child sees, interacts with and explores their world.

The indicators describe the child being and becoming numerate and literate. They are conceptual, behavioural, interconnected and observable in the day-to-day learning context of a preschool. The indicators are not a list of teachable items that require children to be removed from the everyday learning environment.

Numeracy indicators:

» I explore and understand my place and space in the world
» I measure and compare my world
» I analyse, read and organise the data in my world
» I quantify my world.

Literacy indicators:

» I use language to connect with my world
» I understand the language of my world
» I engage with texts and make meaning
» I represent my world symbolically.
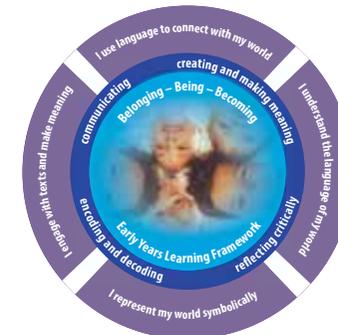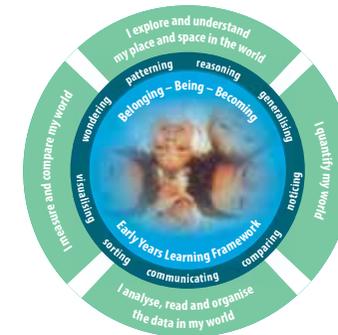
Teachers need to think about the extent to which the indicators are guiding their observations and decisions about children's numeracy and literacy understandings and learning.

4   Early Years Learning Framework, 2009

Key elements

Key elements of numeracy and literacy have been identified for each indicator. The key elements elaborate on each indicator and provide broad observable outcomes within the preschool context. They guide teachers in their observations and decisions about children's numeracy and literacy understandings and learning. The key elements are interconnected and relate to each other in multiple ways. As each child's learning and development is individual, children will demonstrate their knowledge and understanding of the indicators and key elements in different and equally meaningful ways.

Numeracy key elements
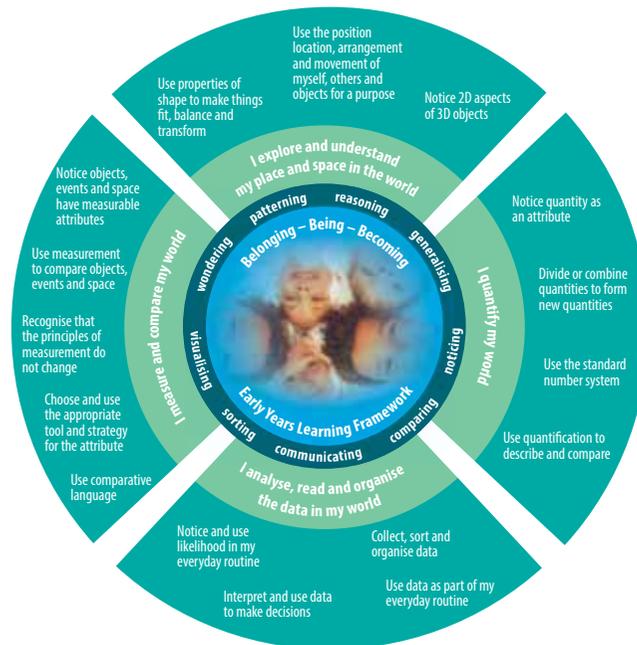
Literacy key elements
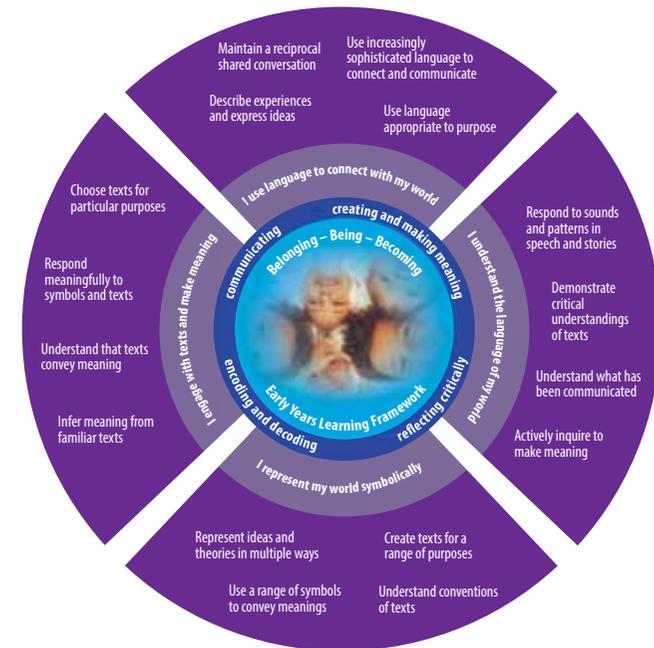
How were the indicators developed?

The indicators were developed through extensive consultation and informed by expert advice. National and international numeracy and literacy resources and frameworks also informed their development (see References).

In addition, feedback and suggestions provided by the members of the advisory groups and professional associations identified below significantly contributed to their development:

»   The Literacy and Numeracy Reference Group

»   The Literacy Expert Working Group and the Numeracy Expert Working Group

»   The 22 preschool sites involved in the trial of the indicators in 2014 (see Appendices).

How do teachers use these indicators?

Planning for learning

"Powerful learning cultivates curiosity and a love of learning. It relies on great teaching practices."[5]

"All children can be mathematicians if we create learning environments which encourage them to make their thinking visible, celebrate their ideas and challenge them to inquire beyond their current level of understanding."[6]

Teachers use the indicators to plan for learning. The indicators provide a focus for teacher observations. They help teachers recognise the ways in which young children develop numeracy and literacy understandings, skills, behaviours and dispositions.

The indicators support teachers to:

» set up learning environments that are intentional in enabling children to develop numeracy and literacy understandings

» plan for and construct learning experiences that are relevant to the children in their local context

» plan for individual children, for small groups of children and for the whole group of children

» identify and plan for children who may be disengaging and/or are not progressing in their learning

» develop individual education plans and negotiated education plans

» reflect on and improve pedagogy for numeracy and literacy learning.

Think and talk about

To what extent does our learning environment interest and engage children and enable the intended learning outcomes?

5   Gilbert and McLeod, 2006
6   Denise Neal, 2007

"Assessment has four characteristics: it is about everyday practice (in this place), it is observation-based (including talking to children), it requires an interpretation, and it points the way to better learning and teaching."[7]

"Assessment for learning is defined in the EYLF as a process of gathering and analysing information as evidence about what children know, can do and understand. It is part of an ongoing cycle that includes planning, documenting and evaluating children's learning." (p.17)

Assessment for learning

The indicators help teachers to develop a shared language in describing how children develop numeracy and literacy understandings and capabilities within a preschool context. They help teachers to focus their observations and identify the ways in which the children in their setting are demonstrating and developing numeracy and literacy skills, knowledge and understandings.

The focus is on the growth of each child in their numeracy and literacy learning.

Teachers build their capacity to effectively assess children's numeracy and literacy understandings and development when they:

» collaboratively build understandings of the learning processes and key elements in the indicators of preschool numeracy and literacy

» explore how the learning processes, indicators and key elements might be demonstrated by the children in their context

Teachers will use the assessment information they gather in partnership with other teachers to analyse their discoveries about each child's learning to inform their ongoing planning and their interactions with children. The dispositions and learning processes children display indicate how a child is engaging in their learning. They can also be important indicators of a child who might be struggling to develop their numeracy and literacy learning.

Each site will identify culturally and contextually appropriate evidence of children's numeracy and literacy understandings gathered over time. In this way assessment for learning becomes a formative assessment process – one that is authentic, ongoing and includes children and families.

Talk and reflect about

How do we identify the next steps in learning and how do we share that with each child?

Do our assessment practices involve high quality interactions, based on thoughtful questions, careful listening and reflective responses?

7   Margaret Carr; 2001

"Educators use a variety of strategies to collect, document, organise, synthesize and interpret the information that they gather to assess children's learning. They search for appropriate ways to collect rich and meaningful information that depicts children's learning in context, describes their progress and identifies their strengths, skills and understandings."[8]

"The term 'formative' describes assessment processes that are ongoing and occur throughout the learning process. They contribute to children's learning by enhancing teaching. The term 'summative' is used to describe assessment processes that typically occur at the end of a learning experience or activity and 'sum up' what has been learned."[9]

Collecting evidence and showing progress

The indicators support teachers to collect evidence that shows progress in children's learning.

Teachers can show a child's progress using the indicators in a range of ways. Evidence of children's understandings, skills and dispositions needs to be gathered in contexts that are familiar to children and collected over time.

Teachers use their professional judgment to make choices about the evidence of progress they will collect. For example, they may choose to identify the learning processes that a child is engaging in or they may choose to identify children's learning in relation to a particular indicator or key element.

There are many ways to collect evidence of children's numeracy and literacy understandings and development.

Evidence of understandings and progress in learning can be recorded in a range of ways and how this will be recorded is a site decision. Documented evidence demonstrating progress in learning may include written observations, annotated photographs, learning stories, jottings, observations, referral notes, reports, displays and newsletters. Evidence of learning can be recorded at an individual, small group and whole-group level.

Documentation is effective in showing progress when it makes learning over time visible to children, families, teachers and other professionals.

Talk and reflect about

To what extent are the environments and experiences we provide enabling children to demonstrate their knowledge, skills and dispositions?

Do we provide opportunities for children to contribute to the collections of evidence about their learning?

8   Early Years Learning Framework, 2009
9   Educators Belonging, Being and Becoming, Charles Sturt University, Resources CD, 2009

"Research tells us that when families, the community and educators have high expectations of children and students, high achievement is more likely. Students who are expected to learn and are supported and challenged to do so at a complex level are invariably more engaged and successful."[10]

Reporting

Teachers will use the indicators to support them to report on children's learning.

The information that is provided in individual education learning plans, negotiated education plans and the *Statement of learning* assists teachers and other professionals to communicate children's strengths and to plan for their ongoing learning.

Information collected using the indicators will be included in the *Statement of learning* for each child. The *Statement of learning* will continue to be written with reference to the Early Years Learning Framework.

Think about

How do we share information with children about their progress in a way that values their individual achievement?

Summary

The indicators of preschool numeracy and literacy:

» are underpinned by the practices, principles and outcomes in *Belonging, Being & Becoming*

» place the child at the centre as a capable and competent learner

» recognise that all children come to preschool with numeracy and literacy capabilities that they demonstrate in their own unique way

» provide a set of eight critical indicators of learning (four for numeracy and four for literacy)

» identify key learning processes that underpin numeracy and literacy learning

» are interconnected and not sequential

» are for teachers to use in a continuous cycle to identify, plan for, assess, monitor and report on each child's learning and growth

» support teachers to reflect on and improve pedagogy for numeracy and literacy learning.

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10   Great Start Strong Foundations Powerful Learners, p. 29

Numeracy chart

Use the position location, arrangement and movement of myself, others and objects for a purpose

Use properties of shape to make things fit, balance and transform

Notice 2D aspects of 3D objects

Notice objects, events and space have measurable attributes

Notice quantity as an attribute

I explore and understand my place and space in the world

patterning

reasoning

wondering

generalising

Belonging – Being – Becoming

Divide or combine quantities to form new quantities

Use measurement to compare objects, events and space

I measure and compare my world

I quantify my world

visualising

noticing

Recognise that the principles of measurement do not change

Early Years Learning Framework

Use the standard number system

Choose and use the appropriate tool and strategy for the attribute

sorting

comparing

communicating

Use quantification to describe and compare

Use comparative language

I analyse, read and organise the data in my world

Notice and use likelihood in my everyday routine

Collect, sort and organise data

Interpret and use data to make decisions

Use data as part of my everyday routine

KEY

- EYLF and the child
- Learning processes
- Indicators
- Key elements

Literacy chart

Segments (top, clockwise):

I use language to connect with my world
- Maintain a reciprocal shared conversation
- Describe experiences and express ideas
- Use increasingly sophisticated language to connect and communicate
- Use language appropriate to purpose

I understand the language of my world
- Respond to sounds and patterns in speech and stories
- Demonstrate critical understandings of texts
- Understand what has been communicated
- Actively inquire to make meaning

I represent my world symbolically
- Represent ideas and theories in multiple ways
- Use a range of symbols to convey meanings
- Create texts for a range of purposes
- Understand conventions of texts

I engage with texts and make meaning
- Choose texts for particular purposes
- Respond meaningfully to symbols and texts
- Understand that texts convey meaning
- Infer meaning from familiar texts

Inner ring (learning processes):
- communicating
- creating and making meaning
- reflecting critically
- encoding and decoding

Centre:
- Belonging – Being – Becoming
- Early Years Learning Framework

KEY
- EYLF and the child
- Learning processes
- Indicators
- Key elements

Examples of practice

The key purpose of the examples of practice that follow is to help teachers build their understandings about each of the indicators, key elements and learning processes in the indicators of preschool numeracy and literacy.

The examples of practice are play scenarios that provide examples of children's numeracy and literacy capabilities and learning demonstrated in their play in social contexts and in individual explorations.

The teachers who wrote the examples of practice have used the numeracy or literacy lens of the indicators to focus the reader on the numeracy and literacy aspects of the play scenarios.

The headings below assist with decoding the examples of practice:

The **INDICATOR** that is most evident is identified at the top of each example of practice.

The **KEY ELEMENTS** heading describes the elements that are most strongly evident in the play scenario.

The **OBSERVATION** heading describes the abilities/strengths/interests/behaviours that provide evidence for the indicator and the key elements identified in the example of practice.

The **PRACTICE AND REFLECTION** heading provides thought provoking questions as prompts for educator reflection on numeracy and literacy practice and children's learning.

CONCEPTS and LANGUAGE demonstrated by the children may also be identified in some examples of practice.

Numeracy

I analyse, read and organise the data in my world

Put your hand up if you can tell me the day today. It starts with a 'mmm'.

"Put your hand up if you can tell me the day."

"Let's sing the days of the week song."

These are instructions and questions I hear as I observe the small group of children playing 'preschool teachers'.

These children have set up an area they can use to 'teach' the other children. They gathered days of the week cards, weather charts, name cards, star charts and other visual routines we have in place for the whole group time.

They set up the daily timetable according to the day and what they remember happens on a particular day. For example, on a Friday we go to the library.

The conversation included the 'teacher' reminding children that they couldn't have fruit until they washed their hands. They counted the number of children and made a 'roll'. The play continued for some time incorporating many aspects of the preschool routine.

Mathematical concepts:

» Prediction

» Collecting and using data

» Routines

» Recording

Language:

» First, last, next, after

» Days of the week

Key elements:

» Use data as part of my everyday routine

» Collect, sort and organise data

Learning processes:

» Communicating

» Noticing

» Patterning

Observations:

» Communicating with the other children using observations from their whole group routines

» Using days of the week and weather charts to 'teach' their attended audience a 'new skill'

» Using predictions to plan their daily activities as they 'teach' their audience

» Recognising the routines and structures of the day as data

Numeracy practice and reflection:

» How do the routines and structures that educators display influence the children in their play?

» How do children reflect the data they collect in their play?

» Are there opportunities for children to extend their play by using the data they collect through observation? How can we as educators support this?

Numeracy

I analyse, read and organise the data in my world
I quantify my world

I found treasure!

Bob was outside searching for treasure in the sandpit.

"Look what treasure I found," he said.

Bob showed me a collection of shells that he had found in the sandpit and led me over to the collection we already had in the preschool.

He added them to the sorting tray before realising that the shells in the tray we already had were mixed up.

"That one can't go here. I will fix it." Bob started to sort the shells.

"This one goes here, they are small. This one goes here, it is big. I will put this one here, it is white."

Bob then decided to count them. It got too hard to count them in the tray so he lined them up in their own lines and counted them.

"What does that number look like?" he asked.

I showed him how to write the number on a piece of paper. He found his own small pieces of paper and wrote the number next to the shells. He then continued to do this for the remainder of the shells and attempted to write the numbers by himself.

"This one is the most," he pointed to the largest collection.

"I like this one the best," and "We don't have many of this one," were comments Bob made as he compared the groups of shells.

Mathematical concepts:

» Sorting and classifying

» Comparing

» Number

» Counting

» Collecting

» Grouping

» Organising

Language:

» Comparison—large, not many, small, same, different, most, more, many, big

Key elements:

I analyse, read and organise the data

» Collect, sort and organise data

I quantify my world

» Use the standard number system

Learning processes:

» Sorting

» Comparing

» Communicating

» Noticing

Observations:

» Collecting and sorting objects

» Using classification to describe groups

» Using mathematical concepts and language to describe groups—same, different, belongs

» Using number to describe groups—counted and written

» Recognising that the last number is how many

Numeracy practice and reflections:

» How can the environment be set up to encourage children to sort, collect and organise data in their everyday play?

» How consistently are educators using and promoting the language of sorting, collecting and organising in their interactions with children?

» How could Bob share his skills with other children?

» How could the skills Bob is using be extended into other areas of his play?

Numeracy

I analyse, read and organise the data in my world

It's raining!

The children are used to discussing the weather each day and talking about how the weather changes. Some children had recorded the weather each day.

Josie saw some children going out to help in the garden. Some had raincoats on and some didn't. Josie stopped at the door and looked at the sky. An educator noticed Josie and asked her what she was thinking.

Josie shared some of her thoughts.

"Should I put on a raincoat?" she said. "It is cold, I think it will rain. It rained yesterday, will it rain today? I saw the dark clouds yesterday and it rained, maybe it will again today. What if I get hot in my raincoat?"

Mathematical concepts:

» Cause and effect

» Predicting

» Collecting new information, looking at weather patterns, using prior knowledge

Language:

» Concepts—hot, cold, wet, dry

» What if, when, will we, what should we do

» Might happen, will happen, likely, unlikely

Key element:

» Interpret and use data to make decisions

Learning processes:

» Generalising

» Noticing

» Wondering

Observations:

» Making inferences based on data—weather patterns

» Making predictions and problem solving

» Responding to data and using the data to make a decision

Numeracy practice and reflection:

» How could we extend this learning? What ways could we record the learning and the data with the children?

» Do we observe children predicting?

» How do we know and record children's thinking?

» In what ways are educators encouraging children to investigate their ideas and make their own decisions?

Numeracy

I analyse, read and organise the data in my world

Will this be soft or hard?

The children and I were having fun at preschool in the park when we saw one of the activities was a sensory walk. Questions from the children started straight away when they observed what other children were doing.

"Should we have a go? The pinecones look spiky. I think they might hurt."

"It's a cold day—I think the water will be too cold."

"What does the seaweed feel like? It looks slimy. I slipped over on seaweed—I might slip again. I am never going to step on the seaweed."

"The feathers will be soft. Will they break?"

"It isn't fair, how did the bird lose its feathers? Did it hurt?"

Children spent time following the sensory pattern and talking to their adults about each step and what it felt like. Conversations discussed the different types of leaves and how they didn't always feel the same, and/or the different types of grasses, especially between real grass and the fake grass, and showed children that their beliefs may not always be true.

Mathematical concepts:

- » Comparing textures
- » Reasoning and hypothesising
- » Making predictions
- » Cause and effect
- » Trial and error

Language:

- » Language of chance—might, never, will

Key elements:

- » Notice and use likelihood in my everyday routine

Learning processes:

- » Comparing
- » Noticing
- » Generalising
- » Wondering

Observations:

- » Reflecting on what they know and making connections between their prior knowledge and new learning
- » Discussing their ideas and understandings
- » Giving other children feedback on their ideas and theories, using reflective thinking
- » Using the language of chance in play
- » Recognising that things may be different to their beliefs or experiences
- » Exploring and taking risks

Numeracy practice and reflection:

- » How can these questioning skills be transferred into everyday practice and play?
- » How can chance and hypothesising be promoted in children's play?
- » How can children be supported in recording their conversations, outcomes and stories?

Numeracy

I analyse, read and organise the data in my world
I measure and compare my world

Bluebells, cockleshells

Talia was making a garden bed in the sandpit. She grouped all of the flowers according to their colour and, when asked about her garden, explained, "All the red flowers are in this spot and these are the yellow ones."

Sam came over to see what Talia was doing.

"Can I have a flower?" Sam asked.

"You can have the long, blue one," Talia replied.

Talia then began rearranging some of the flowers. When asked about what she was doing, she explained that she was changing them so the long ones were together and that the other groups matched 'how big' they were too. Talia said she needed to do this so that when someone wanted a flower she knew which one to give them.

"How did you know which flowers to put together?" I asked.

Talia demonstrated how she had compared the length by holding the stems together. She was very deliberate in making sure the bottom of the stems were aligned and verbalised that this was important "so you know if it matches properly".

Talia organised her groups from shortest to tallest and then invited other children to come and choose flowers, commenting as the number in each group changed.

Mathematical concepts:

» Sorting and classifying

» Measuring—compare length

» Comparing amounts

Language:

» Comparison of length—long, longer, longest, short, shorter, shortest

» Same, different

» Group, belongs, does not belong

» More, less, most, least

Key elements:

I analyse, read and organise the data in my world

» Collect, sort and organise data

I measure and compare my world

» Choose and use the appropriate tool and strategy for the attribute

» Use comparative language

Learning processes:

» Comparing

» Sorting

» Communicating

» Noticing

Observations:

» Sorting collections

» Using classification to describe groups

» Responding to language that describes data – alike, same, different, belongs, doesn't belong

» Using direct comparison to estimate, measure and order objects

Numeracy practice and reflection:

» What opportunities do children have to engage with complex categorising? Have you thought about placing bowls, hoops, baskets etc. in areas where there are blocks, animals, flowers, shells, stones, leaves and other objects that lend themselves to sorting in different and complex ways? Children will naturally sort these into groups as part of the play.

» Do you model different ways of organising data? How do you scaffold children to analyse data?

» What opportunities do children have to record their thinking and discoveries? Are tools readily available for children to represent their thinking in other ways—grid paper, sticky dots, digital tools, photography etc.

Numeracy

I measure and compare my world
I quantify my world

Capacity refers to how much something holds and volume is how much space is taken up by the object. Children experiment with capacity through filling and emptying containers. They need varied experiences to practise estimating and to build understanding about the relationship between volume and capacity.

We need more dirt!

Beth was helping to develop the raised garden bed. Her first idea was to carry the soil to the bed using buckets. She did take one bucket load but commented, "This is going to take forever."

An educator suggested they try another method.

"We could use the wheelbarrow," said Beth.

She helped fill the wheelbarrow with dirt commenting that it took a long time to fill and that it was easier for the educator who was using a large spade.

When Beth and her friends started to put the dirt into the garden bed, Beth realised that this was a big task.

"We need even more dirt! This won't be enough. I think we'll need 10 more," she said.

The educator suggested she tip the dirt into the garden bed and the children spread the dirt so they could get the job done more quickly. Beth kept count of how many wheelbarrow loads it took to fill the bed.

"So how much dirt will we need for the other one, Beth?" asked the educator.

"It will be the same because it is the same size. Now we know how much we need," Beth replied.

Mathematical concepts:

» Volume, capacity

» Quantifying, counting

» Time

Language:

» Comparison—more, less, faster, bigger, smaller

» Full, empty

» Big, small, large

Key elements:

I measure and compare my world

» Notice objects, events and space have measurable attributes

» Use measurement to compare objects, events and space

I quantify my world

» Use quantification to describe and compare

Learning processes:

» Reasoning

» Communicating

» Visualising

» Generalising

Observations:

» Comparing volume and capacity

» Counting

» Making choices based on measurement

» Estimating how many

» Using language related to how many and how much

Numeracy practice and reflection:

» Do children have opportunities to measure different attributes of the same object? For example, measure the garden beds in other ways, measure the perimeter, height, width etc.

» In what ways do children apply their experiences and learning in different contexts? For example, make models of the garden beds and measure how much dirt fills them using different containers, measure the perimeter of the garden bed with string and then use the string to make other shapes. How many children fit in the shape?

Numeracy

I explore and understand my place and space in the world

Children engage in maths play where they are investigating and interacting with maths concepts as the play. While equipment and materials on their own may be of interest to children, it is the interaction with adults that is important. Quality interactions encourage children to ask questions, reflect on their current thinking and try new ways of solving problems.

It's a roof!

Jasmine persisted with the magnet tiles. She initially struggled with matching the pieces so they would connect in the ways that she wanted.

Jasmine experimented with laying the tiles flat first and then folding them. She placed three squares in a line and when she picked them up they folded into a triangular prism. Jasmine looked at the shape she had made, noticing that there was a triangle on the end. She looked through the pile of tiles until she found a triangle.

"It fits," she said placing another triangle on the other end.

Jasmine showed the other children on the rug. She turned her shape, looking at it from different perspectives.

"It looks like a roof. It's like that roof over there," she said.

Jasmine continued to make more 'roof' shapes using her technique of placing tiles in a line first.

Mathematical concepts:

» Transformation using rotation

» Naming 2D shapes

» Patterns and algebraic thinking: noticed attributes of objects, repeated pattern

Language to introduce:

» The names of 3D shapes (triangular prism, rectangular prism, cube, pyramid)

» Properties of shapes—edges, corners, sides, faces

Key elements:

» Notice 2D aspects of 3D objects

» Use properties of shape to make things fit, balance and transform

Learning processes:

» Noticing

» Visualising

» Patterning

Observations:

» Sorting and describing 2D and 3D shapes

» Recognising shapes in the environment

» Combining two or more shapes to create other shapes

» Using rotation when manipulating shape

Numeracy practice and reflection:

Children first engage with shape through three dimensional objects. How do you help them make connections between three dimensional shapes and two dimensional shapes? For example:

» conduct a shape hunt for two dimensional and three dimensional shapes at preschool and in the local community. Use photos to record shapes. Sort, classify and record the data

» include paper and drawing tools with materials related to shape

» create cubbies and dolls houses using boxes and heavy cardboard to create the three-dimensional shapes.

Numeracy

I explore and understand my place and space in the world

Grasp and release

Sarah has been practicing her grasp and release skills. Today we introduced the concept of grasping and then releasing into a container.

The balls and tin were used to maximise her chance of tuning into both the visual and hearing component of the task.

Sarah would pull at the balls and then inspect them closely, looking at the different colours before releasing them into the tin. She had to manipulate the balls to make sure they would fit into the tin as well as visually locating the hole in the top.

Mathematical concepts:

» Locating

» Rotation

» Dimensions

» Language—more, less, full, empty

» Gestures, visual cues, signing

» Colours

Key elements:

» Use properties of shape to make things fit

» Notice 2D and 3D aspects of objects

Learning processes:

» Noticing

» Wondering

» Sorting

» Visualising

Observations:

» Noticing shape and colour

» Using orientation and rotation to complete task

» Noticing dimension of hole and placed balls accordingly

Numeracy practice and reflections:

» How could learning be extended? How could the task be made more complex? Are there other ways to practice and consolidate the same skills? Does Sarah have access to these learning opportunities throughout her day?

» Could other shapes be used? Consider different hand positioning, focus and orientation.

» How do we know what Sarah is learning/noticing/visualising?

Numeracy

I explore and understand my place and space in the world

Treasure map

James headed straight for the digging patch.

"I am going to find treasure," he said.

He picked up the map, looking at it from different angles. He placed it on the ground and rotated it.

"That's the log," he said, pointing to another place on the map. "I am going to dig over here."

James picked up his spade and headed to a bare patch of ground.

The next day James put the construction jacket on again but this time he had pencil and paper in hand.

"I am going to make a map for Sam," he said.

James sat on the edge of the patch, put his clipboard in his lap and looked at the space. He carefully drew a shape to represent the digging patch and some other shapes inside the boundary.

"That's the log and that's the stepping ones," he said. "X marks the spot that tells where the treasure is."

When telling an educator about his map, James explained that the map was like looking down on the digging patch. He used language to describe the position of the objects in relation to each other. He gave directions using everyday language to get from the starting point to X to the treasure.

Mathematical concepts:

» Directional language
» Positional language
» Bird's-eye view
» Language—near, far, around, behind, under, in between

Key element:

» Use the position location, arrangement and movement of myself, others and objects for a purpose

Learning processes:

» Visualising
» Communicating

Observations:

» Using a map in his play
» Drawing his own version of a bird's-eye view of the sandpit
» Transferring his knowledge from one situation to another
» Understanding and using directional and positional language
» Effectively communicating the intention of the map

Numeracy practice and reflections:

» What resources are available to children?
» Encourage children to draw maps of what they see in their environment
» Have access to cameras for children to take photos of different view points
» Encourage children to design and set up their own obstacles courses
» Have examples of maps easily accessible to children – street directories, large maps, Google maps.

Numeracy

I explore and understand my place and space in the world
I quantify my world

Ferris wheel

It's Royal Show time and Eddie is over the top with excitement. Every day he comes to preschool and says "Erris eel," and he jumps up and down and flaps his arms.

Eddie's mum has made a photo book of him at the Show. He loves to share the photos of himself on the ferris wheel and he talks about the "erris eel" going round-and-round and "igh, igh."

Eddie's mum told the preschool staff that he had to wait in line for a really long time but he enjoyed counting the people going past and holding the money to pay. Eddy also loved watching the carriages go round and was able to label the coloured canopies.

At preschool, he took it upon himself to use some building shapes and put them into Jordan's wheelchair, creating his very own ferris wheel.

Mathematical concepts:

- » Sorting and classifying
- » Measurement—height
- » Rotation and motion
- » Language—round and round
- » Attributes—colour, height
- » Counting
- » Gestures
- » Visual cues

Key elements:

I explore and understand my place and pace in the world

- » Use the position location, arrangement and movement of myself, others and objects for a purpose.

I quantify my world

- » Notice quantity as an attribute
- » Use the standard number system
- » Use quantification to describe and compare

Learning processes:

- » Communicating
- » Comparing
- » Generalising
- » Visualising

Observations:

Eddy is able to use and respond to language in order to describe attributes such as colour, position and motion. He is able to adapt and build with 2D shapes to recreate a structure. He uses quantification to describe and compare.

Numeracy practice and reflection:

- » What other opportunities could be provided to children to extend their interest in the mechanics and attributes of familiar structures?
- » How could a ferris wheel be recreated if a wheelchair wasn't available?
- » Are there opportunities set-up for children to notice, classify, sort and count in a range of environments with a variety of different materials and mediums?
- » Are there opportunities to build with boxes, blocks, play dough or on the iPad to create transport, music or Show-related props? How much support and adult modelling will he need during these experiences?
- » Has enough time been allowed for experiences to be repeated and practiced?

Numeracy

I quantify my world
I measure and compare my world

The home corner provides many opportunities for children to explore mathematical concepts. Activities like setting the table, rearranging furniture, and serving food involve processes of sharing, sorting and classifying and measuring. Children engage in play that helps them develop an understanding of the number concepts associated with the addition, subtraction, multiplication and division they will encounter later.

Friends for lunch

Jolie found a quiet moment in the cubby. She placed four chairs around the table and matched a plate to each of the chairs. She had brought a bucket of bark into the cubby with her.

Jolie stood at the stove stirring the bark. She took a measuring cup, filled it with bark from the 'pot' and poured it onto one of the plates. She did this for each plate.

Jolie noticed that there was still some bark in the pot. She took her measuring cup but this time only half filled it before repeating the 'serving' she did previously. This time Jolie was satisfied with each serve. When asked what she had been doing, Jolie explained that she was going to have three friends visit and that she had shared the soup so they would all have the same. The other chair was for her.

Mathematical concepts:

» Equal parts, fair share

» Subitise small quantities

» 1:1 correspondence, part-part-whole (3 and 1 is 4)

» Patterns and algebraic thinking—construct a pattern

» Language to introduce—equal, full, whole, half, more than, less than

Key elements:

I quantify my world

» Divide or combine quantities to make new quantities

I measure and compare my world

» Choose and use the appropriate tool and strategy for the attribute

Learning processes:

» Comparing

» Visualising

» Patterning

Observations:

» Dividing quantities into equal parts

» Counting on when adding one more

» Playing with measurement tools

» Using measurement tools appropriate to the attribute being measured

Numeracy practice and reflections:

» What opportunities do children have to investigate and practice sharing? Maybe have a picnic basket with sets of plates, cutlery, food and other objects that can be shared and encourage patterning. Placing dinosaurs or other animals in the sandpit or garden with materials to make enclosures can prompt dividing and sharing. The animals also need food and water.

» How do you encourage children to explore concepts such as addition and subtraction? Have you considered providing dice with toys or other objects? Make up games rolling the dice and matching the number, adding one more, combining two groups. Have materials on hand for children to record as well. Are dice accessible to children?

» Fractions are about equal parts. What opportunities do you use to investigate fractions?

» Cut fruit together and talk about equal pieces and sharing. How many pieces are there? How many more are needed? Have more than one plate and talk about distributing the pieces equally.

Numeracy

I quantify my world

My guess is...

Hannah started building a bridge for her to walk on to reach the other room. An educator asked her how many blocks she thought she will need. Her first response was 10 but she soon changed that to 100.

When other children could see what she was doing they joined in. Children were engaged in a variety of ways. Some were counting or walking on the blocks and others were collecting blocks and making the bridge longer. A small group of children were sitting, watching and guessing how many blocks they would need to reach the other room.

Educators stood back to observe the learning and offered questions a number of times to add more depth into the play:

"How many more blocks will you need?"

"Do you think we have enough blocks?"

"We are using a lot of blocks. Is that block the same size as this block?"

"How many blocks did you use altogether?

The educators used language such as 'estimate', 'guess', 'counting', 'lots', 'more' and 'how many' to introduce these concepts to the children.

Mathematical concepts:

» Estimation

» Counting

» Comparing

» Trial and error

Language:

» Language related to 'how many'

» More, enough, lots, not enough

Key element:

» Use quantification to describe and compare

Learning processes:

» Communicating

» Reasoning

» Visualising

Observations:

» Estimating how many blocks are being used and how many more they will need

» Responding to educator's questions and asking and answering questions from each other on how many blocks they need, how many more

» Using what they know and have noticed to refine and change their thinking

» Comparing quantities as larger or smaller

Numeracy practice and reflection:

» Play games with the children that encourage guessing or estimating as some children are afraid to make mistakes. Games could include 'Guess what?' Children can guess/estimate how many of a particular object is in the basket.

» Use stories/big books to focus on the language 'how many', 'more', 'enough' and 'not enough'. Books could include *Who Sank the Boat*, *Betcha*, *Counting on Frank* or *How many seeds in a pumpkin?*

Literacy

I engage with texts and make meaning

I will use a book

At the 'creation station' at preschool, Jack approached me.

"I want to make something but I don't know what to make," he said.

"Think for a while and an idea may come to you," I said.

"I know! I will get a book," he said after a short while.

He went to the library area and returned with the *Sharks and Other Deadly Creatures* text and cleared some room at the table to look through it.

"What's this one?" he asked, as he pointed to the porcupine fish (puffer fish).

I read the text to him about the fish. He noticed a scale indicating degrees of venom for each creature. The symbol was a bottle of poison ranging from one bottle, up to five bottles for the most deadly creature.

"What does that mean?" he asked.

I explained how the scale worked and he was able to articulate that the porcupine fish only had one bottle so it wasn't 'super' poisonous.

"I want to make that," Jack said.

"How would you like to make it?" I asked.

"Cardboard," he said. "I will draw them."

He went to the trolley and found a giant sheet of brown cardboard, returned and sat down with the book open at the porcupine fish.

"I don't know how to do it!" he said.

I supported him by encouraging him to look for shapes in the fish. "Look at the body of the fish," I said.

"It's like a circle," Jack said. He then drew a large circle on his page.

"Look at the eyes," I said.

"They are circles too!" he declared. He continued to draw by looking at the shapes until his drawing was complete. "I want to cut it out now."

Jack cut out the porcupine fish and looked proud of what he had done. "I want to make another one," he declared as he looked through the book.

"What's this one? It's really poisonous as it has five bottles of poison. Look!"

"That one is a lion fish," I said.

Once again we went through the process of reading the text, drawing, and cutting. Jack asked if he could do just one more. He flicked through the book and found the blue-ringed octopus.

"I will do this one. It has three bottles, so it's not as bad as the lion fish," Jack said.

Once again Jack drew the picture and cut it out. "I have three deadly creatures," he said.

I asked him if he would like to take some copies of the drawings and publish the photos to put in the floor book.

"Yeah, I want to put one in the floor book and one for my book (portfolio)," he said.

"How many copies will you need then?" I asked.

"I would like three," he replied.

"Why three?" I asked.

"I want to take one home for Grandma," he replied.

We published the photos and copied the drawings using the colour copier, which he then put into the floor book. Jack organised his work by himself and arranged his photos near it. I asked him to tell me about his work. He was able to clearly recall what he had heard from the parts of the book that I had read to him and the names of the creatures he had created. He could recall how poisonous they were and which one was the most poisonous. He was able to share this information with his peers who were also interested in what he had been doing.

"I will get the book and show you," he said.

Jack brought the book to the mat and asked me to read the whole book to the group. He was able to use the 'scale' to tell the group how dangerous the creatures were. He was able to show the group his drawings when he came to the corresponding page. I asked the small group that had gathered if they would like to use the internet to view some of these creatures in their natural environment and see if we could research and find out more information about them.

"Yes!" they called out. We moved to the computer.

"Which one would you like to look at first, Jack?" I asked.

"The lion fish because it's really poisonous," he responded.

We went to the Google web page. I asked Jack to get the book and find the page with the lion fish on it.

"Can you see where it says 'lion fish'?" I asked. Jack pointed to the big bold letters at the top.

"Okay, let's type those words in Jack, I said. "Can you find the first letter on the key board?"

Jack looked at the book, then the keyboard, then the book, then the keyboard. "That one?" he asked.

"That's right," I said. "It's an 'L'. 'L' for lion. Let's see if we can find all the other letters."

"I can't find this one," Jack said, pointing to the 'i'.

"Ah," I replied. "That's because the letters on the key board are upper case and the letters in the book are lower case."

I found a letter chart and showed him the difference. He took time to match the letters of the word to the key board using the chart to match the upper and lower case. Finally we searched 'lion fish' and some of the pictures came up on the screen.

"There it is!" he said with a big smile and lots of excitement.

"Is it a DVD or just a picture?" asked Noah, a member of the small group.

"I will try and find a movie of the creature," I said. "Let's look at what's on the menu."

We found a short clip to watch that showed the lion fish in action.

"It hides in the rocks," said Jack.

"It's like it's camouflaged," said Noah.

"The spikes are the poisonous bits," said Jack.

"It can swim and stay still," said Luella.

They watched the movie three times. "Can we watch the one about a blue-ringed octopus?" Jack asked.

We went through a similar process and then viewed the porcupine fish.

"I want to make them now so I can play with them," declared Jack.

The story continued back at the 'creation station'.

Key element:

» Understand that texts convey meaning

Learning processes:

» Communicating
» Creating and making meaning
» Encoding and decoding

Observations:

» Choosing a text for the purpose of inspiration
» Engaging with a variety of genres to gain information and new vocabulary
» Co-constructing meaning with educator and peers
» Asking for text to be read as well as gaining information from scales, pictures and video
» Gaining understanding of conventions of print e.g. upper/lower case, matching letters
» Interpreting data presented as symbols
» Gaining confidence in representing learning through drawing
» Proudly recalling and sharing new knowledge with others using different texts including drawings

Literacy practice and reflections:

» How would you utilise the information in this example to document and extend Jack's literacy?
» In what ways are non-fiction texts used to enhance literacy skills at your site?
» In what ways do you utilise multi-media to extend children's literacy experiences?
» How do you explore the frequency of educator initiated versus child initiated literacy experiences at your site? How much of the learning is child driven or co-constructed? Discuss your findings as a team.
» How do you support children to understand that a variety of texts convey meaning?

Literacy

I engage with texts and make meaning

Is there room on the broom for me?

The children had been engaging in rhyming word play at lunch time. To extend this interest, the educator read the story *Room on the Broom* by Julia Donaldson as it has a strongly rhyming text.

The children were highly motivated by the text and some of them acted out the story the next day during free play time. The educators helped by resourcing some props and also re-read the text at meeting times with children given the additional opportunity to act out the story with an audience.

The literacy journey that followed this narrative text included a lot of dramatic play, not only based on the story, but with children developing an outdoor play script that involved a castle, princess and prince who lived all by themselves, with a royal nanny, royal ponies... and a witch in a nearby cave who changed people into animals or made them fall asleep. Only rhyming spells could reverse this process!

Children drew characters from *Room on the Broom*, made animal masks, wands and other costume props. Educators purchased additional copies of the book for families to borrow. The children also researched frogs (one of the characters) when a parent brought some in for observation having followed the documentation of the children's play and learning. The children cooked fish (not witch!) and made their own oven baked 'chips' for a hot lunch.

The children were so engaged with this book that when a parent informed us of an animated feature length version, the team and Governing Council decided to have a family movie night showing the DVD version of the story. There was much discussion with the children about whether the dragon would be too scary for younger siblings, and problem solving about feeling safe. Educators then followed up the viewing, encouraging children to recount their evening's experience, to critique the film and think about which text version they preferred.

Key element:

» Infer meaning from familiar texts

Learning processes:

» Communicating
» Making meaning
» Reflecting critically

Observations:

» Comprehending, re-telling and re-enacting a familiar story
» Creating new dramatic play texts around 'witches', 'castles', and 'royalty'
» Developing play script using humour in children's word play
» Responding critically to different roles and representations of the story
» Using letter/sound connections in rhyme
» Interpreting the story in multiple ways

Literacy practice and reflection:

» How can children be engaged with written texts? How can they be supported in making meaning from texts? Do you explicitly foster children's ability to respond critically to texts, gender roles and the power relations of characters?
» How is literacy learning reported to parents and to others?
» How are families engaged in the literacy practices of your site?
» How is each child given the opportunity to engage in an integrated play-based literacy curriculum?

Literacy

I engage with texts and make meaning

There's a storm coming

William was at our morning planning meeting.

"Can we put the weather radar on the computer so we can see the rain coming?" he asked.

"How do you see the rain coming?" I asked.

"Well, the colours tell you on the map," he answered. "The darker the colour, the heavier the rain, unless it's black. You can't get worse than that, it's hail."

"How did you know this?" I asked.

"My dad watches at home and you have to look for colours like red and orange, that's the heavy rain," he said.

We put the computer on and found the weather radar.

"See, that's the measure for the rain," William said and he pointed to the colour scale under the map. "That is no rain and THAT is the hail."

He looked at the map for a while and then reported back the weather conditions to the morning meeting.

"Ah, it's going to rain but not until after lunch," he reported. "And pretty heavy."

We left the weather radar on for the day and other children became interested in the way the radar could tell you the weather. William was able to share his prior knowledge with others so they too could gain an understanding.

"Where are we on the map?" asked Samuel.

"We are here, it easy to remember because we are near this line," said William.

"This one tells you the time too," said William to Kobi, who was also watching the map.

Key elements:

» Choose texts for particular purposes

» Infer meaning from familiar texts

Learning processes:

» Creating and making meaning

» Communicating

» Decoding

Observations:

» Selecting and engaging with digital texts

» Utilising prior knowledge including contextual vocabulary

» Making meaning of symbols

» Sharing knowledge using descriptive language

» Sharing his interpretation of the weather radar with others

» Predicting and hypothesising

Literacy practice and reflection:

» In what ways could William's interest and literacy skills be extended?

» How are digital tools currently used to extend children's literacy skills?

» How could William's ability to share his knowledge and teach other children be 'tapped into'?

Literacy

I engage with texts and make meaning

A print environment

At kindergarten, we are building on the foundations of literacy development from home and children's prior experiences. Our curriculum is both integrated and differentiated in nature. Its focus on social contexts, play pedagogy and relationships support children's sense of well-being in their literacy learning.

Through our own engagement, modelling and sharing we are sending a clear message to the children we teach that we value and enjoy texts and viewing. This is a powerful starting point to instil a love of books in the children. Some strategies to support children's developing understanding of print include focusing the children's attention on print by modelling the use of literacy for real purposes, reading stories, letters, magazines, writing shopping lists and birthday invitations and visiting libraries or drawing their attention to signs in the environment.

We can look at how books are organised and model handling books with care and respect. We support children to develop the mastery of eye tracking from left to right as they learn print conventions. We foster the development of listening and being able to differentiate between sounds and respond appropriately to verbal symbols. We give children opportunities to recognise that words and pictures carry meaning as they begin to recognise their own name and familiar words.

We create a print-rich environment that intentionally supports language exploration. Children gain an understanding that reading is a means of relaying messages and information, a means of capturing human speech and converting it into written symbols. Through an environment that values and promotes oral language we are supporting children to begin connecting letters and sounds.

We add to their vocabulary as we support them to make meaning of new words. We are encouraging children to read for meaning as we analyse the messages in texts, asking questions and discussing scenarios and interpreting the information presented. We acknowledge that children are living in a rapidly evolving world of social media, digital texts and information communication technologies and they require practise to develop specific skills to successfully navigate these new texts.

Key elements:

»   Respond meaningfully to symbols and texts

Learning processes:

»   Encoding and decoding

»   Communicating

Observations:

»   Using *The Very Hungry Caterpillar* story props for re-count

»   Choosing texts independently from accessible/varied selection

»   Reading name cards self/others and own text

»   Using labels for a purpose

»   Role playing of familiar text including emotional response

»   Reading digital symbols and text appropriately

»   Using symbolic representations in context

»   Developing ideas through narratives

»   Interpreting symbols to play a game successfully

»   Being curious about meaning of environmental print

Literacy practice and reflections:

»   How do I gain insight into children's prior knowledge of symbols and texts? How does this inform individualised planning?

»   How do I support children in the development of their reading skills individually as well as in a group?

»   How do I give children opportunities for reading and responding to texts in a play context?

»   How do I build on the home/family and community literacies?

Literacy

I represent my world symbolically

Frozen

Many of the children have been captivated by the animated movie text of Disney's *Frozen*.

Annika just loved the story as well as the songs featured in the movie. One of the educators downloaded the song *Let it go* on her iPhone at the children's request. Annika and her friends sang it over and over, accompanied by dancing and role play of the text they had viewed.

An educator also downloaded images of the characters from the internet to help children in their symbolic representations such as drawing and play dough sculpture. Annika decided to make the castle and draw the characters for the story table so that she and others could symbolically act out the narrative.

Annika and other children also chose to make their own books about *Frozen* and children had the option of drawing, asking for scribing of their words by an adult, copying their own words as written by an adult or having a go at their own writing. Annika had a go at her own inventive spelling with some support from peers and an educator in sounding out words and choosing which letters to write.

Key elements:

» Represent ideas and theories in multiple ways

Learning processes:

» Communicating
» Creating and making meaning
» Encoding and decoding
» Reflecting critically

Observations:

» Responding to texts (including popular fiction and movies) using various mediums and symbolic representations incl. song, dance, discussion, drawing and writing
» Conversing with others about the actions and motivation of characters
» Role playing to gain meaning and understanding and to share knowledge with others
» Making connections to prior knowledge of symbols in print

Literacy practice and reflection:

» With parent permission, educators played the movie *Frozen*. This enabled all children in the centre to gain meaning about the text and elect to participate in the play, *Frozen*.
» How do I feel about using popular culture and texts as part of my literacy practices? How do I connect home literacies with centre values and expectations about literature and literacy? Discuss as a staff team.
» How are children supported in making meaning, communicating and representing meaning in multiple ways?

Literacy

I represent my world symbolically

Signs, signs and more signs

Background: The children have been exploring the concept of recycling and re-using materials as part of our sustainable practices at the centre. This initiative had been supported by some of our families. One parent had provided us with a number of bins to hold all our donations of 10c plastic bottles, cans, containers and glass bottles. Another parent had offered to take the bottles to the recycling centre on a fortnightly basis and an additional parent provided a range of recycle signs for the bins which the children became interested in.

"What are these for?" asked Amelia.

Livinia was able to explain they were, "Signs to go on the bins so people know what things to put in there."

The children became excited about attaching the signs and busily set about labelling the four bins. The bins were then moved outside to the donation zone.

"We need another sign," declared Livinia.

"What do we need a sign for?" I asked.

"To tell people that this is where all the recycle goes. We recycle at home," she said.

"What can we call this area?" I asked.

"We take our bottles to the recycle centre so we could call it the Recycle Centre," said Livinia.

The group agreed that this was a great name for this area. They were very keen to make a sign for this area. Hannah asked if she could write the words.

"Do you know the first letter we need to write?" I asked.

"No," she said.

"Just have a listen. Rrrr...ecycle," I said.

"It's an 'R'," she said and she wrote the first letter on the piece of wood.

She continued to predict the next letter was an 'e' but then the 'c' was challenging as it has an 's' sound.

"Can you write the rest and I will copy it?" she asked.

I wrote the word 'Recycle' and she wrote it on the wood.

"Can I write the next word?" asked Livinia. "Can you write it too?"

"What do you think the first letter of 'Centre' could be?" I asked.

"'S'," she said.

We then talked about how some letters can sound different in different words and it actually started with a 'c'. "That's tricky," she said.

She quickly copied the word 'centre' onto the wood. The children then drew the picture they wanted to illustrate the sign.

I introduced the children to the wood burning tool and explained the way to use it safely. The children were keen to have a go and to make their writing and drawing into a sign. They took it in turns to use the wood burner to trace over their work. They reminded each other about which parts were hot and not to touch. They worked hard and persevered to create their sign.

We worked together to clear varnish the sign and when dried, hung it up in the zone. The children were very proud of their work.

"The Recycle Centre!" said Livinia loudly to the children nearby.

"I am going to show my mum when she comes today," said Amelia. "Can we make more signs?"

"What do you think we could make a sign for next?" I asked.

We went for a walk around the preschool and into the outdoor area.

"What about the mud kitchen?" asked Livinia.

I asked them what they would like to call the mud kitchen. They decided that we would talk at group time and find out lots of different ideas for a name and then vote on the most popular name. After a brainstorm we had seven ideas for the kitchen name: The Cooking Place, The Cake Kitchen, The Big Banana Kitchen, Muddy Puddles Kitchen, My Kitchen Rules, The Cookers' Place, and Mud Kitchen. We then voted and the Muddy Puddles Kitchen was voted most popular by five votes.

The next day we began to create the sign using a similar process – copying the words and then burning them into the wood.

A number of signs were made later, 'The Table of Learning and 'The Shell Shack' (for our chicken house).

The children read and re-read the signs as they moved around the centre. This led them to making signs for other areas of their play. The children made signs on paper, cardboard and whiteboards. They also made signs using playdough, chalk, sand and rocks.

Key element:

» Create texts for a range of purposes

Learning processes:

» Communicating

» Creating and making meaning

» Encoding and decoding

» Reflecting critically

Observations:

» Demonstrating awareness of environmental texts and understanding their purpose

» Experimenting with writing letters and words

» Drawing pictures

» Creating and making meaning/reading

» Describing and asking questions to clarify understanding of letter/sound connections

» Transferring sign making to different mediums and contexts

Literacy practice and reflection:

» In what ways could an interest in signs be further extended?

» How is children's writing extended at your centre? How is this documented?

» What environmental print is evident at your site?

» How do you support children to collaborate and consult for a shared understanding of texts in your context?

Literacy

I represent my world symbolically

To Dad

Ariana loves sharing news about her family and she loves exploring new places.

After telling us about her weekend trip to 'The Big Rocking Horse', Ariana decided that she needed to tell her Dad how much she enjoyed the drive and that she wanted to go out again.

Ariana decided to make her Dad a card. The children have access to a large variety of writing tools and paper but on this day Ariana asked for some cardboard.

"Cards are made of cardboard, aren't they?" she asked. "Pink is my favourite colour."

After finding ribbon in the 'making drawers', Ariana spent some time measuring, cutting and pasting to decorate the front of the card. She then announced that the card needed some writing.

"Would you like me to write the words or would you like to have a go?" asked the educator.

"I want to write it," Ariana replied.

The educator then asked Ariana, "Would you like to copy the words or write them on your own?"

"You write it and I will copy," she replied.

"What is your message to Dad?" asked the educator.

"To Dad, I like going on a drive," she said.

Ariana independently wrote 'from Ariana' and read her text to her Mum at home time.
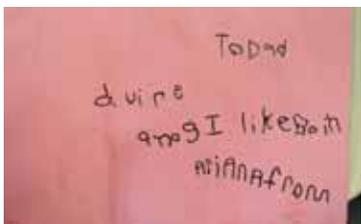
Key element:

» Understand conventions of texts.

Learning processes:

» Communicating
» Creating and making meaning
» Encoding and decoding

Observations:

» Composing the message of a text
» Writing independently and copying
» Demonstrating familiarity with the language conventions required for card making, i.e. writing inside, "To" and "From"
» Speaking in sentences when recounting weekend news and creating a context for writing for a purpose
» Making connections to prior knowledge of symbols in print
» Reading a card and understanding the consistency of a print text message

Literacy practice and reflection:

» Using this example as formative literacy assessment, how could further symbolic literacy learning for Ariana be supported?
» How could the environment be set up to encourage symbolic play and experimenting with print?
» How could individual children be supported to take risks with their drawing and writing?

Literacy

I understand the language of my world

Cave men

Cale, Sam, Charlie, Jacob and Sandithi wanted to be cave men. They built a cave using blocks and wanted it to be dark inside. The educator responded to the children's request, suggesting a tarp as a roof and then the children decided to use waffle blocks for a floor.

There was much excitement, collaboration and negotiation as they organised the materials. Once the floor was installed, there was a lot of dancing inside the cave.

"It's a disco cave!" Charlie (the musician) repeatedly sang. He chanted, "Disco, disco, disco dance in this cave!" and danced around the lawn. Jacob and Cale (the dancers) found their groove.

"I'm going hunting," Sam announced suddenly. He fetched an elephant from the sandpit. "I've got meat!"

Sam's successful hunting inspired Cale. "I've got a dinosaur and a polar bear. More meat!" he said.

All the children then dashed off to hunt, chanting "meat, meat, meat, meat" (the hunters). They piled the animals outside the cave.

"I know!" said Cale (ever the entrepreneur). "We'll sell the meat over there!"

Sam called out, "Put up your hand if you are a hunter, 'cos then you have to guard the meat."

All raised their hands.

"Good. You are all hunters," Sam said (the organiser and protector of assets).

"I'll guard the meat," volunteered Sandithi (the focused one).

Jacob (the inspirer) ran off and returned with a waffle block. "I've got pig meat!" he said.

The children all ran off and returned with waffle blocks, "We've got cheese!"

Cale sought approval for his shop idea from the group. "I'll be the shop keeper," he announced several times to different children. No one else wanted this role.

Charlie worried about the tangent the play script was heading towards. "It's a cave!" he declared.

"It's a shop!" insisted Cale.

"It's a cave!"

"It's a shop!"

An impasse; Cale then declared, "It's a cave shop," and everyone was happy with the compromise.

After all the hard work it was decided, "Let's sleep." They all lay down in the cave calling "goodnight" to each other.

"Oh oh," came a voice in the night. "There could be wild pigs!"

Sandithi solved the issue. "This could be the light," he said and flipped a 'switch'.

This dramatic play continued for over half an hour more. It developed a plot where neighbours came to live in a next-door cave. There was a volcano built using traffic cones.

Maia and Ashley were welcomed into the play and they soon had a dramatic announcement to make.

"Some dinosaurs knocked down our house! We have to build it again!" they said.

"I could be a cave man plumber," thought Cale out loud.

"Well I'm going to hunt him!" announced Sam.

Off they ran after the rampaging imaginary dinosaur.

Key element:

» Understand what has been communicated

Observations:

» Reading and using body language to infer emotions and meaning

» Interpreting ideas of others, confidently sharing ideas and co-constructing narrative

» Comprehending the story plot and following it using working memory to maintain roles

» Using good vocabulary and sophisticated oral language skills, compromising and negotiating

» Using humour

» Demonstrating critical literacy by evaluating the storyline

Learning processes:

» Creating and making meaning

» Communicating

» Encoding and encoding

» Reflecting critically

Literacy practice and reflection:

» What literacy skills are evident in the socio-dramatic play children engage in?

» What oral language strengths can be observed in children's play?

» How can individual children be supported to develop their communication skills through play?

» How does oral language reflect the thinking skills, concepts and socio-cultural understandings of children in play?

Literacy

I understand the language of my world

Hairy Maclary

The educator read *Hairy Maclary*, a frequently requested and very familiar story with a lively text. The children suggested we make puppets and dramatise the narrative.

They had a close look at the facial expressions of the characters in the story, the colours, the shapes, the textures and the features that supported their descriptions to ensure they were truly represented by the puppets. They requested a variety of materials that supported their observations and worked with the educator through this process. Bottomly Potts was indeed covered in a multitude of spots and Muffin Maclay was very hairy like a bundle of hay!

Some children were the actors and other children in the audience were reading along with the educator. The children were encouraged to make predictions and connections and imagine alternate endings to the text. We enjoyed numerous dramatisations to ensure inclusivity and equity. The children expressed their enjoyment of the story through their facial expressions and body language. The rhythm, rhyme and humour in this text are engaging and the text is rich in patterns and repetition that not only makes it easy to listen to but easy to learn.

The children discovered the sounds in the language. Their ongoing exposure to this text and a variety of other texts containing rhyme means many children are now able to identify the rhyme in this text and apply their knowledge of rhyme to other texts. Some are beginning to recognise the position of sounds in words and notice the common parts they share. This knowledge is represented in word lists eg, bat, cat, mat and hat.

The children play with rhyme as they engage in other preschool activities. They use familiar vocab and also create nonsense words. Eva identified Georgia and Porgia, Eva and Diva and Madison and Padison as words that rhyme. When she was asked what rhyme means she said, "They are words that sound the same."

"Try and cry rhyme," Mia explained while playing at the play dough table. "And try and pie."

The educator also used a flip chart as a way to have fun with rhyme and seize opportunities to identify or create rhyme as the children play.

"Hey! Hey! What a great day!"

"Mat time flat time!"

"Cody wody!"

The children have access to a range of stories from this author and are encouraged to access the puppets independently and create their own story lines around the characters.

Key element:

» Respond to sounds and patterns in speech and stories

Learning processes:

» Communicating
» Encoding and decoding

Observations:

» Making letter/sound connections
» Playing with words, creating words
» Appreciating humour
» Listening and interpreting
» Observing
» Developing ideas through narratives
» Enhancing the text using body language

Literacy practice and reflections:

» How do I support children's engagement with a range of texts in my context? What drives my choice of texts?
» What evidence do I have of children responding to sounds and patterns in speech and stories? How do I sensitively monitor children's literacy behaviour?
» Do I give children opportunities to act out texts to deepen their understandings?
» How do I encourage playful learning?
» How do I encourage word and language play in my setting?
» How do I support children to engage in the rhythmic flow of words? Are my practices embedded in daily routines?
» Think of opportunities for 'intentional teaching'.

Literacy

I understand the language of my world

Out of Africa

A group of children's imagination and interest was ignited when they discovered many familiar African animals on sheets of wrapping paper in the making trolley.

They created habitats for the animals. The educator suggested they share their collages with the group and engaged in conversations with the children to find out what knowledge they had about Africa and the questions they wanted answered.

Some of the suggestions for the direction of the research were guided by the children's sources of prior knowledge such as; "Think about it!", "Ask Mum and Dad" and "iPad, TV and books". As part of the inquiry about Africa, the educators organised a workshop with Sam Oshodi, an African performer.
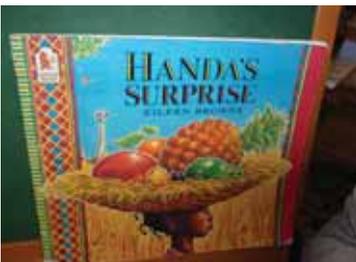
Sam shared memories and knowledge of his African culture through music, dance, language and captivating storytelling style. The children were motivated to dance and move in time with the strong beats and rhythms that Sam made on his drums and many were able to keep in time with him using other drums. Sam enhanced his workshop with traditional clothing and the children learnt that family groups wear garments with the same pattern to identify each other at crowded events. Throughout the workshop Sam worked on a drum, which is now kept in the centre as a reminder of the learning.

The children worked in partnership with their families to undertake an inquiry project about Africa, accessing information online and through books. Families embraced the value of working with their children on these projects which sent a powerful message home. Every project was specific and individual and was presented orally by each child to the group.

The children made books about what they knew. They read other stories, including *Handa's Surprise* and *Dear Zoo*, which both featured African animals. The educators added props for the children to use and created story tables to help them develop a deeper understanding of the text.

An educator showed the children the Ndebele dolls she had collected. They were fascinated by the intricate bead work on the dolls and this led to more research to find out about the dolls' story. The children discovered that the women who make these dolls live in a very remote area in Africa and that the society they live in is strictly patriarchal with females having very limited status in the community. They also found out that the Ndebele women work individually from their homes to create these dolls and the income from this project enables them to care for their children.

The children became concerned to learn that any child could not have their basic need for adequate food met. They also considered toys as essential for all children. They were interested in talking about why things were the way they were for these children and observed that it was lucky that their mum's made the dolls otherwise it would not have been fair. The educator related these conversations to the question of how to make sure children were being fair at preschool and all decided that it was important to share and take turns with the toys within the setting.

There were so many directions to take with the research. The children were very keen to create their own version of an Ndebele doll and gathered a variety of beads and other decorations they could use. They also discussed how to keep safe when using the craft glue guns. Each doll was testament to the thought, planning and time devoted to creating it by the children. The dolls provided a very special keepsake to share with their families and their display continued to evolve throughout the learning journey.

Key element:

» Actively inquire to make meaning
» Demonstrate critical understanding of texts

Learning processes:

» Communicating
» Creating and making meaning
» Reflecting critically

Observations:

» Initiating conversation with a trusted educator
» Asking questions, listening and responding appropriately
» Comprehending new information and building cultural connections
» Embracing the humour of the workshop
» Exploring the meaning of new vocabulary eg, African greetings, chants, Ndebele
» Interpreting and making meaning of new information
» Becoming aware of how children can live differently in other countries and how this can affect their lives
» Exploring what is fair and unfair

Literacy practice and reflections:

» How are children supported to research a range of texts?
» In what ways can children's oral language skills be developed?
» How is children's inquiry supported through your curriculum?
» How are children exposed to other cultural literacy practices and their meanings?
» What is the educator's role in encouraging children to inquire and make meaning? As a learning partner, facilitator, director?
» Are the children in my context inspired to learn more about topics that interest them?

Literacy

I understand the language of my world

Surprise!

Emily asked the educator to watch her complete a puzzle. She did this quickly and competently, matching shape and detail.

As they chatted, the educator asked Emily what she thought all the children in the puzzle were feeling. Emily identified many of the emotions, and when she wasn't sure, she asked the educator to read the word under the facial images.

"What does your face look like when you are feeling upset?" asked the educator.

Emily responded by displaying an appropriate expression. This then became a game for Emily as she redid the puzzle and made the corresponding emotion show in her facial expression.

The educator took the opportunity to chat further about the various emotions displayed on the puzzle and asked Emily if she had ever felt like that. Emily was able to describe situations which caused her to feel in certain ways and she was also able to describe situations and talk about how they made members of her family feel.

Key element:

» Demonstrate critical understanding of texts

Learning processes:

» Communicating
» Creating and making meaning
» Reflecting critically
» Encoding and decoding

Observations:

» Using body language to emphasise understanding and applying prior knowledge
» Interpreting symbolic representations of emotions on the puzzle pieces
» Using appropriate/sophisticated vocabulary to discuss her ideas and experiences
» Sharing her sense of humour

Literacy practice and reflection:

» Using this example as formative literacy assessment, what further literacy learning could be planned for Emily?
» How often is a reciprocal conversation sustained with each child in ways that are playful and engaging?
» Are spontaneous teachable moments used to extend children's vocabulary and understanding?

Literacy

I use language to connect with my world

Jacob's skull

An educator observed and documented a conversation between a small group of children who were involved in a guessing game with Jacob regarding a skull he had bought into the centre after his holidays.

"Is it an eagle, horse, emu, tapir, ostrich or cow?" asked Oliver. "No," said Jacob.

"It could be from the dinosaur age," said Oliver. Jacob shook his head.

"Is it a stegosaurus?" asked Scott. "Nope," said Jacob smiling.

"Is it a possum or a dinosaur?" asked Alice. "None of those," said Jacob.

Luella started observing closely. "It has teeth and claws. It stinks 'cause it's dead!" she said.

"It has 16 teeth," said Alice. "And one tooth is missing."

"When it got dead the tooth just fell out!" said Oliver. "It could have been bitten by a snake."

"That's a dinosaur bone head. It's extinct! It's a meat eater that died. It's a baby T-Rex," said Jeremy.

"The dinosaur bone was underground and an archaeologist dug it up and it needs to go to the museum now!" said Angus. "I think it hunted at night."

Kobi said, "It's a dinosaur head for real!"

And after looking closely at the skull once again, Alice said, "It's a rabbit head with its ears cut off!"

Jacob sat quietly and smiled as the children engaged in this conversation, turning his head to each speaker as they added their comments.

"What are you doing with that bone?" Noah asked.

"I know what it is but they don't!" said Jacob.

Noah said, "I think it is a stegosaurus that died in a volcano!" Jacob laughed and shook his head.

"It could be a bull with its horns cut off and its neck cut off!" said Alice.

Noah laughed. "I think it really is a dinosaur," he said.

"When animals die they turn into bones and the bones disappear," said Luella.

"Yuck," said Jeremy.

Max came over and looked at the skull. "Is it a cow bone because they have lumps like that on the back of their neck? And those holes (nostrils) are for smelling something to eat! I think a crocodile ate it!"

Jacob shook his head and said, "Uh-uh."

Oscar joined the group with Max and added to the dialogue, "A long time ago…it was a T-Rex. When dinosaurs lived." Jacob shook his head.

"Or it could be a cow 'cause they have big eye holes like that! Hey, it's got a wobbly tooth! And one missing. We could look for it," added Oscar.

Jacob then announced in a big voice, "Hey, everyone… it's a SHEEP HEAD, 'cause I know, 'cause I found it!"

"A sheep!" they all said together. "It's a sheep." And they looked again closely at the skull.

"My Mum told me it was a sheep," said Jacob and he took the skull and put it on a stump near the swings.

Key element:

» Use increasingly sophisticated language to connect and communicate

» Describe experiences and express ideas

Learning processes:

» Communicating

» Creating and making meaning

» Reflecting critically

Observations:

» Demonstrating rich vocabulary motivated by curiosity; this was demonstrated by the comments and the varied levels of questioning used by individual children

» Confidently theorising, interpreting, argumentation and sharing prior knowledge

» Listening and responding respectfully in a reciprocal group conversation

» Observing body language and humour to enhance the dialogue

Literacy practice and reflections:

» In this experience, who were the teachers? Who were the learners?

» What does the documented dialogue communicate about each child's language skills?

» How can this information be used to support and extend each child?

» How can a culture of acceptance and trust be built in which each child's opinions, theories, and contributions are valued and acknowledged?

Literacy

I use language to connect with my world

Tunip

Tyler arrived at the centre and said, "My name is Dashy and this is my friend called Tunip."

He held out his hands to show me. His friend Tunip was sitting in his hands and obviously invisible!

"I found him in a rotten tree stump at the back of the preschool," Tyler said.

"What was he doing near the old tree stump?" I asked.

"Waiting for me!" replied Tyler.

I was holding a camera and I could see Tyler looking at it closely. "Are you taking pictures?" he asked.

"I was," I replied.

I asked him if I could take a photo of Tunip. "Yes," Tyler replied. "He likes his photo being taken, but he doesn't like to be tickled by feathers or your fingers."

Tyler held up his hands ready for me to take a photo.

"Can I have a look at the picture?" he asked.

I showed him the picture on the camera that I had taken. "That's good," he said.

After the photo he said, "He only wakes up when you give him a kiss. Would you like to blow him a kiss, Katie?"

I blew Tunip a kiss.

"Uh oh, he is waking up!" Tyler said as he moved his hands about. "I need to go and rescue his Mum now."

Tyler ran outside to the back of the garden and returned shortly.

"Katie, I think I've lost Tunip." he said.

He was pretending to look all over his hands and around himself. "I think he may be hiding in the shop".

Tyler then went into the preschool supermarket and called out, "Tunip! Tunip!"

He pretended to look under things and then said, "Oh there you are! I found him Katie."

He showed me his hands again.

"So you have," I said.

"Shhhhhh!" Tyler said. "I rescued his Mum and she is fast asleep now, so you must be very quiet."

Tyler pretended to put Tunip and his Mum on the lounge chair and returned to the supermarket to play as Tunip and his Mum slept.

Key element:

» Maintain a reciprocal shared conversation

Learning processes:

» Communicating
» Creating and making meaning

Observations:

» Initiating conversation with a trusted educator
» Speaking in sentences, asking questions, listening and responding appropriately
» Creating and narrating an imaginative told story
» Using vocal expression to engage an audience
» Using body/gesture to convey meaning

Literacy practice and reflections:

» How are children supported to engage in reciprocal conversations with each other and with adults? Are oral and non-verbal language skills, signing and other augmented communication aids considered?
» Is oral story telling part of practice? How can oral story telling be extended into other forms of literacy?
» As a staff team, reflect on how home and cultural literacy practices such as oral story telling are valued.

Literacy

I use language to connect with my world

Fei Fei

Fei Fei was very quiet when he first began preschool. There was a lot of separation anxiety, observation and parallel play.

Staff supported his relationships and trust building. Over time and through using body language, Fei Fei responded to a friendship initiated by Asher and a mutual love of trains.

Visual symbols for routines initially helped Fei Fei understand what was happening and to learn words in context. A 'red letter day' was when he ran in and called, "Good morning!" first!

Social and symbolic play allowed Fei Fei to participate non-verbally to start with and then as his confidence with the English language improved, he began to contribute ideas. Fei Fei now initiates play ideas with a large group of friends and is able to assert himself, negotiate and lead as well as follow.

Fei Fei is now so confident and competent that he is even joking in English, "I not tell you that."

As Fei Fei's feelings of security grew, so did his confidence and he began to try new things such as writing his name.

"The sun is shining. A shark is eating, Deb. Pretend! The sea is wavy." Fei Fei is speaking in sentences to describe the narrative of his painting.

Key element:

» Use increasingly sophisticated language to connect and communicate

Learning processes:

» Communicating
» Creating and making meaning
» Coding and decoding

Observations:

» Describing experiences and expressing ideas
» Using known and new vocabulary in context
» Listening and responding to others
» Meeting needs, negotiating roles

Literacy practice and reflection:

» How are the home literacies of English as an additional language or dialect (EALD) children and their families valued? How is intervention targeted to support a sense of trust, belonging and safety for EALD children? What are the considerations for the engagement of EALD families?
» How are individual children supported to take risks and develop confidence with their oral communication, drawing and writing?
» How is children's literacy development extended through play?

Literacy

I use language to connect with my world

How much?

The context for the shop play evolved from multiple points. The children had been making perfume by crushing various leaves and petals from home and preschool in a mortar and pestle, mixing with water and distilling it into bottles with pipettes. There were some very interesting names created for the fragrances! The educators planned to extend this play with herbs and fruit scents for children to experiment with.

Meanwhile many of the children had been planting vegetable seedlings as well as seeds from fruit time and there was much discussion about favourite vegetables.

The popularity of a previous hot lunch at our preschool had us thinking about a healthy recipe to introduce and the children's combined interests prompted us to plan an excursion to the local shops. The children were involved in compiling the shopping list and at the greengrocer's did a lot of noticing, sensory exploration and reading the environmental print to complete the shopping.

Back at preschool, the children followed a recipe to cook vegetable soup and listened to the told story of *Stone Soup*. The following sessions saw socio-dramatic play evolving into a (mostly!) greengrocer's shop. The children took on various roles in the setting up, from sorting fruit and vegetables into categories, to finding the timer to have 'fair' turns on the cash register, to making money.

Jamie was very motivated to label the produce as he had seen it at the real shop. He began by asking the educator to write a word for him to copy. When he asked for another word (bread), the educator challenged him to have a go, as she had a good understanding of Jamie's strengths in phonological awareness. He wrote the word as the educator spelt it.

When Jamie asked for another word, the educator supported his spelling and writing by focusing Jamie to listen to the initial sound of the spoken word, and work out which letter he needed to write and so on. She accepted his efforts without comment as she wanted Jamie to have confidence in himself as a writer and to take risks. Always being correct is something Jamie has often struggled with, so it was important to encourage him to have a go.
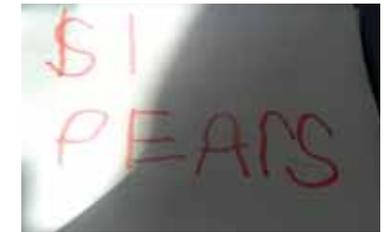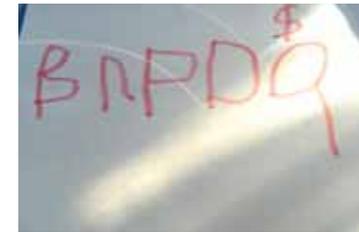
Key element:

» Use language appropriate to purpose

Learning processes:

» Communicating
» Creating and making meaning
» Encoding and decoding

Observations:

» Describing experiences and expressing ideas
» Participating in real literacy experiences
» Using known and new vocabulary in context
» Listening and responding to others
» Negotiating roles, prices etc

» Speaking in sentences, using language conventions and greetings
» Using symbols and print

Literacy practice and reflection:

» How are children engaged in real life meaningful experiences?
» How are individual children supported to take risks with their drawing, writing and oral communication?
» How are children connected with the sociocultural aspects of literacy in the wider community?
» How is children's literacy development extended through play? Think about resources, vocabulary and modelling.

Appendices

Appendix 1: Glossary

Appendix 2: References

Appendix 3: 2014 DECD trial sites

Appendix 4: DECD Numeracy and Literacy Reference Group

Appendix 5: DECD Numeracy Expert Working Group 2013-2014

Appendix 6: DECD Literacy Expert Working Group 2013-2015

Appendix 1
Glossary

Analyse To examine carefully and in detail in order to identify causes, key factors or possible results

Assessment for learning The process of gathering and analysing information as evidence about what children know, can do and understand with the purpose of planning subsequent learning experiences. It is part of an ongoing cycle that includes planning, documenting and evaluating children's learning also referred to as 'formative assessment'

Attribute An attribute is a property such as colour, shape, number of sides, type of angle

Benchmark A point of reference against which learning is measured or compared

Capacity Describes how much a container will hold

Code Switching The practice of switching between a primary and a secondary language or discourse

Comprehend To make meaning

Compose To create or make by joining things together

Conventions of print The standard and uniform way print and text operate; such as directionality, punctuation, word/letter concepts and grammar

Conventions of texts Accepted language practices that have developed over time and are generally used and understood (refer to Texts)

Critical literacy The ability to actively read text in a manner that promotes a deeper understanding of socially constructed concepts

Data A general term for a set of observations and measurements collected during any type of systemic investigation

Decoding The process of working out the meaning of words in a text. In decoding, readers draw on contextual, vocabulary, grammatical and phonic knowledge

Dispositions 'Enduring habits of mind and actions, and tendencies to respond in characteristic ways to situations' (EYLF)

Encoding The process of converting oral sounds and language into graphic symbols

Evidence Any material, knowledge of the child, anecdotal incidents, observations, or information from other sources that support the overall picture of a child's development

Generalise To extend a particular skill, principle or concept to an unfamiliar situation or scenario

Genre The forms and conventions developed to help us communicate effectively with a variety of audiences for a range of purposes

Measurement tools A device for measuring a quantity. Different tools are used to measure different attributes

Modes of communication The various modes of communication including oral and written communication and non-verbal communication; this may include sign language, gesture, stories, songs, dance, music, weaving, drawing, sand drawing etc

Quantify Counting or expressing something in numbers

Quantification To describe a given situation by means of numerical language

Perimeter The distance or length of the boundary around a two-dimensional shape

Reciprocal shared conversation Conversations characterised by equal voice that encourage children to engage in extended verbal communications

Shape (Two-dimensional 2D) A shape that only has two dimensions – width and height and no depth **(Three-dimensional 3D)** An object that has height, width and depth – any object in the real world

Subitising Recognising the number of objects in a group without consciously counting

Texts 'Things we read, view and listen to and that we create to share meaning. Texts can be print based, such as books, magazines and posters or screen based eg, internet sites and DVDs. Many texts are multi-modal, integrating images, written words and/or sound' (EYLF)

Trajectory of learning The developmental pathway of learning followed by children

Transformation A way of moving a shape or an object so that it is in a different position. Transformations include rotation (turn), translation (slide) and reflection (flip)

Volume The amount of three-dimensional space an object occupies

Appendix 2

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Appendix 3
2014 DECD trial sites

Modbury Preschool

Penneshaw Kindergarten

Hendon Preschool

Eden Hills Kindergarten

Golden Grove Kindergarten

Goolwa Children's Centre

Forbes Children's Centre

Port Pirie Community Kindergarten

C.a.F.E Enfield Children's Centre

Streaky Bay Children's Centre

Pt Augusta West Childhood Service Centre

Jamestown Community Children's Centre

Swallowcliffe Preschool

Acacia Kindergarten

North Haven Kindergarten

Mannum Kindergarten

Mt Barker Kindergarten

Ngura Yadurirn Child and Family Centre

Para Hills West Preschool

Wattle Park Kindergarten

Nuriootpa Community Children's Centre

Kaurna Plains Children's Centre

Appendix 4
DECD Numeracy and Literacy Reference Group

Membership	2013	2014	2015
Chair	Rod Nancarrow	Rod Nancarrow	Rod Nancarrow
Executive officer	Graham Francis	Jacinta Poskey	Graham Francis
Education director	Christine Hatzi	Anne Millard	Christine Hatzi
Preschool nominee	Lisa Coleman Golden Grove Preschool	Lisa Coleman Golden Grove Preschool	Lisa Coleman Golden Grove Preschool
Primary school nominee(s)	Sarah Button Stradbroke Primary School	Karen Anderson Goolwa Primary School Zoe Mimidas Monash Primary School	Sarah Button Stradbroke Primary School
Secondary school nominee	Amanda Aulert Blackwood High School	Amanda Aulert Blackwood High School	Rebecca Ludewig Salisbury High School
Early Childhood Australia – South Australia branch	Joan Gilbert	Joan Gilbert	Joan Gilbert
Gowrie Adelaide	Lynne Rutherford	Lynne Rutherford	Lynne Rutherford
Child and Family Health Service	Alice Steeb	Alice Steeb	Alice Steeb
FamiliesSA – Residential Care	Nicole Stasiak	Nicole Stasiak	Nicole Stasiak
Aboriginal education	Elizabeth Andrew	Elizabeth Andrew	Elizabeth Andrew
South Australian Aboriginal Education Consultative Body	Haydyn Bromley	Cheryl Cairns	Cheryl Cairns
Preschool Directors Association of South Australia	Marilyn Clark	Marilyn Clark	Marilyn Clark

Membership	2013	2014	2015
South Australian Primary Principals Association	Steve Portlock	Pam Kent	Pam Kent
South Australian Secondary Principals' Association	Janette Scott Para Hills High School	Janette Scott Para Hills High School	Janette Scott Para Hills High School
South Australian Area Schools Leaders Association	Robyn Wohling Kimba Area School	Robyn Wohling Kimba Area School	Leonie Falland Mannum Community College
SA Special Education Principals and Leaders Association	Niki Takos The Grove Education Centre	Niki Takos The Grove Education Centre	Niki Takos The Grove Education Centre
Council of Education Associations of South Australia	Phil Callen	Virginia Pattingale	Lisa-Jane O'Connor
Data Management and Information Services, DECD	Jacinta Poskey	Kathryn Byrnes	George Dracopoulos
Tertiary sector – Deans of Education	Julie Clark Flinders University	Julie Clark Flinders University	Julie Clark Flinders University
8-12 teacher representative in first five years of teaching in country region	Jenna Hewlett Whyalla High School	Jenna Hewlett Whyalla High School	Jenna Hewlett Whyalla High School
Year 11 student representatives (school name only)	Glenunga International High School Le Fevre High School	Glenunga International High School Le Fevre High School	Seaview High School Craigmore High School
Parent representatives	J Bundy F Rodney	J Bundy F Rodney	J Bundy F Rodney
Powerful Learners, Program Leader, Literacy		Antonella Macchia	Antonella Macchia
Powerful Learners, Program Leader, Numeracy		Grant Small	

Appendix 5
DECD Numeracy Expert Working Group 2013-2014

Membership	2013	2014
Numeracy and literacy director	Rod Nancarrow	Rod Nancarrow
Program leader, Powerful Learners, Numeracy		Grant Small
Regional/education director	Kathryn Bruggemann	Kathryn Bruggemann
Coach Manager	John Bleckly	John Bleckly
South Australian Primary Principals' Association	Grant Small	Brenton Robbins
South Australian Secondary Principals' Association	Marion Coady	Marion Coady
DECD (Early Years)	Barb Willmott	Kerry Hugo
Leadership and Pedagogy	Val Westwell	Val Westwell
Workforce Development	Bev Rogers	Diane Coady
DECD (Australian Curriculum)	Jo Kennedy	Jo Kennedy
Preschool Directors Association	Asha Crozier	Asha Crozier
Australian Science and Mathematics School	Susan Hyde	Susan Hyde
Primary Maths Association of South Australia Inc.	Lisa-Jane O'Connor	Lisa-Jane O'Connor
The Mathematical Association of South Australia	Mark Darrell	Mark Darrell
Early Childhood Australia	Sue Jackson	Anne-Marie Shin
Early Childhood Organisation	Jose Thompson	Penny Cook
Executive officer	Matt Millar	Matt Millar

Appendix 6

DECD Literacy Expert Working Group 2013-2015

Membership	2013	2014	2015
Program manager B-18 Literacy program Leader, Powerful Learners, Literacy (2014/15)	Don Borema	Viv Rusk Antonella Macchia	Antonella Macchia
Regional/education director	Joann Weckert	Joann Weckert	Joann Weckert
Lillian de Lissa Chair of Early Childhood Research at UniSA & DECD	Professor Pauline Harris	Professor Pauline Harris	Professor Pauline Harris
Literacy and Numeracy National Partnership	Kath Thelning	Kath Thelning	Kath Thelning
English as an additional language or dialect	Dr Jenny Barnett	Dr Jenny Barnett	Dr Jenny Barnett
South Australian Primary Principals' Association	Vonnie Dolling	Vonnie Dolling	Vonnie Dolling
South Australian Secondary Principals' Association	Jeane Schocroft	Jeane Schocroft	Jeane Schocroft
Early Learning and Quality Reform	Michael Austin		
Early Years, Wellbeing and Standards R-12 Teaching & Learning Services		Jen Emery	Jen Emery
Leadership and Pedagogy	Sue Charleston	Sue Charleston	Mandi Dimitriadis
Director, Early Learning, Partnerships and Planning Office of Children & Young People		Marina Elliott	Marina Elliott
Workforce Development	Kerry Kavanagh Leila Kasprzak	Leila Kasprzak	Melissa White
Australian Curriculum Implementation Teaching & Learning Services	Christine Thompson	Christine Thompson	Christine Thompson
Preschool Director's Association	Ann Millhouse	Ann Millhouse	Ann Millhouse

Membership	2013	2014	2015
Australian Literacy Educators' Association	Linda Dally	Linda Dally	Linda Dally
Early Childhood Australia	Kate Ryan	Kate Ryan	Kate Ryan
Early Childhood Organisation	Marilyn Hayward	Marilyn Hayward	Marilyn Hayward
Director, Numeracy and Literacy (ex officio) Teaching & Learning Services	Rod Nancarrow	Rod Nancarrow	Rod Nancarrow
Executive officer	Margaret Kellett	Trish Tranfa	Trish Tranfa