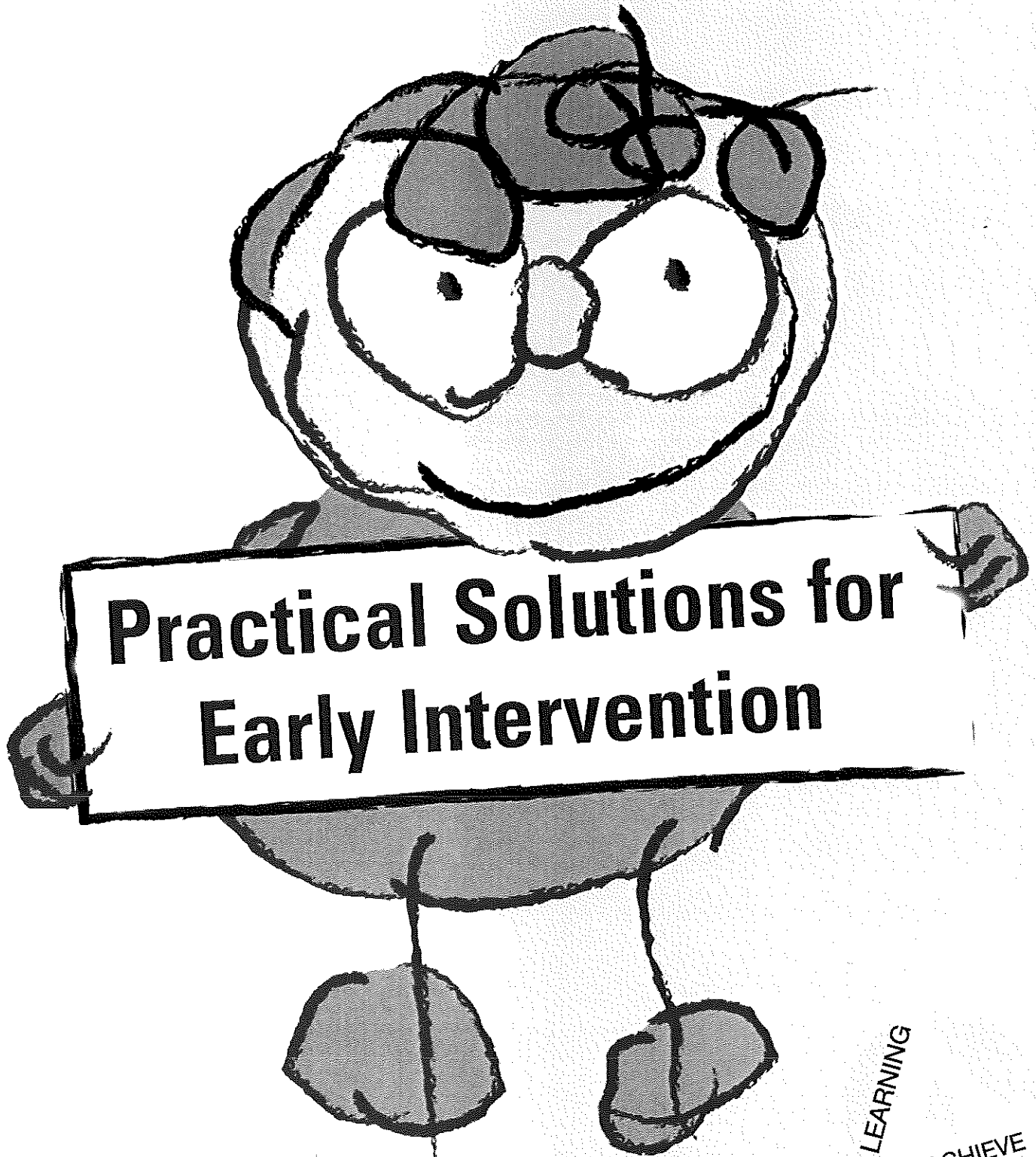


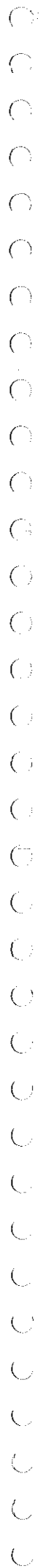


Falkirk Council
Education Services



November 2013.

LEARNING
TO ACHIEVE





This document should be read in conjunction with the Falkirk Council files: **'Supporting Effective Learning for Children 3 to 5' University of Dundee (2005)** and, **'Effective Learning and Teaching in Primary 1 and 2, Early Intervention Programme' University of Dundee (2003)**.

It is not intended to provide the background premise for Early Intervention but rather to provide staff with practical solutions for early literacy, early numeracy, the learning environment and working with parents.

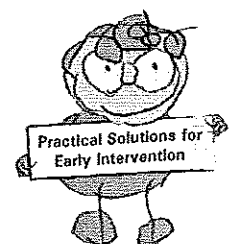
However, it is important to restate the aims and strategies from the Early Intervention Programme at this point.

Early Intervention Aims

- Raise standards of literacy and numeracy.
- Raise the quality of learning experiences for early years children.
- Continue and develop the learning and teaching practices of the Early Intervention Programme.
- Promote the well-being of the whole child at all stages of development.
- Promote positive attitudes to learning in children and adults.

Key Strategies

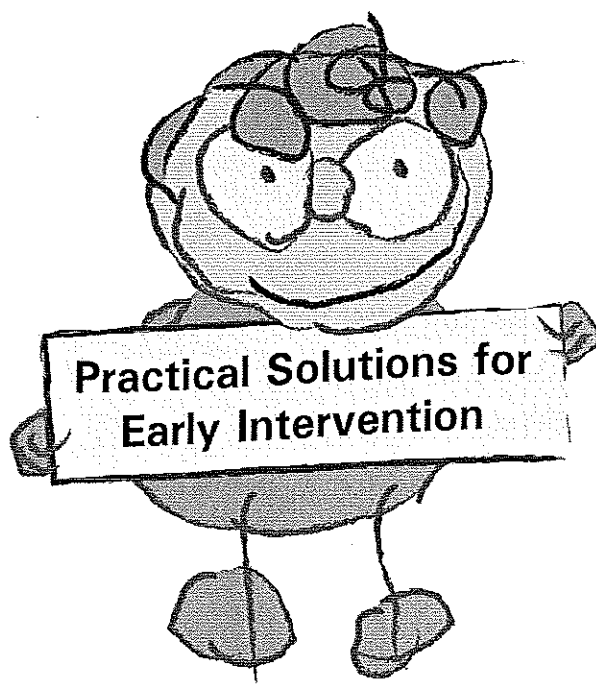
- Create in your nursery/classroom a print rich learning environment.
- Organise your day to give lots of time to the oral curriculum.
- Identify, value and acknowledge the literacy and numeracy skills the children bring from home to nursery and school.
- Regularly inform parents of their child's participation in literacy and numeracy learning opportunities within the nursery and school and encourage parents to support this learning at home.
- Establish effective learning and teaching strategies to facilitate early success in literacy and numeracy.
- Liaise with Early Years staff and P1 staff at the time of transition to effect a continuous progression of the child's literacy and numeracy skills.
- Liaise with family support workers to develop shared strategies for working with parents.





Contents

	Page
Practical Solutions for the Learning Environment	3
Practical Solutions for Working with Parents	7
Practical Solutions for Literacy	9
Practical Solutions for Early Numeracy	31
Bibliography & Suggested Reading	38





Practical Solutions for the Learning Environment

The Learning Environment

When planning for the use of resources and space available, early years staff should take into account the following features of early learning as highlighted in the **Rumbold Report DES(1990)**.

- Young children follow recognised patterns of development but within any group there will be considerable variation between individuals.
- Children are individuals who focus on their own needs and interests, rather than those of others.
- Children are generally active.
- Children operate most effectively through first hand experiences.
- Children make sense of their world by exploring objects, materials and emotions in situations which have meaning to them.
- Young children are naturally curious – they want to know why and how things are as they are.
- Young children ask lots of questions and need immediate and appropriate responses.
- Children's imagination can be nurtured by responding to their curiosity. With encouragement and stimulation, this curiosity will develop into a thirst for and enjoyment of learning.
- Children need opportunities to be alone, to interact in pairs and in small groups, to engage in parallel or solitary play or co-operative play.

The Staff Team

Providing a valuable learning environment is primarily dependent on the staff team. When establishing an effective Early Intervention Programme, consideration should be given of:-

- Effective, respected and respectful leadership.
- Identifying staff skills and strengths, valuing and building on these skills.
- Regular opportunities for sharing information on observed good practice and professional development undertaken.
- Regular curriculum planning meetings with Early Intervention on the agenda.
- Identifying areas of responsibility for the following aspects.
 - a) The Improvement Plan will identify staff with responsibility for progressing the literacy and numeracy areas outlined. The named person(s) undertake this work. Good communication, through team meetings, etc. will support the named person as well as helping other members of the team feel that they have a part to play within this work.
 - b) It can also be an effective strategy to allocate to named persons the responsibility for care and requisition of literacy and numeracy resources and to develop an inventory file of literacy and numeracy resources, suggested learning opportunities and activities.



- c) A member of staff can be given the responsibility of informing parents of the Early Intervention opportunities being offered to the children, e.g. newsletters, displays year books, home link ideas sheets.
- d) In order to maintain links with Falkirk Council Library Support for Schools and local libraries, a member of the staff team can be allocated the role of co-ordinator.

First Impressions

The Child's Perspective

When you look at the learning environment from the child's level:

- Can you see any object or area that makes you interested or curious?
- Does your curiosity take you there to find out more?
- Can you, as the child, see other areas within the room that you want to explore?
- Can you see a pathway to it?
- Can you play independently and confidently?
- Can you reach the resources you want to explore?

Within the organised layout of the nursery or classroom, decisions have to be made about what is provided in the environment to interest the child and thus encourages his or her learning.

The Adult's View

When looking at any learning environment and when deciding how to lay out the environment it is necessary for the adults to ask the following questions which should promote discussion and help decisions to be made.

What is the best use of the furniture?

Resources should be stored in an accessible fashion for the children and adults, taking into account:

- Safety and hygiene for children and adults.
- The size of the children and where they can reach.
- The size of the furniture especially the height of chairs, computer tables and work benches.
- The amount of furniture and storage units and their purpose.
- Surfaces and display areas needed for children to use.
- The space children need to explore.
- Space to leave and or extend models or constructions.
- The need for open spaces, spaces for a few children, comfortable areas and space for all the children to come together.
- The need to separate noisy and quiet areas.
- The need for display areas.
- Position of wall boards, whiteboards etc.
- The incorporation of the outdoor area as part of the learning environment.



These are only a few points. What they show, however, is that decisions need to be made about the purpose of the learning environment, how best to use the furniture to store and display, how to place the furniture in the space provided and when to change or replace areas.

Which areas do we want near to each other?

Activities can be categorised into three areas:

- Creative – e.g. art, craft, design, music.
- Investigative - science, maths, technology, modelling, natural materials, cooking and baking.
- Communication – reading, writing, talking, listening, role play, games and puzzles.

Decisions need to be made about where you might place these areas and which ones would be adjacent to which.

It is helpful to think of the learning processes that predominantly arise within these contexts and where you would be best placed to observe and assess these processes in transference across learning activities, e.g. Does the layout encourage the child to take his/her learning about colour from the investigative science display into, let's say, the art area in order to explore colour in painting and drawing?

What size of area do we need?

Take into account:

- The number of children who will be using the area.
- The need to store resources nearby.
- The need for children to spread out and to extend their activities.

How will children access resources?

- Storing resources and materials properly is the key to ensuring that children can reach and choose resources for themselves.
- Ensure that all resources and materials needed for a particular activity are stored within the same area or nearby.
- Continuity and consistency in the storage of resources is vital in letting children know exactly where to find resources.
- Rigid, lightweight containers for easy handling.
- Word and picture labels, silhouettes, and real objects to help children identify resources in containers and to return resources when play has ended.
- Adult interaction to ensure that access to resources to extend play is easily facilitated.

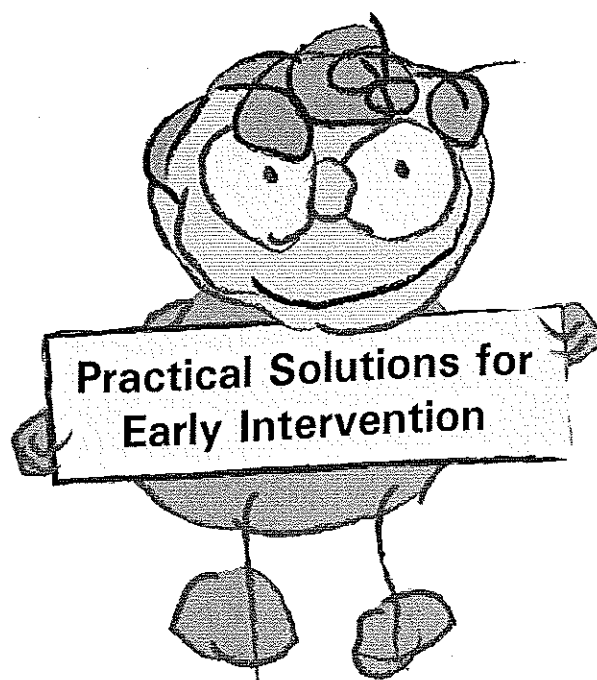
Other Points to Consider

- Can staff see their way round and through the room layout from their own height?
- Can the children see their way around the room layout?
- Can they be hidden or always seen?



- Are the room dividers at the height where the children are sheltered but can see out and know that adults are still there?
- Can the adults observe and keep an overview of the learning that is taking place?
- Is it too cluttered or too full?
- Is there space to let the children develop their learning by using their initiative?
- Are displays limited so that individual work/learning is valued and discussed?
- Is there enough space for the children to engage with the materials provided?
- Do children and adults consult with each other when an area is to be changed and new resources are to be added?
- When and how often should layout and resources be changed?

The staff team who give careful thought to the room layout, considering the points mentioned, will benefit from an effective learning environment where adults and children feel secure and ready to take forward learning in all areas of the curriculum.





Practical Solutions for Working with Parents

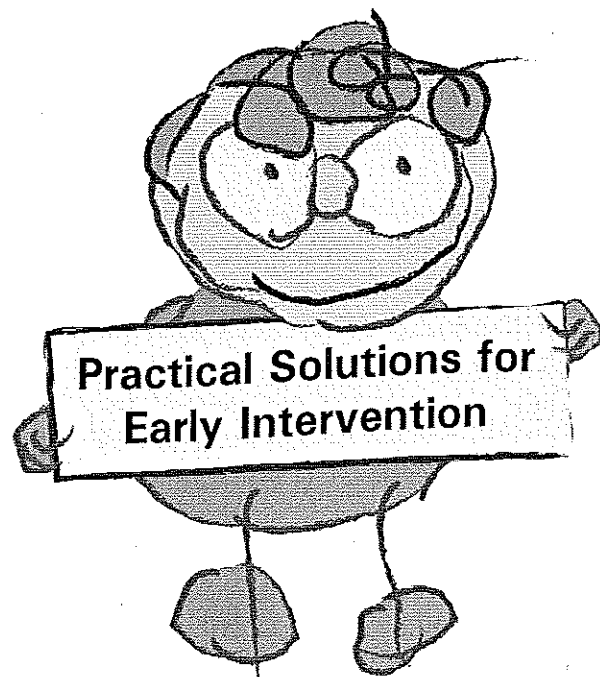
Many parents have bad memories of their own time in school and are not always keen to come into school.

We are often the first contact with education since the day the parent walked out of high school. It is too great an opportunity to miss. The way the parent experiences the first meeting can make or break the whole experience.

- Try to organise a home visit prior to the child's starting date at nursery. This can be of huge value to the nursery and the family in the transition from home to education and is often dismissed as an over use of human resources. The benefits prove to outweigh the costs.
- Make the school or nursery entrance a welcoming place. Make sure the photo's (recent and smiling only) of all adults who may be in or around the nursery or school are on display (preferably at a level that can be inclusive for the children).
- The teacher or key worker should be around at enrolment or initial visit. This is often the summer before they start and can make the difference between 7 weeks of excitement or 7 weeks of anxiety (for the whole family).
- Introduce yourself to the parents or carers using your first name, and then introduce yourself to the child at their eye level with your title.
- Let the child know how excited you are about them coming to nursery or school.
- If it is on a one to one, physical contact can often diffuse anxiety and enable you to come across as a person rather than an institution.
- Use eye contact, smile and be positive about your job and your setting.
- If there are two parents or carers present, address them equally.
- Make it clear that you are available and will always value their concerns worries and anxieties and you will always make time for them.
- Always focus on positives when you are addressing a parent about their child. When other professionals are working with a family or a child, try to anticipate their anxiety. Offer your support with attendance at meetings or guidance. Always introduce other professional to parents using their first name and surname. Always introduce parents using their title.
- Consider the use of body language and furniture when you are speaking. Avoid barriers. Be aware that your appearance can be threatening. Never have a desk between you and a parent. Always sit on the same side and address them as your equal.



- Organise a nursery PTA or encourage P1 parents to become involved in the school PTA. Be clear how the children will benefit from the money and their involvement. The parents will be more inclined to help if their children are the focus.
- Have a social calendar so the parents know what is coming and keep them in regular contact.
- Have news letters often, asking for help and thanking parents as well as informing them.
- The parents are a valuable resource. Not only do they have vast knowledge about the children but they bring many skills and contacts that are there to be harvested.





Practical Solutions for Literacy

Environmental Print

Creative activities can be supported by the following:

- Include appropriate environmental print in role play areas, for example:
 - o At the doctor's (prescriptions, appointment book, eye charts, magazines).
 - o In the café (menus, signs, reservations book, credit card, place mats, receipts).
 - o In the house (books, magazines, newspapers, T.V. video, telephone and telephone book, shopping lists). Talk about the words and what they mean and encourage the children to make their own signs.
- Printing with letters.
- Using cutters to make letters from dough, shaping letters of name from dough or clay.
- Encourage children to collect samples of sweet wrappers, labels, empty packaging containers. These can be used to make a collage and displayed.
- Encourage children to collect samples of alphabet letters. Use them to make alphabet books using print e.g. a food alphabet.
- Encourage children to make their own signs to use in role play activities.
- Encourage children to make letter shapes from a variety of materials.
- Allow children to explore letter shapes in wet sand, finger painting, chalk etc.
- Involve environmental print in all areas and praise recognition. Remember to tell the children they are reading and how proud everyone will be.

Investigative activities can be supported by the following:

- Organise print walks around the nursery and local area.
 - o Involve parents and give the children signs to spot, talk about the reason for each sign as you walk around.
 - o Draw attention to letters in the environment, for example, 'P' for Parking, 'M' for McDonalds.
- Make games using food packaging for matching, sorting and classifying activities. Snap and pairs games may also evolve from these materials.
- Use of ICT resources.
 - o Use of computer keyboard and appropriate computer games.



- Play games with names, e.g. names that begin with the same letter, things that begin with the same letter as a given name, alphabet book with names for each letter.
- Collect and display objects that begin with the same letter.
- Use letter and number forms and encourage children to sort letters and numbers.

Communication activities can be supported by the following:

- Talk about the meaning and purpose of signs, labels, and notices around the room.
- Include environmental print on wall displays. Not all wall print should be computer generated. It is important to include hand written examples, where the children can see staff modelling how to write a message.
- Use examples of environmental print to develop the children's understanding of the difference between words, pictures, letters and numbers.
- Play alphabet games, using alphabet mat, tiles, magnetic boards and letters.
- Provide free play with letter shapes – children can familiarise themselves with the forms of letters and with adult intervention talk about shape and pattern. Use letters made from a variety of materials and encourage the children to sort, match, find the letters of their names, compare and describe.
- Establish an awareness of print by sharing books, printed rhymes and poems by discussing illustrations and words, the title of the book, differentiating between large and small words and encouraging the children to join in with repetitive texts.

The use of children's names can assist print awareness. Other curricular activities that support the functional aspect of environmental print can be supported by the following:

- A day by day weather chart.
- Labels for materials and resources.
- Attendance chart (children move their name at entrance into nursery as they arrive).
- Wearing badges so they can read and write each others names
- Placing name on snack chart, removing name when snack has been taken.
- Ask effective questions, "Can you tell me who has still to come for snack?".
- Simple general instruction notice e. g. art work, water toys.
- Baking booklets with pictures and print.



- Name labels on pegs, trays and snack charts.
- Name labels available for art and craft activities.
- Opportunities for children to recognise and write their own name, providing laminated name cards in the writing area using alphabetical organisation, for easy access for children to copy.

Developing Awareness of the Features of Print

The next stage is to develop a deeper awareness of the features of print. Free play with letter shapes is one way in which children can familiarise themselves with the forms of letters and with adult intervention talk about shape and pattern.

- Have letters made of wood, plastic, foam, sandpaper etc. Encourage children to sort, match, find the letters in their name, compare and describe.
- Encourage children to make letter shapes from a variety of materials such as Plasticine, dough or clay.
- Allow children to write letters in wet sand, finger painting, chalk etc. Often the feel of the letter shape will help children to recognise and remember it.
- Use letter and number forms and encourage children to sort letters from numbers.
- Collect and display objects that begin with the same letter.
- Provide magnetic boards and letters for children to explore.
- Included in the book corner alphabet books and other books made by the children.
- Choose books for the book corner that match a particular letter, e.g. for 'b' you could provide bear books.

An awareness of the features of print will be established by sharing books, printed rhymes and poems.

- Discuss illustrations and words.
- Tell children that the words in the title of the book indicate the content.
- Encourage children to:
 - o Join in with favourite stories.
 - o Recognise and join in with well-known, often repeated parts of the texts.
 - o Point to specific and distinctive words.
 - o Differentiate between big and little words.

It is important that children are encouraged to learn that:

- Print has a purpose



- Print holds a message
- Print is different from other patterns in the environment
- Print has a range of uses
- Print is powerful
- Everyone, including children, can use print for their own purposes
- The words we say are mapped onto print
- Both print and illustrations tell the story
- Print is made up of letters
- Print has a particular visual appearance
- Print has a particular directionality
- Spaces separate words
- Words like, page, letter, words, read and write are part of technical vocabulary associated with literacy.

Early Reading Skills

Creative activities can be supported by the following:

- Set up a listening activity with a follow up task e.g. painting, drawing, and role play.
- Scribe and read captions to go alongside the children's drawings and paintings.
- Re-tell stories using props/story box, Velcro characters and board.
- Provide malleable materials, e.g. dough, making letters, names.
- Encourage children to make their own books – illustrations and scribing.
- Role play stories, consulting with children to identify relevant resources to support their play.
- Involve children in creating environmental print in the setting.
- Printing with letters.

Investigative activities can be supported by the following:

- Use of ICT resources and appropriate computer games.
- Environmental print treasure hunts (using packaging, familiar logos etc).
- Environmental print lotto.



- Working with magnetic boards and letters.
- Lotto games and letter bingo.
- Picture dominoes.
- Sorting and classifying pictures.
- Alphabet games, jigsaws and mats.
- Story sequencing jigsaws and games.
- Discussing children's representations before scribing.
- Referring naturally to the print around the nursery.
- Encouraging children to bring printed material such as cards, comics, local newspapers, and catalogues from home and discussing them together.
- Appropriate ICT resources and games.
- Reading stories to children on a daily basis.
- Using big books with groups of children.
- Reading information and instructions to the children.
- Writing books with the children and then reading them.
- Listening for enjoyment.

Throughout the learning environment

- As well as pictures, use the children's names on their coat pegs and trays etc.
- Ensure that the nursery or classroom is always a print rich environment at the child's eye level.
- Provide books in a wide range of contexts across the learning environment.
- Encourage children to access these for information and enjoyment.
- Provide storytelling activities supported by creativity boxes, etc.
- Tell stories to children without books as well as with books.
- Use non-fiction books with children to develop effective questioning and enquiry skills.



The Book Corner

When setting up a book corner/area, the following questions are useful to consider:

- Are there comfortable chairs, cushions, beanbags and/or rugs for sitting and lying on?
- Are the books displayed attractively with the covers showing?
- Is the space enclosed and situated in a quiet area of the nursery?
- Do you regularly refresh the books and objects on the interest table?
- Are there too many/few books?
- Is the area often left untidy?
- Is there a range of reading materials available?
- How do you monitor the use of the area?
- How do you encourage non-users?

Some helpful hints are:

- Creative use of shelf units, trolleys, screens, drapes and see-through dividing sections can help to produce the desired quiet and discreet 'corner.'
- Children will be encouraged to enter the area if there is a homely feel to the space. Add plants, vase of flowers, pot pourri in a bowl, etc.
- Children should have a reasonable number of books to choose from and there should always be something new and interesting for them to explore. As a guide there should be approximately 1.5 books per child, so for a 20 place nursery there would be 30 books at any one time.
- As a pre-cursor to effective use of the school and public library, children need to be comfortable with books and be able to choose from a wide selection of titles.
- The range of books should include new books and old favourites.
- Selections of board books, feely books, noisy books, pop-ups should be available.
- Annuals, catalogues, comics, travel brochures, newspapers etc should be included, ensuring regular renewal.
- If space allows, have a Big Book display with interactive activities such as puppets, objects from the story, story sequencing board.
- Story bags and story boxes can be used to encourage children to engage in reading and storytelling activities.
- Encourage children to 'read' to one another and to 'share' a story with a soft toy.



- Discuss the author and illustrator of books.
- Display photographs of authors of popular books.
- Include books that the children have been involved in making.
- Read books that feature rhyme, rhythm and repetition so that children can readily join in.

Books in Play

It is not only within the context of home play that books can play a central role, for example, in the hairdressers there could be:

- Magazines for the customer to read.
- Magazines from which customers choose new hairstyles.
- Newspapers.
- Picture books made by the children related to hair products and hairstyles.

When setting up such a context, discussion with children and adults should be undertaken in order to decide on the different types of reading material to be included in this role play setting. There are many examples of imaginative play contexts where books play an integral part. These could include a restaurant or café, a hospital, travel agent, or indeed a library.

Books in Drama and Role Play

Books can often be used as a starting point for drama and/or role play. Young children spontaneously act out well-loved stories, the adult's role is to support and extend this play.

Providing props will encourage children to play out a story recently heard, for example, three bowls, three spoons, three chairs, three pillows will suggest the story of Goldilocks.

Several books lend themselves well to extending the story 'before' and 'after' e.g. 'Rosie's Walk' (What was Rosie doing before she went of her walk? What did she do afterwards?)

Listening and Talking

Talk thrives in an environment where there are plenty of things to talk about. This environment should motivate children to speak and interact and should include:

- Quiet and busy areas.
- Interest tables and displays.
- Topic or special focus related resources.
- Construction materials.
- Small world play resources.
- A range of educational toys.



Children should be given opportunities to:

- Exercise their control and mastery of language.
- Explore grammatical patterns.
- Practice and experiment in becoming literate people.
- Develop security, value and confidence.
- Participate in a range of activities that take account of their interests.
- Think and talk about their learning.
- Share and discuss exciting events.
- Solve problems.

The layout of the learning environment should be structured in such a way that it stimulates the use of language and encourages the child to become involved in talk.

Furniture should be adaptable and multi-purpose in order to be able to sub-divide large open areas so that there are small enclosed areas where children can chat, imagine and wonder e.g. whispering corner. Cushions, beanbags and mats should be available for children to rest on and to be comfortable.

However, any area can provide opportunities for talk e.g. small world, block play. Communication and language must have a major focus on talk, discussion and activity.

These activities will involve the development of:

- The oral traditions of poetry using nursery rhymes, rhyme and rhythm, memory, audience awareness and clarity of speech.
- Storytelling in the oral tradition of telling from the heart supporting the understanding of story structure e.g. the pattern of threes shown in traditional tales such as the Three Little Pigs; beginning middle and end; sequencing of events and building on from the previous (e.g. The Enormous Turnip).
- Storytelling from books highlighting the concept of print, a love of stories and books, hearing stories read daily, developing vocabulary and sentence structure, and experiencing a variety of genre.
- Songs and music supporting the development of memory, rhythm and rhyme, language structures.
- Nonsense rhymes such as tongue twisters and jokes that allow children to play around with sound and language and to explore how language works.

Learning Opportunities to encourage Talking

Creative activities can be supported by the following:

- Establish a role play area (Children will explore different forms and uses of talk as they play out their various roles). A mirror with scarves, glasses, hats, jewellery, etc can act as a wonderful stimulus.



- Introduce a Puppet theatre in the learning environment (Puppets can be brought in or made by children).
- Develop a 'talk corner' table/boxes/bags (Provide unusual objects, various textures, size, shape and colour).
- Provide wide opportunities for junk model making, play dough, clay and painting. (It is important that the adult is there to listen to the conversation the child volunteers whilst involved in the activity).
- Provide a platform or small stage with screens and microphone, encouraging individual and group 'performances'.
- Introduce a 'magic carpet' that can whisk the child off to the land of make believe.
- Position a telephone in a quiet space that might attract children to talk into it alone, perhaps for reassurance purposes. Use discarded telephones rather than toy ones as these are more realistic to the children.
- Encourage children to make up rhyming shopping lists e.g. a pound of pears and three chocolate éclairs.
- Make up alternative versions of nursery rhymes, e.g., 'Hickory Dickory Dare, Jamie flew up in the air'.

Investigative activities can be supported by the following:

- Provide a range of sand, water, dough, clay and other natural resources. Compost is also a good resource.
- Provide small world play (as a separate activity or included in the above activities using natural stimuli).
- Provide a range of communication props eg Telephone box, answering machine, tape recorder, tapes, etc.
- ICT resources and computer software that have divergent programmes.
- Provide a range of construction materials and provide opportunities for children to extend their representation using other media such as drawing.
- Promote children's use of the digital camera.
- Develop games such as the 'What am I ?' game where children have to gather clues about an object or person and guess the identity.

Communication activities can be supported by the following:

- Set up a 'whispering corner' (intimate area for chat).



- Maximise talking opportunities during Circle Time.
- Devise rules for speaking and listening, giving and receiving messages.
- Play the game 'Talk Partners'. Each child has to ask questions to find out three different things about their partner. The child then relates what they have found out about their partner to other children.
- Develop your own instruction games where children give and receive instructions, e.g. threading beads to make identical necklaces. Similarly, descriptive activities, e.g. observing what their partner is wearing and reporting back. This could be extended to pictures, objects from home, or items on a tray or in a display.
- Listen to and document what the children say in captions on the wall or in books and displays. This shows that we value and respect what they say.
- Create a rich environment where there are exciting events and curious objects to talk about.
- Use individual and group time to discuss, reflect and extend the child's conversation.
- Play with language, nonsense and rhyme.
- Put children's actions into words.
- Display posters that celebrate talk, e.g. words we say when we are happy, angry, sad.
- Set up a story wall where pictured or photographs have been sequences and the captions are contributed by staff and children.
- A 'talk' chair can be used as a story chair, an expert's chair, a nursery rhyme chair etc.
- Ensure that there is a wide range of books that encourage an exchange of communication with the child.

Learning Opportunities to encourage Listening

The following suggestions can be presented in any area of the room and are categorised into three skills:

- Listening to sounds
- Listening to instruction
- Listening to language

Listening to sounds

- Take small groups of children on listening walks; in the nursery, school, in the park, on the street.



- Play the 'blindfold game'; arrange children in a circle. One child is blindfolded and has to point to the direction that a sound created by the adult or another child comes from. The sound can be from a musical instrument or a rattle, etc. When the child correctly locates the sound, he/she chooses the next child to be blindfolded.
- Another circle 'blindfold game' can be where children in the circle are given different instruments and the adult selects the child to create the sound. Again the blindfolded child has to point to the source of the sound.
- Yet another variation can be where the child who is blindfolded sits in the middle with an object that makes a sound behind his/her back. The adult chooses a child from the circle to move to take the object from behind the blindfolded child's back and to return to the circle without making a sound. If the child in the middle hears a sound, he /she points to the sound and if correct swaps places with the sound maker!
- Use taped sounds and ask children to identify what the sounds are. These could be matched to picture cards or objects.
- Play games identifying and copying sounds such as animal noises.
- Play 'Listen, Listen' where children have to identify a sound from an object that is hidden behind a screen or in a box. The object is from a collection of objects known to the children. The rhyme below can be used to construct the game
 - Listen, listen
 - A sound is near
 - Listen, listen
 - What do I hear?
- Another sound production game is built around the following rhyme and children join in with the sound at the end of the rhyme. The adult makes a virtual box and lid using hand gestures and opens the 'lid' very slowly and peeps in before the fourth line is spoken

Here is a box
Put on the lid
I wonder whatever inside it is hid
It's a without a doubt
Open the box and let it come out!
- Play games such as musical statues, chairs etc to encourage children to listen for the stop in the music.

Listening to Instructions

- Play 'Simon Says'
- Incorporate instructions with one, two then three elements in movement activities.



- Give children turns to carry out a sequence of actions e.g. James, stand up, touch your toes and sit down.
- Play 'hunt the object' games giving children clues as they continue their search.
- Set up activities where children have to follow spoken instructions to complete a building task e.g. a tower with a yellow brick, then a blue one and so on.
- Develop games using positional language e.g. Point to the ceiling, point to the floor etc
- Play singing games such as 'Dusty Bluebells', 'There was a Princess' and encourage close listening to the song to direct the actions.

Listening to Language

- Make deliberate mistakes in familiar stories and ask the children to spot them.
- Play 'Kim's Game' where children have to identify an object that has been removed from a collection that they have already seen.
- Display a selection of pictures of everyday objects, animals, etc. Give one clue at a time and encourage children to guess which one you are talking about e.g. If it is a bear, the clues could start with 'I have sharp claws.' 'I am brown.' and so on.
- Play 'I went on holiday and I took.....' where children have to remember the list of items before they add on their own.
- Always emphasise the connection between spoken and written language.

Learning Opportunities in Storytelling

Establish a wide range of stories that can be introduced to children. Contact with Library Support for Schools will provide you with an up to date list of good titles. The Scottish Storytelling Centre at the Netherbow in Edinburgh is also a very useful source of information and guidance.

When compiling a 'library' of stories to tell give consideration to the following sources:

- Finger play stories
- Fairy stories
- Traditional stories
- Stories with repetition
- Counting stories
- Favourite stories
- Original stories from the children and adults
- Stories by favourite authors



By involving the children in discussion about the stories they enjoy, it can heighten awareness of the endless possibilities of where stories can originate and the varying strategies that can be introduced to engage the children.

There can be stories:-

- About people
- From different cultures
- That make us laugh
- That help us explore emotions
- From television
- That we make up
- About things we have seen
- From poems
- From magazines, comics and newspapers
- That raise issues

Creative activities can be supported by the following:

- Story boxes or bags containing a variety of objects to encourage children to make up their own stories.
- Take a familiar character from a traditional story and ask the children to create a different adventure.
- Encourage the children to re-tell stories by using role play using scenarios, puppets, and cut-out pictures on a board or models of the characters.
- Imaginary journeys give the children the opportunity to take part in role play.
- Provide dressing up clothes and props that suggest specific stories and which can be rotated on a regular basis.
- Collect drawings from the story discussed and scribed and presented in a book which children can access.
- Encourage children to represent their ideas through different art and craft media.
- Make puppet characters from the story read to the children.
- Introduce a puppet theatre with a selection of puppets from which the children can develop and act out their own stories.
- Background music can be useful to set the mood of the story; musical instruments can be introduced to represent an emotion, event or natural phenomenon.

Investigative activities can be supported by the following:

- Children can develop a story by exploring different textures.



- Use an overhead projector with natural materials to create a visual backdrop within which the children can tell their stories.
- Use a collection of objects related to the story. Display and label these after the story and invite the children to explore the display.
- Explore a story box or bag containing a variety of objects which will encourage the children to make up their own stories.

Communication activities can be supported by the following:

- Plan regular storytelling to the children. Stories can be chosen by the adult or the children or linked to current topic or interest.
- Involve children in 'story circles' where the adult begins the story to which each child adds a phrase or sentence to develop the story.
- Introduce a 'story chair' that is a special place where children can develop confidence as storytellers.
- Big books can provide a stimulus and a structure for beginning storytelling with young children.
- Encourage children to tell personal stories from their home experience e.g. a baby story, holiday story, a birthday story etc.
- Leave taped stories in a quiet area. Use a tape recorder to record stories by adults and children.
- Invite a storyteller into nursery or school – contact your local library or Falkirk Council Library Support for Schools.
- Use photographs and video cameras to record children's storytelling.
- Wherever possible introduce non-fiction books to consolidate learning from a child's interest. This can also be developed through developed adult reading, props, role play e.g. using the water tray with a selection of model sea creatures to develop the child's interest in sea life. The story 'The Rainbow Fish' together with non-fiction books can add to support children's interest and learning.

An example from practice in one of our commissioned partner playgroups begins with the preparation for the Storytelling Festival and led to the further development of:-

- Adult storytelling in large and small groups. Attending storytelling training sessions led to improved practice by the adult in developing her storytelling techniques.
- Use of Big Books.
- Development of displays.
- Development of a familiar story 'Goldilocks and the Three Bears' that progressed to include learning opportunities across the curriculum.



- a) Numeracy; sequencing, size differentiation, counting, number recognition
- b) Creativity; model making, collage, painting.
- c) Role play; home area adapted to house of the three bears, related dressing up clothes, props related to story.
- d) Early reading skills; storytelling, picture recognition, display of key words in the story.
- e) Emergent writing and representation; drawing, emergent writing, scribing, children's book of drawings.
- f) Oral curriculum; discussion related to story in one to one and group situations; discussion about the bears' food led to the children discussing their likes and dislikes in relation to food.
- g) Newsletter to parents informing them of the storytelling event and the planned curriculum to support the event.

Learning Opportunities to Encourage Awareness of Rhyme

Creative activities can be supported by the following:

- Teach a variety of nursery rhymes - both familiar and less familiar e.g.
 - 'Sing a Song of Sixpence'
 - 'Little Jack Horner'
 - 'Little Miss Muffet'
 - 'Baa Baa Black Sheep'
 - 'Hey Diddle Diddle'
 - 'Mary had a Little Lamb'
 - 'Doctor Foster'
 - 'Incy Wincy Spider'
 - 'There was an Old Woman Who Lived in a Shoe'
 - 'Polly put the Kettle on'
- Encourage the children to use a variety of Art and Craft materials to represent their interpretations of the chosen rhyme.
- Make finger and stick puppets for rhymes.
- Make up rhyme bags with individual rhyme books, puppets and other relevant props.
- Offer children coloured sheets of paper. Ask the children to think of words that rhyme with each colour and invite them to draw a picture of the rhyming word, attach appropriate rhyming word to relevant colour and display.
- Create rhyming mobiles using pictures, children's drawings, objects and suspend at a height the children can see.
- Set rhymes to music and sing them together.
- Keep time to rhymes and songs with fingers, clapping/tapping different parts of the body, eventually introducing simple percussion instruments to tap out rhythms.



- Use different instruments to make a beat pattern and encourage the children to copy.
- Listen to different types of music and tap or clap the rhythm.

Investigative activities can be supported by the following:

- Set up a rhyme corner with illustrations and objects to remind the children of familiar rhymes.
- Make displays interactive so that the children can act out the rhymes.
- Help children arrange a rhyming display with objects and pictures which all rhyme.
- Make up a 'feely bag' with pairs of rhyming objects.
- Play rhyming games such as snap, lotto and pairs.

Communication activities can be supported by the following:

- Read stories, poems and rhymes with strong rhythm.
- Encourage participation in action rhymes.
- When reciting rhymes, emphasise the rhyming words. Hesitate as you reach the end of a line with a rhyming word and ask the children to fill in the missing word.
- Use clapping to emphasise rhythms, e.g. children's names.
- Make audio tapes of favourite rhymes.
- Beginning with the children's names, find a rhyming adjective for their names, for example, tall Paul, happy Jackie.
- Make a large book with a rhyme and illustration for each child's name, for example:
 - o Ben is ten.
 - o Laura Clark goes to the park.
 - o Elaine plays in the rain.
- Play odd one out using two rhyming objects or pictures and one that does not rhyme.
- Play a rhyming version of 'I Spy'.
- Read rhyming stories, for example, 'This is the Bear', 'Can't you swim Jim?'

An example of how to develop a cross curricular approach using a nursery rhyme is illustrated using the rhyme Hickory Dickory Dock.



Suggested activities:

- Recite the rhyme, keeping time with a wood block to make the tick-tock sounds. Add a clash of cymbals for the clock striking.
- Add more verses e.g.
Hickory Dickory Dock,
The mouse ran round the clock,
The clock struck two
The mouse said "Boo",
Hickory Dickory Dock.
- Make a collection of different types of clocks, alarm clocks, stop watches etc.
- Make a group book of places the mouse might have gone, drawings, pictures, text etc.
- Read some mouse stories e.g.
'Mouse Paint' by Ellen Stoll Walsh
'The Sleepy Dormouse' by Mark Ezra
'It Could Have Been Worse' by A.H. Benjamin, T. Warnes
- Set up a wall display, together with a copy of the rhyme.
- Choose some o'clock times and draw picture to illustrate things that happen at that time e.g. 8 o'clock "It's breakfast time". Use the clock face to encourage number recognition.
- Encourage the children's creativity e.g. painting, provide a variety of art and craft materials to allow the children to experiment and represent their interpretation of the rhyme.
- Can the children find more small animals, using books, magazines etc? Discuss their names and attributes.

Learning Opportunities to Encourage Awareness of Alliteration

Alliteration can be developed by adapting most of the previous ideas for rhyme as well as through the following suggestions:

- Learn and make up tongue twisters.
- Play 'I Spy' games.
- Play the game 'I packed my suitcase and in it I put'(all objects should start with same sound)
- Play 'odd-one-out' using five objects one of which has a different initial sound.
- Introduce Snap and Lotto games that have alliterative objects on the cards.



- Invent alliterative descriptions for children and objects e.g. Sunny Sam, Dodging Drivers, Tired Teds, etc.
- Play sorting games, sorting children into groups by alliterative first names, putting objects to be into a box, etc.

Representation and Emergent Writing

If children are to develop their mark making and drawing skills then they must use and develop as wide a range of media as possible. These may include:

- soft graphite pencils
- charcoal
- electronic computer marks
- felt markers and fibre tips
- ball point pens
- chalk
- paint and brushes
- water and brushes (outdoor play).

Surfaces to experiment with:

- paper of all kinds
- fabrics
- boards (blackboards, whiteboards, cardboard)
- walls
- the playground

Learning Opportunities

- Children's spontaneous drawings.
- Drawings that express feelings- suggested resource 'A Box Full of Feelings', 'Ploum'.
- Drawings related to storytelling.
- Drawings that convey ideas and provide information e.g. follow-up to child's play in role play, construction etc child's interest e.g. sea life, wild life, seed planting/growth etc.
- Observational drawings e.g. self portraits, still life.
- Follow-up activities from literature, music and drama.
- Books of children's drawings related to a topic of interest.
- Designated display areas for children's drawings.

Discussions between adult and child relating to the child's drawing will help the child to observe details, stimulate the child's imagination as well as giving the child a clearer perception of what he/she can represent through drawing.

Early Years staff should be realistic about the child's drawings in relation to her expectations, the developmental level of the child and always giving an encouraging and positive response to the child's representational drawings.



Staff should always be accepting of the child's work even though they may not see the relevance of what the child has represented.

Points to Consider to Encourage Emergent Writing

Physical Skills

Four key areas need to be developed to enable the child to progress their writing skills.

- Gross Motor Skills – the ability to control the body.
- Fine Motor Skills – the ability to fine tune the movements of the arm, hand and fingers.
- Visual Control – the ability to co-ordinate hand-eye movements.
- Spatial Control – the awareness of oneself in space, an awareness of direction (left/right) and plane (horizontal/vertical) and how to transfer that onto paper.

Suggested activities to develop the skills outlined

- Ball games that give the opportunity for children to kick, catch, throw, bounce etc.
- Play with hoops, Frisbees, beanbags.
- Encourage play on large apparatus e.g. climbing frames.
- Encourage football and dance-type activities.
- Large block play and large construction.
- Involve the children in finger rhymes.
- Encourage children to model and make – cutting, sticking, moulding, cooking, sewing, threading etc using a range of materials.
- Encourage the children to experiment with a range of tools and equipment – pens, pencils, crayons, felt tips, scissors, small construction etc.
- Share jigsaw puzzles and board games.
- Provide opportunities for painting, and mark-making on different sizes of paper, sand tray, play dough.

Early attempts at writing will take many forms and are likely to include:

- Random marks
- Linear or circular marks
- Marks with spaces
- Invented letters
- Actual letters
- A mixture of random and actual letters
- Letters and numbers
- Letters from their own name
- Letter strings
- Grouped letters
- Copies of environmental print
- Copies of adult writing.

The adult role can be summarised as to:

Model Let children see people using literacy tools and skills to communicate with one another.



Provide	Quality books, examples of print and the written word in a variety of scripts and fonts.
Observe	What children do and say and to assess their development of literacy skills.
Interact	While the child is reading and writing, always give positive feedback.
Intervene	Gently move the child forward with sensitive observation/interaction.
Evaluate	The adult should reflect on teaching strategies and achievement.

Possible resources within the writing area could include:

- A variety of paper in different sizes, shapes, colours and quality, neatly cut.
- A variety of pens, sharpened pencils, felt tips, crayons.
- Card, envelopes, coupons and forms, postcards and greetings cards.
- Note and message pads.
- Ready made booklets of different sizes.
- Small stapler, hole punch, rubber stamps, non-toxic glue, labels, pencil sharpener, sticky tape, paper clips, children's scissors, rulers.
- Old diaries and calendars.
- A waste bin.
- Wooden letters.
- Reference materials such as alphabet books, printed and laminated children's names, letters and numbers.
- Display area for the children's work, letters and messages, writing in other languages, handwriting styles.
- A post box that can be emptied at the end of the day.
- An old keyboard.
- Trays for completed drawings and writing.
- Resources should be stored in labelled, easily accessible containers, preferably on nearby shelves, not on the writing table.

The area should be well organised and maintained on a daily basis and restocked whenever necessary. Staff need to be aware of how the children are using the area and, through staff planning and child consultation, suggest new ways of using the area together with adding new resources. The resources need to be changed regularly to maintain the children's interest and the children should be encouraged to discuss their work and share it with others.

Learning Opportunities in Emergent Writing and Representation

Creative activities can be supported by the following:

An important aspect of writing provision is the role play area. A variety of different contexts can be created by staff and children together where children 'play' at being writers and explore the social contexts and purposes of writing e.g.:

- **Home corner** – books, magazines, newspapers, catalogues, crosswords, forms, writing pads, note pads, envelopes and a variety of pens, pencils, notice board in the kitchen, telephones, calendar, address book.



- **Doctor's surgery** – magazines, charts, posters in the waiting room, appointment book, telephone, message pad, folders for doctor's notes, prescription pad, eye chart, height chart.
- **Post Office** – forms, ink pad and stamp, envelopes, paper, greetings cards, postcards, parcels, string, stamps, scales, open/closed sign, telephone.

In all activities:

- Encourage children to write their names on models and paintings.
- Provide opportunities for mark making using a variety of media and tools e.g. finger painting, writing with feathers, brushes, malleable materials.
- Involve the children in sign making e.g. outdoor play, road safety.
- Celebrate a special event engaging the children in differing presentations of writing – making posters, banners, signs, invitation cards, menus, photo captions.

Investigative activities can be supported by the following:

- Games and puzzles.
- Writing bags and containing some writing resources.
- Free exploration and practice.
- ICT resources and software.

Communication activities can be supported by the following:

- Make books with the children and keep them in the library corner. Read them to the children.
- Encourage the children to watch and be involved when adults are writing lists, notes and signs for the room.
- Involve the children in some of the organisation of the room, e.g. writing shopping lists with staff, snack lists, writing their own name card, labelling resource boxes and displays.
- Ensure that adults talk about what they are doing when modelling writing.
- Give each child their own small post-box (poly pocket with child's photograph and name) and encourage them to correspond with each other, exchanging cards, drawings and letters.
- Create displays of photographs showing events that have happened, scribe the captions with the children.
- Create a book for parents that includes the children's drawings, attempts at writing and scribing by an adult.



- Encourage the use of the writing area and introduce writing opportunities across the curriculum.
- Encourage children to talk to adults and each other about their writing.
- Develop storytelling – followed up by displaying the props and books used in the writing area to encourage the children to draw pictures related to the story, adult scribes.
- Resource the writing area related to a particular interest e.g. birthdays, a visit.



Practical Solutions for Early Numeracy

The maths area should be located in a quiet area, preferably near to the writing area so that mark making can include numerical representations.

It is important that it includes a storage area so that staff and children know where maths resources are stored and where they can find a number line, examples of numerals to sort and count. There should be enough room to have accessible and clearly labelled storage and display. Storage should be in trays, clear plastic boxes and other safe containers. Shelves with silhouettes should be available to store resources such as scales, sand timers, measuring tapes etc.

Resources

The maths area should include at different times the following:-

- Reference and story books about number, pattern, size, shape and measurement.
- A clear number line with pictures or photographs.
- A height chart.
- Clipboards, paper and pencil for recording.
- Objects (natural if possible) to sort, classify, order and count. A big basket of shells, conkers, pebbles, fir cones, feathers is useful, so too are commercially produced items, for example, wild animals, dinosaurs, farm animals, transport toys, compare bears.
- Sorting trays and circles.
- Coloured mats.
- Wicker baskets and bowls.
- Wooden and plastic numbers.
- Boxes of assorted sizes, shapes and colours.
- Small wooden bricks in different colours.
- Magnetic shapes and numbers.
- Shapes.
- Beads, cotton reels and lace.
- Balances and scales.
- Sand timers.
- Tape measures.
- Assorted track and card games.
- Dominoes with shapes, colours, numbers or textures.
- Lotto games with different shapes and pictures.
- Assorted puzzles, including those about number, colours, shapes.
- Graded inset puzzles.
- Calculators and abacus.

Resources within the maths area should be changed regularly to sustain the children's interest and support any planned curriculum opportunities.

Creative activities can be supported by the following:

- A number walk – taking a digital camera to take photographs of numbers in the environment, or take photographs beforehand and ask children to find examples in the photographs.



- Numbers in the environment – children can participate with staff to build up a number display including numerals cut from magazines, birthday cards, adverts, packaging, calendars, dice, money etc.
- Count to the music when children are involved in using instruments.
- Create opportunities for children to use number language in role play areas by providing telephones and directories, ICT resources, tills and till receipts, menus and price lists, telephone remote control etc.
- Act out a number rhyme with props.
- Make a number book.
- Use a variety of media to encourage children to represent numbers.

Investigative activities can be supported by the following:

- Interactive maths displays e.g. books, stories and resources linked to the number 3.
- Make available a number line or chart with clear numerals to support children's learning.
- A narrow number line with numerals to 20 can be laminated and fixed to a table top.
- Using concrete materials, develop an understanding of number, eg, three-ness' of three.
- Make groups or sets of four.
- Make a tower of four blocks.
- Make patterns with four items.
- Make a book of four.
- Play board games and puzzles. Use large track games outdoors.
- Put a number of objects in a bag and see if the children can feel how many there are.
- Involve children in purposeful counting of themselves and each other e.g. 'How many children can work at the sand tray?'
- Play games using a large dice or spinner that involves collecting objects.
- Count how many plastic bears you can fit along the edge of the table.
- Make lists that include numbers.
- Have available number resources and charts for children to refer to as they need to, with numbers up to ten and twenty.
- Labelling resources with numbers, so that the children know how many resources to replace at tidy – up time.
- Using computers and computer software.
- Counting activities are many and varied e.g. count a tower of bricks, now lay them in a long line on the floor. How many bricks now? How many chairs do we need at the snack table?
- Counting when preparing food or equipment.

Whilst the children will investigate numbers independently, adult interaction and appropriate resources will help children to investigate numbers and counting in a meaningful way and lead to an awareness and further understanding of number.



Connecting Literacy with Numbers

- Use nursery rhymes that include number sequences, such as 'Five currant buns in the baker's shop'.
- Display notices that involve numerals e.g. '4 children can play here'.
- Provide opportunities for lots of discussion featuring numbers and counting, e.g. discussing ages, birthdays, cards, badges, calendars, clocks.
- Use props to act out number rhymes.
- Inclusion of number books in the reading corner as well as other areas within the room.
- Many story books have a mathematical content e.g. 'The Shopping basket', 'The Very Hungry Caterpillar'
- Circle time.
- Give children the opportunity to represent numbers by writing them, providing pens, pencils and paper in the number area.

Other Areas

- Invent clapping hands and stamping feet games that involve large and energetic body movements and numbers. Devise number games in physical play both indoors and out.
- Use opportunities for counting in daily activities when putting away large bricks, paint brushes etc.
- Use plastic or wooden numbers to press shapes in the sand or catch in a net in the water tray.
- Use construction material to involve counting activities.

The possibilities of introducing children to numbers and counting are many and varied. Practitioners could record any further activities they have introduced to the curriculum which have been enjoyed and have been successful in progressing the children's learning.

Problem Solving

- Counting in itself is a problem solving strategy which can be used to answer questions. These questions will lead onto more challenging ones such as how many more do I need?
- Devise problem-solving situations where children can apply their mathematical knowledge e.g. woodwork – How many nails do we need to connect two pieces of wood together? Who can help me to find the longest block to finish my model?
- Problem solving increases the child's attention to detail and allows children to try out their own strategies. It also gives children opportunities to see for themselves advantages of different, more effective approaches to the problem.
- Children are problem solving often, (at times when they are unaware of it). The practitioner's role is to introduce opportunities that may lead to problem solving or, to intervene to help the child to reach a successful outcome to the problem he has encountered in a mathematical context.

Measurement

In Early Years, children will begin to develop their experience and understanding of measuring, applying this to length, volume and capacity, weight and time. Once measurement has been thoroughly investigated using non-standard units, begin to introduce standard units.



Length

- Encourage children to talk about and compare their heights, talking about tallest, shortest, taller than, smaller than.
- Draw an outline of the tallest and smallest child, paint and display inviting the children to see the comparisons.
- Make a height chart, marking the children's height. Measure using standard and non-standard units of measurement.
- Measure everyday objects. Allow the children to experiment using different units of measurement.
- Display different tools for measurement e.g. rulers, meter sticks, tape measures etc. Discuss what they might be used for.
- Draw round hands and feet and let the children compare.
- Measure, for example, a table using hand spans.

Volume and Capacity

The sand and water trays provide experiences that will help to develop an understanding of this area of maths and mathematical language.

- Give the children opportunities to play with a variety of containers in the sand and water tray.
- Filling and emptying-how much, full, empty, more than, less than.
- Provide spoons and ladles of differing sizes – compare results as to how many spoonfuls are needed to fill the container, what can we use to fill the container fastest?
- Encourage the children to use smaller containers to fill larger ones.
- Identify volume and capacity in other areas of play e.g. find a box that all the bricks will fit into. How many cups will it take to fill the jug?
- Ask the children to bring various containers from home and discuss how and where they can use these them – what can they discover? Can they find any numbers on the containers – what does this tell them?
- Look for changes in volume e.g. rice when cooked or scones that rise in the oven.
- Ask the children to estimate e.g. how many small jugs will fill the large jug?

Weight

- Make display of different types of scales and talk about their uses.
- Let the children experiment with balance scales using items such as beads, counters, compare bears, building bricks.
- Talk about the size and weight of objects. If the objects are the same size will they be the same weight?
- When baking use spoons and cups to measure quantities as well as scales.
- Give the children the opportunities to talk about the weight of objects e.g. heavy and light. Compare the weight of objects.
- Look at the packaging of food items and find where and how the weight is written.
- Read and discuss amounts in recipes.



Time

- A pictorial chart of the daily routine can help children identify themselves with where they are in the day. Times such as snack time, story time, home time should be marked.
- Stories and rhymes that relate to time.
- The cycle of time can be emphasised using group time to talk about past and future events and mark special events, e.g. birthdays, annual festivals.
- Make a display, with the children of the different ways in which time can be measured e. clocks, watches, calendars, egg timers etc.
- Use non-fiction books and posters to discuss time.
- Snack and baking – children can develop their understanding of time and routine. When baking they can develop the language of time, e.g. how long to cook, how many more minutes?
- Discuss months, days, using a calendar, seasons, special days of the week.
- Add clocks, old watches and calendars and diaries to the home area.

Whilst allowing the children to experiment with the areas outlined will promote learning, adult interaction with the children in this area of mathematical learning is valuable in helping the children to understand and develop concepts of measurement.

Shape, Size and Pattern

Children need to be able to recognise and understand the properties of common two and three dimensional shapes.

Pattern is also an important mathematical concept which occurs both in number and shape. Children should be aware of the characteristics of pattern in that it is regular and predictable and can be repeated.

Shape

- Look for and identify shapes in the environment e.g. doors as rectangle.
- Use different shapes of paper for collage, drawing and painting.
- Large blocks have a variety of shapes from which the children can represent in model making, names of the shapes can be introduced through play as well as giving the children first hand experience of the properties of the different shapes.
- Use dough and clay to model or cut shapes.
- Junk modelling – providing boxes and packaging materials of varying shapes and sizes can help children to distinguish and name different shapes.
- Games and puzzles.
- Selection of non-fiction books and posters.
- Develop the language of 3-D shape when talking about sand shapes, flat, level, curved.
- Shape sorters, introduce correct shape names.
- Computer software.



- Can the children represent shapes using a variety of drawing and art and craft materials.
- Shape bag from which children identify shapes they find.

Size

- Comparisons of objects of different sizes provides an opportunity to introduce mathematical language including:-
Big, small, biggest, smallest, tiny, bigger than,
Smaller than, tall, tallest, short, shorter than.
- Jigsaws, puzzles.
- Sorting activities into small and large objects.
- Comparison of size of children/adults.
- Who is the biggest/smallest in the family.
- Comparisons of size of resources within the setting e.g. Can you find me the biggest paint brush? Who has made the smallest model?
- Labelled display of objects within the setting, can the children find more to add to the display.
- Ordering sizes of containers.

Pattern

- Sand tray – learn about direction and patterns using sand combs, forks and rakes. Look at straight and curved patterns, wavy lines and circles.
- Make impressions in the sand with objects. Make a repeating pattern and the children can continue it.
- Look for pattern in the environment. It can be found in brick walls, clothes, curtains tiles, wrapping paper. Nature is also rich in pattern seen in animal markings, flowers, seed heads.
- Computer software.
- Children can create their own patterns using painting, printing, and collage. They can also be encouraged to make patterns using beads, bricks and natural materials. Adult intervention is needed to help the children identify patterns and continue it in their activities.

Sorting and Matching

Sorting and classifying objects into sets contributes to the development of logical thinking. It requires recognition of the feature that characterises the set, for example, they are all red or all round or all animals. Pre-school children may find it difficult to sort for more than one characteristic at a time. Sorting and classifying skills can be developed through the following activities:-

- Provide boxes and trays containing collections of shells, beads, buttons etc. and encourage the children to devise their own criteria for sorting e.g. all the white buttons.



- Using a chosen type of sorting materials such as toy animals encourage the children to sort for particular attributes, e.g. animals with stripes, wild animals.
- Discuss with the children the reasoning behind their method of sorting.
- Provide opportunities for recording sets. Hoops, circles, trays, paper with circles drawn on them.
- Encourage sorting and classifying through everyday activities. Tidy up time can provide opportunities for sorting different object, such as building bricks, collage and craft materials.



Bibliography and suggested reading:

Citizenship

Citizenship for primary schools – years 1-2 [Teacher's book], Nelson Thornes; Cheltenham.

Citizenship for primary schools – years 1-2 [Flipover book], Nelson Thornes; Cheltenham.

Moorcroft, C. [2005], Developing citizenship; activities for personal, social and health education – year R, A & C Black; London, ISBN 0713671165

Moorcroft, C. [2005], Developing citizenship; activities for personal, social and health education – year R, A & C Black; London, ISBN 0713671173

Moorcroft, C. [2005], Developing citizenship; activities for personal, social and health education – year 2, A & C Black; London, ISBN 0713671181

Concepts

Whitehouse, P. [2004], Animal pairs [Animal world], Raintree; Oxford, ISBN 1844215415

Whitehouse, P [2003], Odd one out [Colours we eat], Raintree; Oxford, ISBN 1844216179

Series worth looking out for:

Talking about time – published by Heinemann (set of four books on time, days of the week, how long does it take and seasons of the year, ISBN 0431079420).

Literacy & Language Development

Brodie, A. [2006] Supporting literacy for ages 5-6; Additional support materials for children who need that extra bit of help, A & C Black; London, ISBN 071367606X

Brodie, A. [2006] Supporting literacy for ages 6-7; Additional support materials for children who need that extra bit of help, A & C Black; London, ISBN 0713676078

Cigman, J. [1998] Starting to read and write [Learning activities for early years], A & C Black; London, ISBN 0713648562

Cleary, B. P. [2003] Under, over, by the clover; What is a preposition? [Words are categorical] Book House; Brighton, ISBN 1904194591

Cleary, B. P. [2003] Hairy, scary, ordinary; What is an adjective? [Words are categorical] Book House; Brighton, ISBN 1904194575

Cleary, B. P. [2003] To root, to toot, to parachute; What is a verb? [Words are categorical] Book House; Brighton, ISBN 1904194613

Cleary, B. P. [2003] A mink, a fink, a skating rink; What is a noun? [Words are categorical] Book House; Brighton, ISBN 190419463X

Johnson, P. [2005] Get writing! Creative book-making projects for children, A & C Black; London, ISBN 0713673125



Featherstone, S. [2004] The little book of language fun, Husbands Bosworth; Featherstone Education, ISBN 1904187889

Featherstone, S. [2003] The little book of listening games, Husbands Bosworth; Featherstone Education, ISBN 1904187692

Featherstone, S. [2002] The little book of nursery rhymes, Husbands Bosworth; Featherstone Education, ISBN 1904187536

Linfield, R. [2000], Planning for learning through nursery rhymes, Leamington Spa; Step Forward Publishing, ISBN 1902438302

Numeracy

Blinko, J. [2000] Exploring numbers [Learning activities for early years], A & C Black; London, ISBN 0713649283

Brodie, A. [1999] Numeracy today; for ages 7-9, Andrew Brodie Publications; London, ISBN 0713676760

Brodie, A. [2004] Mental maths in minutes; for ages 7-9, A & C Black; London, ISBN 0713669314

Featherstone, S. [2002] The little book of maths activities, Husbands Bosworth; Featherstone Education, ISBN 1904187080

Featherstone, S. [2002] The little book of maths songs and games, Husbands Bosworth; Featherstone Education, ISBN 1904187323

Montague-Smith, A. [2004] Counting book 1 [Start: Maths], QED Publishing; London, ISBN 184538024X

Schaefer, L. [2003], Ooey-gooey animals 123 [Ooey-gooey animals], Raintree; Oxford, ISBN 1844210340

Whitehouse, P. [2004], Animal maths [Animal world], Raintree; Oxford, ISBN 1844215407

Whitehouse, P. [2003], Plant maths [Plants], Raintree; Oxford, ISBN 1844210766

Series worth looking out for:

Simple Maths – published by Raintree (Series includes: adding, subtracting, doubling and multiplying and, sharing and dividing ISBN 1406203947)

Size, Shape & Pattern

Hendra, S. [2001], Shapes, London; Walker Books, ISBN 0744582059

Linfield, R. [2000], Planning for learning through shape, Leamington Spa; Step Forward Publishing, ISBN 1902438434

Onyefulu, I. [2001], A triangle got Adaora; An African book of shapes, London; Frances Lincoln, ISBN 0711214670



Reidy, H. [1999], What does it look like? Slough; Zero to ten, ISBN 1840891866

Whitehouse, P. [2004], Animal patterns [Animal World], Oxford; Raintree, ISBN 1844215415

Whitehouse, P. [2004], Animal sizes [Animal World], Oxford; Raintree, ISBN 1844215431

Big and wide [Sizes], Oxford; Raintree, ISBN 1844437868

Circles [Finding Shapes], Oxford; Raintree, ISBN 1844213315

Heavy and light [Sizes], Oxford; Raintree, ISBN 1844437892

Rectangles [Finding Shapes], Oxford; Raintree, ISBN 1844213323

Squares [Finding Shapes], Oxford; Raintree, ISBN 1844213331

Tall and short [Sizes], Oxford; Raintree, ISBN 1844437884

Triangles [Finding Shapes], Oxford; Raintree, ISBN 184421334X

Wide and narrow [Sizes], Oxford; Raintree, ISBN 1844437876

Whitehouse, P. [2004], Animal patterns [Animal World], Raintree; Oxford, ISBN 1844215415

Whitehouse, P. [2004], Animal sizes [Animal World], Raintree; Oxford, ISBN 1844215431

Series worth looking out for:

Finding Shapes – published by Raintree (set of four books with links to Maths and Art).

Sizes – published by Raintree (titles include Big and little, Wide and narrow, Tall and short and, Heavy and light ISBN 1844437906)

Storytelling Resources

Moorcroft, Chris [1998] Responding to stories [Learning activities for early years], A & C Black; London, ISBN 0713648554

Storytelling Resource Box, Library Support for Schools. (This resource box is designed to be used for staff training and features a range of story types e.g. using props and oral stories, and information on how to improve your techniques).

Library Support for Schools has a wide range of puppets, storyboards and props designed to help improve you and your pupil's storytelling skills. Our collections are constantly updating, so please check with us regularly about new stock.