



CENTRE FOR
Community
Child Health

Literacy Promotion

Practice Resource

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Practice Resource: Literacy Promotion

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Introduction

There is now a large amount of research evidence about the importance of the early years. Many professionals are unsure about how this evidence impacts on the services they provide for families and their professional practice.

The Centre for Community Child Health has therefore developed eleven "*Practice Resources*". Each *Practice Resource* provides professionals with:

- an introduction to the topic
- a summary of the latest research, and
- practical strategies to support their daily work with young children and their families.

These *Practice Resources* will help professionals consider and understand the issues and the range of researched options and strategies available to discuss with parents and carers in addressing their concerns and increasing their confidence. They will also support management to make sensible decisions about the use of resources and directions for services to address important issues for children.

The project to develop these eleven *Practice Resources* has been made possible through funding from the Telstra Foundation.

See Appendix 1 and 2 for more details about the Centre for Community Child Health and the Telstra Foundation respectively.

Why were *Practice Resources* developed?

The *Practice Resources* have been designed to bridge the gap between research and practice. Most professionals do not have the time to sift through and interpret the relevant research that can inform how they work with children and families, nor do they have access or opportunity to attend relevant professional development.

The aim of the *Practice Resources* is to broadly translate the research evidence on a number of important topics into easily understood practical information that can be readily used by a range of professionals, assisting their daily work with young children and their families.

While each resource is written for professionals working with children and families, the information will also be useful to managers of services.

What is the structure of each Practice Resource?

These resources are designed to be easy to use and inform professional practice. The structure of the *Practice Resources* enables access to information at different levels of detail depending on the user's needs.

Each resource has the following structure:

- **Glossary**
Definitions of key terms.
- **Section 1: Introduction**
This includes definitions, how frequently problems occur, information about normal development (where relevant), effects of the problem, and whether the focus should be on promotion, prevention, or early intervention.
- **Section 2: What works?**
This includes a simple summary of the research and outlines what works and therefore the strategies that should be implemented. Whilst this section is brief, strategies are sufficiently detailed and specific for action. To support the professional there is also:
 - **Parent information:** Pointers to existing web based parent information are provided. This information has been reviewed to ensure the messages are consistent with those in the resource.
 - **Key messages:** A single page summary is provided outlining the most important messages for professionals and managers.
- **Section 3: What the research shows**
Annotated summary tables of the research evidence and intervention studies is included, with information provided about the level of evidence, see Appendix 4. Also included are the more detailed key research principles that are fully referenced.
- **References**
All references used to inform the resource are listed.

To make these *Practice Resources* easy for professionals to access and use, references are not included within “*Section 1: Introduction*” and “*Section 2: What Works*”. In “*Section 3: What the research shows*” references are included in the text. A full list of the references relevant to each topic can be found separately in the References section.

Overview

What topics are covered?

Promotion

- Breastfeeding
- Literacy

Prevention

- Injury
- Overweight and obesity
- Smoking during pregnancy
- Passive smoking effects on children
- Child and adolescent smoking

Early Intervention

- Language
- Settling and sleep
- Behaviour
- Eating behaviour

How were the topics selected?

A number of criteria were used to select topics. These included:

- The importance of the issue in relation to children's health and development
- Requests from professionals
- Expression of need from communities
- Parental needs and concerns
- Perceived gap between evidence and practice
- Ease of including in daily professional practice
- Lack of information from other sources

See Appendix 3 for more detail about the selection criteria.

Overview

How were the Practice Resources developed?

The content of the resources were drawn from the published research, expert advice, and information about innovative and promising practices. An expert committee oversaw the development of the content, and an expert in the field reviewed the content of each resource.

The format and design of the resources was focus tested and modified accordingly.

Are there limitations to these Practice Resources?

For a number of topics there were limited numbers of well researched interventions and strategies available in the literature. Therefore it is important to note the following:

- Where possible National Health and Medical Research Council principles of assessing evidence were applied to research reviewed. For some topics there was very little evidence of high quality.
- Interventions and strategies included in the resources were based on a combination of research-based principles and expert advice.
- It is highly likely that the evidence for most topics will change over the next few years; suggested strategies may require ongoing review.

Glossary

Comprehension	The ability to make meaning from spoken and written words
Concepts of print	Understandings children need to have before they can learn to read, including the left-to-right direction of text, the difference between letters and words, and the parts of a book
Dialogic reading	The fundamental reading technique in dialogic reading is the PEER sequence. This is a short interaction between a child and the adult. The adult prompts the child to say something about the book, evaluates the child's response, expands the child's response by rephrasing and adding information to it, and repeats the prompt to make sure the child has learned from the expansion.
Emergent literacy	The skills, knowledge and attitudes that come before and lead up to conventional reading and writing
Letter knowledge	The ability to be able to name and attribute various sounds to letter identities of the alphabet
Formal Literacy	The ability to read and write printed text representing spoken language
Phonics	The relationship between letters and the sounds they make
Phonological awareness	The ability to understand the relationships of sounds in spoken words. At a simple level, children can identify rhyming words. At a more complex level, children can identify similarities in sounds and spellings.
Preliterate	The period of time prior to the acquisition of formal literacy

Glossary

Prose literacy	Is the ability to understand and use information from various kinds of prose texts, including texts from newspapers, magazines and brochures
Reading strategies	The approaches a reader uses to help discover the meaning of words and phrases, such as studying illustrations and making predictions
Shared reading	Is an activity undertaken between two people, generally referring to an adult reading aloud to a child
Sight word	A word that a child reads without having to sounding it out
Vocabulary	The collection or list of words and word phrases in a language

Refer to Appendix 5 for a glossary of terms related to research methodology terminology.

Section 1: Introduction

Setting the scene

Topic focus:	Promotion
Topic inclusion:	Activities that promote literacy for children prior to school commencement
Topic exclusion:	Interventions for school-aged children or interventions aimed at teaching children how to read.
Age group:	Birth to five years (prior to school commencement)

Literacy is one of the most important foundations for success in school and life. It is a crucial survival tool in a global society

The term literacy promotion as defined for the purpose of this practice resource refers to activities that will promote children's eventual ability to read and write printed text.

Emergent literacy refers to the skills, knowledge and attitudes that come before and lead up to conventional reading and writing. Some of the skills that predict later reading success include the following:

- Language abilities, including vocabulary size (both expressive and receptive)
- Letter identification and knowledge (knowing the names and corresponding sounds of letters)
- Phonological awareness and sensitivity (the ability to identify and manipulate sounds in spoken language)
- Appreciation of the concepts of print, including understanding the functions of writing and the 'left-to-right, top-to-bottom direction of print on each page with print progressing from front to back across pages'.

Most children develop language skills to communicate in their first or native language naturally. However, few children will develop the ability to understand their language in a written form naturally without some help. Therefore literacy is thought to be experience dependent, as it is encouraged and influenced by experiences that may not be available to everyone. A child's literacy environment predicts later reading success. Although the building blocks leading to literacy are clear, the fact that the development of literacy is so largely dependent on experience makes it difficult to describe a chronology of literacy development.

Section 1: Introduction

Although formal instruction in literacy, that is reading and writing, usually begins when children begin compulsory schooling, research efforts have identified a number of key characteristics in preliterate children who acquire literacy successfully later. These characteristics are absent in children who struggle to become formally literate. Literacy promotion includes ways to encourage acquisition of these characteristics and develop them further.

Prevalence of literacy problems

The Australian Council for Educational Research's National School English Literacy Survey in 1997 reported on the diversity in reading achievement in the primary school years. This report indicated that 27% of Year 3 and 29% of Year 5 students in Australia did not meet agreed standards in reading. The survey also indicated that boys were well behind girls in literacy development and that many Indigenous students could not read or write satisfactorily. Nearly 40% of Year 3 students and over half of Year 5 students from low socio-economic backgrounds and 77 per cent of Year 5 Indigenous students failed to meet the performance standards as set by the National School English Literacy Survey.

In a study of 3000 Australian students in 2002, 30% of nine year olds still had not mastered letter sounds, arguably the most basic phonics skill. A similar proportion of children entering high school continued to display confusion between names and sounds. Over 72 per cent of children entering high school were unable to read words of three and four syllables phonetically.

The Australian Bureau of Statistics Aspects of Literacy Survey in 1996 found that approximately 20% of Australians aged between 15 and 74 years have 'very poor' prose literacy skills which is the ability to understand and use information from various kinds of texts, including texts from newspapers, magazines and brochures.

Section 1: Introduction

Impact of literacy promotion

Children raised in families with low socio-economic status are at greater risk of poor literacy development in early childhood. A poor foundation in literacy prior to school entry not only reduces the likelihood of success in literacy but also increases the risk of disengaging from formal education.

Poor literacy skills are generally associated with lower self esteem and reduced education, employment and social outcomes as well as being linked to high rates of unemployment, welfare dependence and teenage parenting. Other studies indicate that poor reading levels can also impact on both the health practices and health outcomes of individuals. Consequently, poor literacy has high social and economic costs.

Promoting literacy has many benefits, both immediate and long term, for children, families, communities and society as a whole. Literacy promotion has been linked to:

- Increased academic and occupational success
- Increased self esteem and motivation to learn, participate in and commit to education
- Socially accepted behaviours in school and later in life
- Positive regard for one's abilities and prospects, leading to empowerment
- Reduced need for special education
- Potential reduction in the effects of low socio-economic background
- Decreased social and financial costs associated with illiteracy

Section 1: Introduction

Factors found to influence literacy promotion

A significant body of research has demonstrated a strong relationship between a number of recognised emergent literacy skills and later success in reading, particularly links between 'letter knowledge' or phonological awareness and later reading proficiency.

There are three key factors that have been found to support and promote emergent literacy skills prior to school commencement. Contributions to literacy come from the interplay among these three elements rather than from any one of the elements alone. These elements are described briefly below.

1. *People*, including all who care for and are involved in a child's life: parents, family members, friends and early childhood professionals
 - Adults involved in reading and literacy-related activities, in particular males, can have a positive impact during children's early years.
 - Parental involvement in reading to a child increases opportunities to strengthen relationships and motivates and encourages children to read or look at books more often.
2. *Environments* that allow access to materials such as books, crayons and paper that support literacy
 - The home is the most practical and accessible venue for early literacy activities.
 - Strong correlations have been reported between the literacy environment in the home and preschool-aged children's language abilities.
3. *Activities* that support literacy, such as reading aloud, playing games, conversations, naming objects, rhyming, singing nursery rhymes and other songs.

Particular aspects of reading with children that have been found to be important are described briefly below:

- Regular shared reading with children from a young age is linked positively to children's scores on vocabulary tests. These findings are consistent with other research that has found that the frequency of book reading at home influenced children's vocabulary development.

Section 1: Introduction

- Selecting appropriate books for shared reading ensures that the child's attention is engaged.
- Reading styles matter. Dialogic reading shows great promise for supporting the development of emergent literacy skills in shared reading. This is an interactional style of reading to children that encourages the child to become the teller of the story over time, challenging the child's knowledge and skills to 'stretch' him or her to a higher ability level.

Section 2: What works?

Introduction

Despite the acknowledged importance of literacy, no studies have actually linked literacy promotion interventions conclusively with improvements in literacy (reading and writing) at any age. To date, only links between literacy promotion and language development have been demonstrated.

Understanding literacy promotion interventions

There are three types of programs or interventions that have been used to try to promote literacy in children prior to school:

- clinic-based programs (for example ROAR)
- home-based programs (for example HIPPY)
- community interventions (for example Bookstart)

Of these three, *clinic-based* and *home-based* interventions show the most promise. No studies have provided a rigorous evaluation of the effectiveness of literacy promotion programs in a community or population setting.

Clinic based interventions

- Consists of advice about reading to children given to clients by a health-care professional
- Professional models appropriate literacy-related activities and behaviours to client
- Free literacy-related materials such as books given to the client

Home-based interventions

- Targeted at disadvantaged communities
- Parents empowered as primary educators for their children
- Parents provided with support and structured activities to carry out at home with their children

Community interventions

- Consists of widespread delivery of messages about promoting literacy across the whole community
- Aimed at encouraging parents to read to children from an early age and developing a firm routine for doing so
- Books and guidance messages distributed to all parents of young babies

Section 2: What works?

What you can do

Many professionals working with families in the community have a close working relationship with them, which provides opportunities to deliver messages about the importance of reading with young children. These messages can come from information used in both home- and clinic-based interventions. Professionals can take a proactive role and promote literacy as an issue deserving of attention and action.

Some important information that can be passed on to families:

- It is generally accepted that the younger children are when parents start reading to them the better the results are likely to be. Some professionals believe that reading to young children should begin soon after birth, while others say it should start when the baby is around four to six months, has head control and can sit comfortably on an adult's lap.
- Babies usually enjoy being held in a parent's arms, listening to her or his voice and looking together at the pictures in a book. This lends weight to the recommendation to start using books with babies as early as possible.
- The focus for parents should be to make the experience enjoyable and fun while modelling the activity of reading.
- There are not specific recommendations about how long and how often to read to a young child, but the general recommendation is that it should be at least daily. Young children like routines, so developing a daily reading routine is often recommended. This can be part of the bedtime routine, although children who enjoy books are likely to choose books and want to share reading at any time of the day.
- It is helpful if parents turn off the television or radio when reading to a child, so that the child will be less distracted and can focus on the book.
- Shared reading with babies or children relies initially on an animated reading style to engage and maintain the baby's attention. Typically this requires the parent to interact with the book in a fun, playful and light-hearted manner, using different voices and being sure to remain calm and relaxed.
- Pointing to the words and pictures in the book helps get the child involved. Using different voices as well as making sounds are ways to make shared reading fun.
- As a child grows, the way he or she is read to needs to change according to the child's developmental level.
- Librarians or children's booksellers can help parents select appropriate books for different ages.
- A child is never too young to be enrolled at the local library. Many libraries have regular storytelling sessions for toddlers and preschoolers. Parents can also learn a lot by watching someone else read aloud to children.

Section 2: What works?

Professional practices that promote parents' encouragement of literacy

- Professionals can support families by giving them the opportunity to discuss their views on reading and literacy in general and any challenges they foresee to supporting their child's emergent literacy. For example, is anyone in the family illiterate? This information can help the professional decide on the best ways to support the family and the child.
- Providing literacy-related materials, for instance books, to families is essential to ensure the accessibility of vital materials, to engender enthusiasm and encourage the development of a daily reading routine.
- Support from all the key people in a child's life is important, as each can play a significant role in the child's language development and emergent literacy.
- Professionals can raise awareness of the importance of literacy as a foundation for future success and share ideas about simple ways that family members can support emerging literacy.

Activities and strategies that professionals can share with families to support the child's emerging literacy

- Sing nursery rhymes.
- Have alphabet fridge magnets, mobiles, posters and blocks.
- Play 'eye spy'.
- Talk about the names and sounds of letters.
- Sing the alphabet song.
- Visit the local library.
- Read labels and signs on daily outings.
- Read aloud to the child.
- Engage the child while reading by asking questions about the story, encouraging the child to become the teller of the story, praising the child's efforts and 'bringing the book alive' (using the dialogic or interaction style of reading).
- Point to words and name pictures while reading.
- Label and describe objects in the book and emphasise sounds and letters while reading.
- Select books that are predictable, as rhyme, rhythm and repetition assist development of phonological awareness.
- Select alphabet books to assist in the development of letter and sound knowledge.
- Encourage the child to choose books.

Section 2: What works?

Information for parents

Parents can be directed to the following sites which provide tip sheets and helpful information on literacy:

In Australia

- Let's Read
www.letsread.com.au
- The Little Big Book Club
www.thelittlebigbookclub.com.au/
- Better Beginnings
www.liswa.wa.gov.au/bb/index.html
- Raising Children's Network
www.raisingchildren.com.au

Overseas

- Get Ready to Read
www.getreadytoread.org
- Bookstart
www.bookstart.co.uk/index.php4
- Reach Out and Read
www.reachoutandread.org/about.html

Section 2: What works?

Key Messages for Professionals

Literacy is one of the most important foundations for success in school and life. It is a crucial survival tool in a global society

Literacy promotion refers to activities that will promote children's eventual ability to read and write printed text. Emergent literacy refers to the skills, knowledge and attitudes that come before and lay the foundations for conventional forms of reading and writing.

Children raised in disadvantaged families are at greater risk of developing inadequate emergent literacy skills in early childhood. A poor foundation in literacy prior to school entry reduces the likelihood of success in subsequent acquisition of literacy skills and increases the risk of disengagement from formal education and poorer life outcomes.

Nearly 30% of students in Years 3 and 5 fail to meet appropriate reading standards, and Indigenous students are three times less likely to reach the Year 5 reading benchmark than Australian students as a whole.

The knowledge, experience and skills that children bring to school is a key factor in literacy success. The home environment is recognised as critically important in promoting literacy development. Further research is needed to link literacy promotion programs conclusively with improvements in literacy and to evaluate the effectiveness of literacy promotion programs in a community or population setting.

Research-based strategies for promoting literacy

- Encourage parents to read to children as part of daily routine.
- Support parents to engage in literacy-related activities and read aloud to children regularly in ways that are enjoyable and engaging. Parents are ideal facilitators of early literacy acquisition.
- Advise parents to give children ample access to books and materials using the alphabet (for example, books, blocks, fridge magnets, mobiles and crayons and paper).
- Encourage regular library visits and help parents to appreciate the value to their child of increasing their own exposure to print.
- Share ideas for activities. Encourage parents to sing nursery rhymes and play eye spy and other games that support emergent literacy. More importantly support parents to read aloud to children in ways that encourage the child to become the storyteller over time, praise the child's efforts, point to text while reading, label objects in the book and prompt the child with questions (dialogic reading style).
- Books containing the alphabet and books with predictable or patterned content are recommended as assisting later reading achievement.

Section 2: What works?

Key Messages for Managers

Literacy is one of the most important foundations for success in school and life. It is a crucial survival tool in a global society

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Research-based strategies for promoting literacy

The following information may assist managers who want to promote literacy:

- Professionals who work with children and families are well placed to provide guidance on literacy promotion in the family and home.
- Resources that support literacy, such as books that can be given free to parents of young babies and children, are important tools for professionals.
- Widespread delivery of messages about promoting literacy across the whole community may be the most efficient way to promote literacy, using professionals and consistent community awareness messages that aim at encouraging parents to read to children from an early age.
- Community-wide literacy initiatives are likely to impact on members of the community from all socio-economic backgrounds.

Section 3: What the research shows

Summary of the evidence on language interventions

At this stage there are no interventions that can be recommended strongly for the promotion of literacy. Despite the obvious importance of literacy no studies have linked literacy promotion conclusively with improvements in literacy at any age. Further, no studies have evaluated rigorously the effectiveness of literacy promotion programs in a community setting. Rather, many initiatives target those children identified as deficient in some aspect of literacy rather than focusing on the importance and necessity of early preventative measures to promote emergent literacy skills prior to school entry in order to give children the best foundation for academic success.

Intervention focus	Recommended intervention	Effectiveness
Home Based Interventions	Parents are provided with support and activities in order to empower them to be the primary educators for their children	**
Clinic Based Interventions	Advice about reading to children is given to clients by health-care professionals who model appropriate activities and provide literacy related materials	**
Community Interventions	Widespread delivery of program across the whole community which encourages care givers to read to children from a young age	*

Guide to recommendation of effectiveness category

Level of evidence	Effectiveness	Key
Strong to good evidence	Beneficial	***
	Not beneficial	xxx
Fair level of evidence	May be beneficial	**
	May not be beneficial	xx
Requires more studies	May be beneficial (promising)	*
	May not be beneficial (not likely)	x
	Unknown benefits	?

Refer to Appendix 5 for a glossary of terms related to research methodology terminology.

Section 3: What the research shows

Key research findings

Literacy promotion

- **Literacy is a key survival tool in today's global society.**

Becoming literate is one of the most important developmental achievements for young children; it is a key to future success in the education system and their subsequent work environment. Poor literacy is linked to decreased productivity, lower income, high unemployment, welfare dependence, lower self esteem, substance abuse and teen-age parenting.¹ The foundations for literacy are laid from infancy and the strength of this foundation is modifiable through early intervention.

- **Acquisition of emergent literacy skills is essential for future capabilities.**

The term *emergent literacy*, introduced by Clay, refers to the skills, knowledge and attitudes that are considered developmental precursors to conventional forms of reading and writing and the environment that nurtures these.^{2, 3} Research provides evidence of the impact of individual differences in a number of emergent literacy skills and reading outcomes.⁴

- **Reading failure affects children from low socio-economic backgrounds disproportionately, contributing to perpetuating the poverty cycle.**⁵

Despite the fact that fewer than 10 per cent of children fail to read because of a bona fide reading disability,⁶ nearly 40 per cent of students in Australia in Year 3 from low socio-economic backgrounds fail to read at or above the age-appropriate reading benchmark, while their more affluent peers perform significantly better, with only 12 per cent falling short of the benchmark. Children from low socio-economic backgrounds appear to have lost significant ground in literacy (with poorer emergent literacy skills) even before starting school, and the differences appear to widen as they progress through school.⁷

- **Studies have found repeatedly that children who experience difficulties in learning to read are unlikely to catch up to their peers.**^{8, 9, 10}

The probability that children will remain poor readers at the end of Grade 4 if they were poor readers at the end of the Grade 1 is 0.88.¹¹

Section 3: What the research shows

- **Reading is influenced by motivation and interest.**

Juel demonstrated that children who struggle with reading will dislike it and therefore will read less, and that children who are read to less fall progressively further behind once they reach school.¹¹ This phenomenon, called the Matthew Effects, which asserts that reading is a function of interest and motivation, is said to start very early in life and grow stronger with time.¹²

- **The knowledge and experience that children bring to school is a key factor in their success at school.**¹³

Results of research support the importance of intervention as a preventative measure rather than a treatment option, as many children who struggle with literacy skills in school already show deficits in important emergent literacy skills prior to school entry. These findings lend support to the idea of a critical period for in acquiring literacy skills.

- **Literacy is the result of Interaction among a number of key factors.**

Formal literacy acquisition depends on a number of different influences (including family environment as well as types of instruction) from a very early age.

- **Shared reading is no longer viewed as a universal means of assuring success in literacy.**

Research on shared reading indicates that it alone accounts for very little variance in outcome measures including language growth, emergent literacy and reading achievement.¹⁴ However, shared reading does have a significant impact on vocabulary development, listening comprehension and understanding the concepts of print. Shared reading is an activity into which a number of other key activities that promote emergent literacy skills can be incorporated successfully.

Section 3: What the research shows

Factors found to influence literacy promotion

There is a fair level of evidence that effective promotion of literacy requires interaction among three broad elements: people, environmental context and activities.

A summary of the evidence on literacy promotion in preschool-aged children follows. Although the interaction among these target areas of literacy promotion is essential to obtain real benefits, they have been separated here for ease of discussion.

Significant people in the child's life¹⁵

Parents and caregivers play a vital role in preparing their children for school. Many children who begin school with deficits in identified emergent literacy skills are at greatest risk of illiteracy.

Environment

Dimensions of the environment that affect emergent literacy include access to literacy-related materials (for example, books, materials containing the alphabet, crayons and paper), introduction and exposure to the local library and parents' own exposure to print.

The quality of the home environment, which is obviously the most practical and accessible venue for early literacy activities, is the most important determinant of literacy development. Research findings show significant correlations between the home literacy environment and preschool-aged children's language abilities.

A recent study reported that the number of books in the home, library visits and parents' own exposure to print was related to children's vocabulary skills. Another study found that four to six year olds from families with low incomes knew more about the uses and functions of written language and had more conventional concepts about print when higher levels of home literacy events were reported.^{15, 16, 17}

Section 3: What the research shows

Activities

Home-based literacy activities found to be effective include regular shared reading, selecting appropriate books, using appropriate reading styles, singing nursery rhymes and other songs and playing eye spy and other games.

Shared reading^{17, 18, 19, 20, 21}

The National Research Council in the United States stated that 'the single most important activity in building the knowledge required for eventual success in reading is reading aloud to children (p.23)²². Early research suggested that children could begin to recognise words through repeated exposure, thought to be achieved through repeated interaction around shared reading of books. However shared reading is now attributed with far less importance with three key factors now recognised as more salient in promoting literacy.

The benefits of reading aloud to young children are most obvious in the area of language development. One study found that approximately five per cent of the daily speech of 24-month-old children occurred in the context of being read to²³. Similarly a study of 41 two year olds found that being read to at a younger age by their mothers was associated with greater receptive language abilities. Even a single book reading session per day appears to increase four and five year old children's receptive vocabulary²¹.

Regular shared reading from a young age has been shown consistently to be correlated positively with vocabulary scores. One study of children 18 months and older found that children who were read to more often had significantly higher receptive and expressive vocabulary scores than children who were not.²⁴

However, Max Coltheart, an Australian expert on literacy, suggests that reading is as complex a skill as playing the piano, highlighting the view that exposure to books, words and language alone is not enough.²⁵ Recent empirical evidence supports this view, indicating minimal impact between shared reading and later reading achievement. A number of studies do indicate a positive correlation between shared reading and later reading achievement, but as a stand-alone activity it is no longer thought to be a panacea for children's literacy problems or deficits.²⁶

Section 3: What the research shows

In two separate meta-analyses of the effects of book reading on later reading achievement, the amount of reading that parents did with their child accounted for approximately eight per cent of the variance in kindergarten and first grade.^{14, 27} Another analysis also found a positive correlation between shared reading prior to school entry and reading achievement in school-aged children, but the activity alone was found to explain only five per cent of the variance in children's achievement.²⁸ Bloom noted that socio-economic status and mothers' education level account for far more variance than shared reading but are more difficult to modify.²⁹

Shared reading benefits vocabulary and language and offers a situation in which a number of other experiences that support literacy can be incorporated.

Book selection

There is increasing evidence that the types of books that are selected to read with children can also impact on their emergent literacy.

A child who has had experience with books will usually show a preference for favourite books at around 10-12 months of age. Research findings suggest that books that are predictable and alphabet books assist later achievement in reading.²⁶

Books with predictable content or patterned books 'contain a repeated linguistic pattern that children can use to support their reading'.²⁶ A number of studies have found that the use of predictable books in shared reading improves sight word learning significantly in children in first grade.³⁰

Although empirical evidence is lacking, it is also thought that the rhythm, rhyme, predictability and repetition of book content provide children with an opportunity to fine tune their sensitivity to the phonological level of words (syllables, onset and rime and initial and final phonemes).

A number of recent studies have examined the benefit of using alphabet books in shared reading with children prior to school entry. One study found that reading alphabet books (emphasising the sounds of letters) to a group of four year olds at risk improved their phonemic awareness (awareness of individual sounds within words) significantly. The authors saw this as indicating 'some causal link between alphabet book reading and phonemic awareness'.²⁶ Individual differences in letter knowledge are also related to the rate of acquisition of reading skills.^{31, 32}

Section 3: What the research shows

Reading style

The style in which a child is read to in shared reading has also proved to be an important variable. In one study 48 four year olds were assigned randomly to receive one of three reading styles (describer, comprehender, and performance) over a six-week period. Describer style focuses on describing pictures during the reading, comprehender focuses on story meaning and performance style introduces the book and discusses story meaning on completion.³³ Pre- and post-tests measured children's receptive, print and story comprehension skills. Results indicated that greatest overall benefits occurred when the describer style was used. Another study reported similar findings in a study involving 117 first graders and 129 third graders in which reading only, performance reading and interactional reading were compared.³⁴ The interactional reading style, which invited questions at any point during the reading, facilitated greater vocabulary gains than the performance style or reading only.

Dialogic reading appears to be a promising way to develop emergent literacy skills, with specific strategies suggested for used in shared reading.

One study found that preschool-aged children with poor expressive vocabulary skills averaging 13 months behind chronological age, made significantly greater gains in the dialogic reading condition than those in a control group.³⁵ In a broader community-based intervention study children's librarians at four branches of a city library taught parents the dialogic reading technique in two sessions of one hour's duration. Two thirds of families were randomly assigned to the dialogic reading condition and one third to a comparison condition. Results indicated that children whose parents were taught the dialogic reading technique by librarians made significant gains in vocabulary scores.³⁶

The benefits of dialogic reading have also been shown in studies involving families from low socio-economic backgrounds. One study found that two-year-old children who were exposed to a seven-week reading program while attending day care in Mexico had significant gains in expressive and receptive skills and linguistic complexity compared with children in a control group.³⁷

Section 3: What the research shows

Literacy promotion interventions

With greater recognition of the importance of the first years of life, there are increasing numbers of early intervention programs that propose to increase the likelihood of improved outcomes for children. Three early literacy interventions are described briefly below. The first is a facilitated curriculum-based program while the remaining two are book-distribution interventions.

Home-based intervention: Home Instruction for Parents of Preschool Youngsters (HIPPY) ^{38,39,40,41}

General program description:

- Not directed only at literacy promotion
- Targets disadvantaged communities
- Aims to increase the success at school of children living in educationally disadvantaged families
- Empowers parents as primary educators of their children and fosters parent involvement in school and community life
- Aimed at parents of four and five year olds who want educational enrichment for their children
- Activities focus on language development, problem solving and discrimination skills
- Manual contains 30 weeks of activities and nine books each year for two years are provided
- Home tutors role play the activities every fortnight and on alternative weeks parents and home tutors meet at the hippy site
- Important feature is that group meetings foster strong community links and friendships that help reduce the sense of isolation felt by many families in disadvantaged communities

Research evidence:

- Limited number of rigorous studies support the benefits of HIPPY, with children involved scoring higher on standardised assessments
- Children completing only one year performed better than children in matched comparison groups on teacher assessments of progress on reading
- Children in program obtained higher scores on tests of language and auditory skills
- Significant cost and time to sustain the program.

Section 3: What the research shows

Clinic based intervention: Reach Out and Read (ROR) ^{20,24,42}

General program description:

- Built around understandings of emergent literacy framework
- A book-based intervention in the United States
- Developed and delivered by paediatricians
- Three components:
 1. Paediatricians are trained to give advice to parents at health supervision visits about the importance of reading aloud to children.
 2. Paediatricians provide a new book to each child at each visit.
 3. Volunteers read aloud to children in waiting rooms as a way of modelling techniques for parents.

Research evidence:

- A number of studies report improvements in language scores, both receptive and expressive, for children in ROR.
- Studies have also reported that parents in ROR are more likely to read aloud to children and enjoy the activity.

Community intervention: BookStart ⁴¹

General program description:

- Delivered nationally in the United Kingdom
- A variety of projects based on BookStart are currently operating in Western Australia, South Australia, Victoria, New South Wales, Queensland and the Australian Capital Territory
- Involves provision of books for babies and guidance to parents to promote shared book reading
- Book packs distributed to parents at the seven to nine month health check-up
- Second part of the gift is the delivery of a BookStart kit by the health visitor and the invitation to join the library.
- Typical BookStart kit consists of:
 - A canvas bag with the BookStart logo and the prominent strap lines 'Babies love books' and 'Libraries are for everyone', designed for use by parents
 - A leaflet for parents designed to be an easily accessible and reassuring introduction to sharing books
 - A nursery rhymes place mat

Section 3: What the research shows

- Two story books
- A book list
- Tips on sharing books from librarians, health visitors and parents whose babies have enjoyed BookStart
- Each BookStart kit personalised with information about how to join the scheme's local library

Research evidence:

- Absence of randomised controlled trials to determine the benefits of the intervention.
- A study of 75 families involved in BookStart and 30 control families showed that the number of parents who read to their babies rose from 78 to 91 per cent after BookStart intervention. The number of parents who read to their babies every day rose from 47 per cent to 60 per cent.
- Another study showed that children involved in BookStart were ahead frequently on assessments of speaking, listening and writing and performed better on mathematic assessments on commencement of school.

Section 3: What the research shows

Annotated summary of literacy promotion studies

Following is:

- A summary of intervention studies that were used to inform this resource
- An annotated summary of studies examining factors found to influence literacy promotion
- An annotated summary of literacy promotion interventions

Summary of intervention studies

Focus of study	Author
Factors found to influence literacy promotion	
<i>Environmental context:</i> Relationship between the home literacy environment and literacy promotion	Evan, Shaw and Bell (2000) ¹⁵ Purcell-Gates (1996) ¹⁶
<i>Activity:</i> Relationship between shared reading and literacy promotion	Bus, van Ijzendoorn and Pellegrini (1995) ¹⁴ Elley (1989) ¹⁹ Senechal and Cornell (1993) ²¹ Senechal et al. (1996) ¹⁷
<i>Activity:</i> Relationship between reading style and literacy promotion	Hargrave and Senechal (2000) ³⁵ Huebner, 2000 ³⁶ Reese and Cox (1999) ³³ Valdez-Menchaca and Whitehurst (1992) ³⁷
Interventions:	
<i>Home Based Interventions (HIPPY)</i>	Baker, Piotrkowski & Brooks-Gunn (1999) ⁴¹
<i>Clinic Based Interventions (ROAR)</i>	High, LaGasse, Becker, Ahlgren and Gardner (2000) ²⁴ Mendelsohn et al. (2001) ²⁰
<i>Community Interventions (BookStart)</i>	The National Centre for Research in Childrens Literature (2001). ⁴⁴

Annotated summary of studies examining factors found to influence literacy promotion

Study	Participants	Intervention	Targeted Behaviour	Results	Comments
Evan, Shaw and Bell, 2000 ¹⁵	67 children, 62 mothers and 5 fathers; average age of child five years, 11 months.	Parents were interviewed and visited to assess literacy practices and observe shared reading activities. Children were also assessed individually at school for cognitive, language and literacy skills over a three-year period.	Relationship between home environments and children's language and literacy development	Frequency of home literacy activities predicted knowledge of letter names, letter sounds and phonological sensitivity	Importance of parental involvement and the potential to enhance children's reading achievement both before and after school commencement
Purcell-Gates, 1996 ¹⁶	24 children, aged between four and six years from families with low-socioeconomic status	Researchers observed daily life activity within the home to determine the use of print. A variety of reading and writing task assessments were also undertaken.	Examined the relationship between the types and frequency of literacy events and emergent literacy skills	Children's understanding of the conventions of print is related to both the frequency of home literacy events and to their focus and involvement in literacy events. Children knew more about the alphabetic principle and specific forms of written language in homes where literate members read and wrote more complex levels of discourse.	Small sample size and no- random selection of subjects limits generalisability. Parents, regardless of literacy level and home literacy events, found the onset of formal literacy education as an appropriate time to begin or increase their involvement in their children's literacy learning.

Practice resource:

LITERACY PROMOTION

Study	Participants	Intervention	Targeted Behaviour	Results	Comments
Bus, van IJzendoorn and Pellegrini, 1995 ¹⁴	Preschoolers	Quantitative meta-analysis of studies related to parent-preschooler reading at home and several outcome measures such as language growth, emergent literacy and reading environment	Test the assumption that parent-child interaction around books is important in promoting a literate orientation	Frequency of parent-preschooler book reading is related to language growth, emergent literacy and reading achievement outcome measures	The effect of parent-preschooler reading is not dependent on the socioeconomic status of families.
Elley, 1989 ¹⁹	1 st study: 157 seven-year-old pupils from seven classrooms in seven schools. 2 nd study: six classes of eight-year-old children from six schools (178 pupils)	1 st study: Teachers read the same book aloud to students three times over seven days without explanation of words. 2 nd study: two experimental groups and one control group. The experimental groups were read two stories a week apart, three times over seven days by their teacher. One story was read aloud without explanation and the other story was read aloud with explanation. These two treatments (reading with explanation and reading without explanation) were crossed with the two stories for the two experimental groups. The control group took all tests at the same time but heard neither story.	Learning the meanings of new words heard in stories read aloud to them with and without explanation	Children learned new words from having the storybooks read to them and additional explanation of unknown words more than doubled such vocabulary gains. Children who started out with less vocabulary knowledge gained as much from the reading as other students and the learning was relatively permanent.	The likelihood that children learn new words may be accounted for in part by: the frequency of the word occurring in the story, the helpfulness of the context and the frequency of the word in pictorial representation.

Practice resource:

LITERACY PROMOTION

Study	Participants	Intervention	Targeted Behaviour	Results	Comments
Senechal and Cornell, 1993 ²¹	80 four-year-olds and 80 five-year-olds with an equal number of boys and girls from day care, nursery school and kindergartens	Children were individually read a story book which introduced 10 target words not known to young children. Children were pre-tested for their language knowledge, post-tested immediately after the reading and post-tested again one week later.	Assess whether preschool children learn new vocabulary from a single reading of a storybook and whether certain conversational devices used during book reading facilitated vocabulary growth	A single reading of a storybook boosted children's receptive vocabulary. Active participation in book reading did not boost children's vocabulary learning.	Study shows that there is a difference between the acquisition of receptive and expressive vocabulary.
Senechal et al., 1996 ¹⁷	119 children (55 girls, 64 boys) and their parents from day care centres and nursery schools. Average age four years four months	Two studies were conducted. One assessed parental exposure to and knowledge of story books, such as frequency of shared book reading and print exposure and its relationship with vocabulary scores. The second study assessed children's knowledge of storybooks and their vocabulary skills.	Parental exposure to and knowledge of books and its relationship to children's vocabulary knowledge and skills	Children's interest in reading, the frequency of storybook reading, the number of children's books available and library usage were positively related to vocabulary knowledge. Parent print exposure was related to vocabulary skills.	Parental and children's knowledge of storybooks is a good predictor of language skills for preschoolers

Practice resource:

LITERACY PROMOTION

Study	Participants	Intervention	Targeted Behaviour	Results	Comments
Hargrave and Senechal, 2000 ³⁵	36 preschool children, (average age four years) with poor expressive vocabulary, averaging 13 months behind chronological age	Children separated into two groups: intervention group exposed to dialogic reading and control group exposed to regular shared reading Children exposed to the same 10 books over a four-week period with daily minimum of 10 minutes of reading with each book read twice	Examined the effects of storybook reading on the acquisition of vocabulary and whether this effect was further influenced by reading condition	Intervention condition made significantly greater gains in vocabulary and on standardised expressive vocabulary tests compared to control group, where some improvement was also evident.	Attempts to expand this study into the home environment were limited by lack of parental involvement, limiting possible comparisons. Failed to indicate any increased benefit for children exposed to both teacher and parent reading
Huebner, 2000 ³⁶	129 children aged between 24 and 35 months	Randomised controlled design in which 88 families received group intervention in dialogic reading from librarians and 41 families were assigned to a comparison parent-child condition	Assessed the influence of dialogic reading on emergent literacy skills and the beneficial effect on self-reported parenting stress during this developmental period (two years old)	Significant gains for the intervention group with positive changes reported in parent-child reading styles and children's expressive language at three-month follow up. Parents in the intervention group reported less parenting stress, specifically stress resulting from characteristics of their child.	Difficulty in recruiting families and children at greatest socio-economic risk to language problems

Practice resource:

LITERACY PROMOTION

Study	Participants	Intervention	Targeted Behaviour	Results	Comments
Reese and Cox, 1999 ³³	48 four year olds (24 females, 26 males)	Random assignment to one of three reading styles (describer, comprehender, performance- oriented) over a six-week period in which each child was read 32 books individually at preschool	Assessed the relative benefits of three styles of adult book reading for preschoolers' emergent literacy	A describer style of book reading results in the greatest overall benefit for children's receptive vocabulary and print skills. However, when children's initial skill levels are taken into account children with higher vocabulary benefit most in vocabulary development from the performance-oriented style. The describer style was most beneficial for print skills when the child had greater initial story comprehension skills.	Findings emphasise that the skills and knowledge children bring to the interaction is vital for their subsequent learning
Valdez-Menchaca and Whitehurst, 1992 ³⁷	20 (12 girls, 8 boys) Mexican two year olds from low-income backgrounds attending day care	Children were randomly divided between an intervention and control group. Intervention children received one on one dialogic reading sessions with a teacher while the control group was given individual arts and crafts instruction by the same teacher over a six- to seven- week period.	Influence of dialogic reading among children of low-income parents	When assessed on standardised measures (Peabody Picture Vocabulary Test-Revised, Expressive One-word Picture Vocabulary and Illinois Test of Psycholinguistic Abilities) intervention children out-performed children in the control group.	Potential for dialogic reading to assist children who are disadvantaged within the community.

Practice resource:

LITERACY PROMOTION

Annotated summary of literacy promotion interventions

Study	Participants	Intervention	Targeted Behaviour	Results	Comments
Baker, Piotrkowski & Brooks-Gunn (1999)	<p>New York cohort 1 sample 37 HIPPY participants, 32 control participants. Cohort 2 sample: 47 HIPPY participants and 66 control participants.</p> <p>Arkansas cohort 1 sample 58 HIPPY participants, 55 control participants. Cohort 2 sample: 63 HIPPY participants and 50 control participants.</p>	2 year home based program initiated prior to children's school entry and implemented by parents with support from a community based HIPPY trainer	To assess the effects of participation in HIPPY on children's school functioning	<p>Results from Arkansas varied across the 2 cohorts. Children who participated in HIPPY scored higher on measures of classroom adaptation and standardised achievement.</p> <p>Results from New York also varied across the 2 cohorts. Children who participated in HIPPY scored higher on measures of cognitive skills, classroom adaptation and at 1-year follow up improved on standardised reading and classroom adaptation compared to control.</p>	HIPPY children had a more successful entry into elementary school, with better skills and better performance.

Practice resource:

LITERACY PROMOTION

Study	Participants	Intervention	Targeted Behaviour	Results	Comments
High, LaGasse, Becker, Ahlgren and Gardner, 2000 ²⁴	205 low-income families with 5 to 11 month old children randomised to intervention (106) or control (99) groups	Families in the intervention group received children's books, educational materials and advice about sharing books from their paediatricians, while the control group received no books or materials relevant to literacy.	Effect of literacy promotion intervention delivered by paediatricians on parent behaviours and attitudes and children's language	Intervention families read more to their children and both receptive and expressive vocabulary scores improved for older intervention toddlers (18- 25 months old).	Participation in the program changed parental attitudes about the importance of reading and increased the incidents of shared reading activities which in turn enhanced language development in older toddlers.
Mendelsohn et al., 2001 ²⁰	122 participants (49 intervention, 73 comparison) aged between two and six years of Latino or black and English and/or Spanish speaking background.	At one clinic (intervention group) participants were exposed to a literacy support program based on Reach Out and Read (ROR). At a second clinic (comparison group) a similar program started three months before the study.	Determine the effect of a clinic-based literacy intervention on the language development of preschool children	Intensity of exposure to ROR was associated with increased parent-child reading activities. Compared to the comparison group the intervention children had both higher receptive and expressive language scores.	ROR as an intervention strategy can successfully support parents and enhance language development of children from disadvantaged communities

Practice resource:

LITERACY PROMOTION

Study	Participants	Intervention	Targeted Behaviour	Results	Comments
The National Centre for Research in Childrens Literature (2001) ⁴⁴ .	75 families with a control group of 30 people	Quantitative and qualitative evaluation of the BookStart programme	To assess whether BookStart encouraged parents and families to provide early reading experiences to children	Increased reading with babies and children was evident, library membership also increased for babies. There was also an increased awareness of the role reading can play in speech/ language development and parental confidence in reading to children also increased	As a result of the program parents valued reading with children and appreciated the role of reading in child development

Practice resource:

LITERACY PROMOTION

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Book Programs

- Let's Read: www.letsread.com.au
- The little big book club: www.thelittlebigbookclub.com.au/
- Better Beginnings: www.liswa.wa.gov.au/bb/index.html
- Get Ready to Read: www.getreadytoread.org
- Bookstart: www.bookstart.co.uk/index.php4
- Reach Out & Read: www.reachoutandread.org/about.html

Appendix 1

Centre for Community Child Health

The Centre for Community Child Health's mission is to improve the health and wellbeing of all children.

At the forefront of Australian research into early childhood development and behaviour, the Centre has a particular interest in children's mental health; obesity; language, learning and literacy; hearing; and the development of quality early childhood services.

The Centre is committed to disseminating its research findings to inform public policy, service delivery, clinical care and professional practice.

Professor Frank Oberklaid, an internationally renowned researcher, author, lecturer and consultant, leads a team of over 90 staff from a range of disciplines including paediatrics, psychology, education, early childhood, public health and communications.

Located at The Royal Children's Hospital, Melbourne, the Centre is a key research centre of the Murdoch Childrens Research Institute and an academic centre of the University of Melbourne.

Further information about the Centre for Community Child Health can be found at www.rch.org.au/ccch

Appendix 2

Telstra Foundation

In 2002, as part of its strong tradition of community involvement, Telstra established the Telstra Foundation, a program devoted to enriching the lives of Australian children and young people and the communities in which they live.

The Telstra Foundation supports projects that develop innovative solutions and new approaches to issues affecting children and young people aged 18 years and under, are based on sound research, and develop practical applications of new knowledge and have an emphasis on early intervention.

The Telstra Foundation has two main programs, with the *Community Development Fund* providing the funding for the practice resource. The Community Development Fund provides grants to charitable organisations for projects that have wide impact and intervene early to address causal factors affecting the health, well-being and life chances of Australia's children and young people.

Further information about the Telstra Foundation can be found at:

<http://202.12.135.148/dir148/tfweb.nsf/webdocs/home~home?opendocument>

Criteria for selecting topics

There were a number of criteria used for selecting the topic for each practice resource. These included:

- *Importance of the issue in relation to children's health and development*
There are a number of issues that are very prevalent and impact both on the immediate health and development of the child as well as the impact over the life course.
- *Provider need*
Through various forums providers have requested easier access to research based information that will assist directly in their daily interactions with children and families.
- *Community need*
Around Australia there is increasing community activity focusing on early childhood. A number of these communities have begun to articulate the desire to support families more effectively through providing services that engage in family centred practice and use research based strategies to address issues that concern parents.
- *Parent need and concern*
National consultations have highlighted the issues that parents want more information about. In addition, Australian research has shown that there are a small number of issues that cause parents the most concern about their children.
- *Perceived gap between evidence and practice*
There are a number of areas of practice which in general do not reflect research evidence in spite of sound evidence from that research.
- *Can be readily incorporated into routine practice*
The primary aim of each resource is to assist professionals in their interactions with children and families. Priority was given to issues about which strategies could be relatively easily incorporated into practice.
- *No duplicating of effort*
Consideration was given to whether issues had been addressed elsewhere in similar ways for the same audience.

Appendix 4

NHMRC Guidelines for Levels of Evidence

- | | |
|-------|--|
| I | Evidence obtained from a systematic review of all relevant randomised controlled trials. |
| II | Evidence obtained from at least one properly designed randomised controlled trial. |
| III-1 | Evidence obtained from well-designed pseudo-randomised controlled trials (alternate allocation of some other method). |
| III-2 | Evidence obtained from comparative studies with concurrent controls and allocation not randomised (cohort studies), case-control studies, or interrupted time series with a control group. |
| III-3 | Evidence obtained from comparative studies with historical control, two or more single-arm studies, or interrupted time series without a parallel control group. |
| IV | Evidence obtained from case series, either post-test or pre-test and post-test. |

Practice resource:

LITERACY PROMOTION

Appendix 5

Glossary of Terms – Research Methodology

Note: Wherever possible these definitions are taken from the *Glossary of Terms in the Cochrane Collaboration, Version 4.2.5, updated May 2005*.

Case-control study	A study that compares people with a disease or outcome of interest (cases) with people from the same population without that disease or outcome (controls), and which seeks to find associations between the outcome and exposure to particular risk factors
Cochrane Review	Systematic summaries of evidence of the effects of health care interventions, intended to help people make practical decisions. For a review to be called a Cochrane Review it must be in the Cochrane Database of Systematic Reviews or the Cochrane Review Methodology Database. These are administered by the Cochrane Collaboration, an international organisation that aims to help people make well-informed decisions about health care.
Control	A participant in a randomised controlled trial who is in a group that acts as a comparator for the experimental intervention(s); alternatively, a participant in a case-control study who is in a group that does not have the disease or outcome of interest.
Control trials	Studies in which participants are assigned to an intervention or control group using specific criteria.
Effectiveness	The extent to which a specific intervention, when used under ordinary circumstances, does what it is intended to do.
Evidence	Up-to-date, accurate information about the effects of interventions.
Randomised controlled trial (RCT)	An experiment in which two or more interventions are compared by being randomly (like tossing a coin) allocated to participants.