

Oral Language in Early Childhood and Primary Education (3-8 years)

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(3-8 years)

Commissioned research report

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Reading Note

Readers should note that this report is one of three research papers published in 2012 in support of the development of a new primary language curriculum, as Nos. 14, 15, and 16 in the NCCA’s Research Report Series (ISSN 1649-3362):

- **Oral Language in Early Childhood and Primary Education (3–8 years)** Drs. Gerry Shiel, Áine Cregan, Anne McGough and Peter Archer
- **Literacy in Early Childhood and Primary Education (3–8 years)** Drs. Eithne Kennedy, Elizabeth Dunphy, Bernadette Dwyer, Geraldine Hayes, Thérèse McPhillips, Jackie Marsh, Maura O’Connor and Gerry Shiel
- **Towards an Integrated Language Curriculum for Primary Schools (3–12 years)** Dr. Pádraig Ó Duibhir and Prof. Jim Cummins

In recognition of the many important links between their subject matter, especially between the Oral Language and Literacy papers, a measure of cross-referencing has been brought to the reports. This has been achieved through:

- a cross-referencing table, included as Appendix A, showing where corresponding or related material appears in the companion report/s
- the inclusion of embedded hyperlinks in the Portable Document Format (PDF) of the reports.

The three reports are also published in Portable Document Format (PDF) on the NCCA website at: <http://www.ncca.ie> along with a series of podcasts of key messages from the reports.

Acronyms

ACC	Augmentative and Alternative Communication (techniques)
Aistear	the Early Childhood Curriculum Framework (1999)
AK	Alphabet Knowledge
BICS	Basic Interpersonal Communication Skills
CALP	Cognitive Academic Language Proficiency
DES	Department of Education and Skills (formerly Department of Education and Science)
DHH	Deaf and Hard of Hearing
EAL	English as an Additional Language
ELLS	English language learners
EMT	Enhanced Milieu Teaching
ICTs	Information and Communication Technologies
IRE	Initiation-Response-Evaluation model
KAL	Knowledge about Language
MLU	Mean Length of Utterance
MT	Milieu Teaching
NCCA	National Council for Curriculum and Assessment
NELP	US National Early Literacy Panel
NCSE	National Council for Special Education
OECD	Organisation for Economic Cooperation and Development
PA	phonological awareness
PECS	Picture Exchange Communication System
PMLD	Multiple and Profound Learning Disabilities
PMT	Prelinguistic Milieu Teaching
PSEC	Primary School English Curriculum (1999)
QtA	Questioning the Author
REPEY	Researching Effective Pedagogy in the Early Years study
RI	Response interaction
SCERTS	Social communication, emotional regulation, transactional support (model of intervention)
SES	Socioeconomic status
SÍOLTA	National Quality Framework for Early Childhood Education (2006)
SSLD	Specific Speech and Language Difficulties

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E X E C U T I V E

S U M M A R Y

This section provides a broad overview of the outcomes of the research and considers some implications for curriculum development and for practice.

CONTEXT OF THE STUDY

Much work has been accomplished in recent years in highlighting the importance of oral language development in educational settings. There is already a strong emphasis on oral language development in the Primary School English Curriculum (PSEC) (NCCA, 1999a, 1999b), though there is evidence that, initially at least, some teachers may have struggled to implement this component because the underlying framework was unclear to them. Another feature of PSEC was the disconnection between curriculum and assessment. A system of assessment and appropriate supports for teachers was not brought in during the first few years of curriculum implementation. Hence, consideration needs to be given to the structure of the new oral language (and English) framework, and how this might align with a corresponding assessment framework. It seems particularly important to align curriculum and assessment frameworks from the start since understanding and implementation of the curriculum can be supported by assessment based on the framework (and vice versa).

The issue of alignment also arises in the context of developing a curriculum covering the three to eight age range. While some children in this age range (mainly children aged 3-5 years) will attend pre-schools, others (4-8 years) will attend primary schools. Most children 4-7 years will be in the infant classes, but some will be in the first or second class. The *Aistear* framework provides a broad blueprint for how learning can be conceptualised and organised in early years settings. Indeed, the learning goals in the Communications strand focus on several important aspects of oral language development, and are quite well aligned with the current PSEC

(NCCA, 2009c). The current report seeks to recognise and consider links between the different contexts in which language develops and communication occurs, including the home, pre-school settings and infant classes in primary schools.

One of the most significant changes to have occurred in Ireland since 1999 is the participation in the education system of large numbers of children for whom the language spoken at home is different from the language of instruction. Ten percent of children in second class in *The 2009 National Assessments of Mathematics and English Reading* did not speak English/Irish at home, and this group had an average reading score that was significantly lower than that of children who spoke English/Irish at home. Hence, the current report focuses in particular on implications for curriculum for children who speak a language other than English or Gaeilge at home.

The *National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020* draws attention to the needs of children who are struggling with language development. A proposed action in the strategy is the development of learning outcomes for the curriculum, including learning outcomes in oral language for pre-school children and children in infant classes. An issue that arises from this proposal is whether learning outcomes might be derived from *Aistear* as it currently exists, or whether aspects of *Aistear* (e.g., the Communications Strand) might feed into a revised and expanded curriculum framework in English for children aged 3-8 years.

CURRENT THEORETICAL PERSPECTIVES ON LANGUAGE

DEVELOPMENT IN YOUNG CHILDREN

Current work on understanding language development in young children has been described by MacWhinney (1999) as a concern to provide a conceptual framework which can account for interactions between biological and environmental processes. It recognises the

role of the child's physiological status, cognitive skills and social precocity in language acquisition, and the interactions between these elements and caregiver/adult input. However, it also notes that the importance of different factors may vary over the course of development. This can be described as the emergentist view of language development. The view allows key roles for both child and adult in the language acquisition process. This view is compatible with socio-constructivist perspectives on knowledge acquisition, in which the contribution of a knowledgeable adult is considered to be part of the language construction process.

Within an emergentist view of language acquisition and development, it is possible to provide a theoretical framework for a language curriculum which can support the development of a diverse population of young children that includes children of different cultural and linguistic backgrounds, children whose development may be inhibited by social/environmental circumstances and children whose development may be compromised by particular biological and/or environmental conditions, resulting in special educational needs.

Historically, the literature which has focused on typically developing children has been dominated by an emphasis on the amount of language acquired by children in the first three years of life and by the remarkable similarities in the sequence of that development as observed across children acquiring a given language. However, research has also highlighted very large individual differences, among typically developing children, in onset time, and in rate of growth, for all of the critical components of the language system: word comprehension, word production, word combinations and sentence complexity. This challenges the view that language develops in the same way for all children. Instead, variations observed in children with atypical development are interpreted as representing extensions

of the variations that are also observed in children with typical development (Bates, Dale & Thal, 1995).

The intervention literature reports important advances in our understanding of the specific language profiles of children with particular genetic syndromes such as Down syndrome, Fragile X syndrome and Williams syndrome, as well as autism. Along with stressing the need for syndrome-specific knowledge, this literature points to the importance of taking a developmental perspective on the communication and language strengths and needs of children with disabilities so that in addition to the child's diagnosis, intervention can take account of the child's developmental level.

An emergentist/developmental position is also compatible with accounts of second language acquisition. Cummins' hypothesis about the interdependence of first and second language and his common underlying proficiency model (Cummins, 1979; 1991; 2000) are compatible with a developmental perspective on second language acquisition. This has been most robustly demonstrated by research on the stage of acquisition described as *inter-language*. This is the period in child second language development between when the learner starts to use the language productively and he/she achieves levels of competence comparable to a native speaker.

A CONTINUUM OF LANGUAGE DEVELOPMENT

We outlined a two-pronged framework for children's early language development. First, it was noted that, in acquiring language, children engage in three modes of meaning – the interpersonal (through which children enact interpersonal relationships with significant others), the ideational (through which children both construe experience and reflect on it), and the textual (through which children enter into discourse, and have access to, and engage with, the academic language of the curriculum). The progression within

each meaning mode was outlined from birth onwards, and it was stressed that there is considerable variation among children in their development within each model. Hence, conditions such as Down syndrome and autism spectrum disorders can be conceptualised in terms of deviations from the expected course of language development within and across modes. Implications for curriculum development in respect of each meaning mode were outlined.

In the context of outlining the ideational model, key aspects of language development, such as the development of vocabulary, sentence structure and language use, were described. The interdependence between vocabulary, grammar and pragmatics in early language development was highlighted. Vocabulary was examined not only with respect to the emergence of understanding of individual words, but also with respect to the ability to categorise words – a process that occurs as the child reflects on language in addition to using it.

Decontextualised language was defined as language that is context-free, autonomous and disembedded. It is not rooted in any immediate context of time or situation, and does not rely on observation or immediate physical experience, but stands as an autonomous representation of meaning. The early emergence of decontextualised language, often in the context of imaginative play, was outlined, and it was stressed that growth in decontextualised language and other aspects of language arose from children's desire to engage in communication (dialogue) with and express meaning to others.

The most complex mode of meaning, the propositional or textual mode, was discussed with reference to the language of written texts, where meaning is built in a systematic, logical fashion, maintaining an internal coherence which places particular contextual demands on the language user (listener/reader). It was noted that the literature

supports a view of educational knowledge as requiring a particular linguistic learning style in which the propositional function of language is brought to deliberate and conscious awareness for children so that they can both reflect on language and use it as a tool for reflection. It was pointed out that the propositional function of language requires that children use language as a symbolic, syntactic and conceptual system to construct context-free ideas. Similarities between narrative and explanatory discourse were outlined, as was the need to develop explanation as a form of discourse arising from narrative, in the pre-school and early school years. Challenges that children living in disadvantaged socioeconomic circumstances may encounter in acquiring propositional (academic) language were considered.

In order to support a 'modes of meaning' approach to language development, a model incorporating the forms and structure of language was presented that includes listener-speaker-communicator skills and language uses (pragmatics), and language content and structure (semantics and syntax). The model, which specifies key subcomponents in each of these areas, could serve as a framework for both curriculum development and assessment.

In sum, for children aged 3-8 years, within a language curriculum, language teaching and learning can be conceptualised as the development of children's knowledge of language as a system and a resource, for the co-construction of meaning between adult and child, and between the child and other children, through progressive modes of meaning or levels of complexity with an explicit focus on the academic language of schooling. Progression through the modes of meaning can be represented as a progression through, and accumulation of, levels of understanding of language as a system and a resource, along a continuum, beginning with the inter-subjective. The continuum allows for differential rates of progress by children,

for acquisition of more than one language and for inclusion of children whose acquisition of the language system, and opportunity to use the system to construe meaning, may be compromised by biological or environmental factors or by a combination of these.

The pre-school and early school years are crucial for the development of children's oral language. In considering this, it is recognised that 'becoming a native speaker is a rapid and highly efficient process, but becoming a proficient speaker takes a long time' (Berman, 2004, p.10). Due to the remarkable and rapid developments which take place in spoken language during the pre-school years, evidence of language growth during this period is not difficult to mark. However, developments during the early school years are more subtle, and therefore, more difficult to identify. Nevertheless, interest in the phase of later language development has expanded and is emerging as a significant body of literature in the field of oral language development. This focuses on development in semantics, syntax and pragmatics, and also focuses on specific aspects of language that might be attended to in school settings, including narration, figurative language and use of metaphor. As noted earlier, these aspects develop best in meaningful dialogue around authentic language tasks that involve teacher and pupils, and pupils talking among themselves.

EFFECTIVE PRACTICES FOR LANGUAGE DEVELOPMENT

From a social-interactionist perspective, the pragmatic use of language, its communicative function, is seen as the driving force of language learning for the child, and the motivation for the child's acquisition of the structural components of vocabulary and grammar (Tomasello, 2003). Related to this, the adult's role is seen as rooted in the desire to facilitate the child's communicative intent and to develop the child's communicative competence. Recent research, focusing specifically on developing language and literacy skills in

children at-risk for reasons of socio-economic disadvantage, emphasises teacher-child dialogue as the essential teaching and learning context, and the nature and quality of teacher interactional style as the critical factor in predicting children's outcomes (Justice, Mashburn, Hamre & Pianta, 2008; Henry & Pianta, 2011).

Given the importance of teacher-child dialogue in developing language, researchers have sought to classify and evaluate adults' interaction styles. Adults who follow the child's attentional lead – those who label, describe, or comment upon objects, actions or events to which the child is currently attending – are generally facilitative of children's language development, compared with adults who have more directive responding styles, and seek to control children's communicative behaviour and to change their focus of attention. However, early intervention research suggests that directives may also be a necessary part of teachers' repertoires of supportive strategies, constituting an adaptive response to children who themselves are less responsive and who display less differentiated cues to adults during interactions.

An enabling teaching style is also one in which the teacher can initiate the topic or prompt the child/children to achieve joint attention. A feature of an enabling style is that the teacher's talk is adjusted to match the comprehension levels of the child/children. This style can be linked directly to developing the listener-speaker skills component of the curriculum: initiating or responding to a topic; listening and attending to a topic; turn-taking; and contributing in accordance with the listener's needs.

An important pre-requisite for achieving mutual attention and intention is that the children must be interested in, and motivated to attend to, the topic. Another condition is that, as meaning on any particular topic is co-constructed between the teacher and child/children, the children's contributions are valued and the dialogue

builds through the turn-taking contributions of the participants.

Along with particular kinds of interactive style, specific features of adult talk have been identified as facilitative of children's language development. Adult talk or communicative behaviour in the form of imitation, prompts, repetitions, recasts and expansions of children's utterances and the provision of multiple models of vocabulary use and of verb forms in use, for example modelling the use of the passive and active voice, has been shown to support children's acquisition of vocabulary, grammatical structures and verb complexity. Milieu teaching and responsive interaction techniques rely on adult-child dialogue. They are described as naturalistic language intervention procedures through which specific teaching episodes, employing specific talk strategies, can be used in response to children's initiations and can be embedded in the on-going stream of interactions in the early childhood setting.

Findings from the Researching Effective Pedagogy in the Early Years (REPEY) early childhood research project in England indicate that in the most effective instructional settings, teachers maintained a balance between child-initiated and adult-initiated activities. Whether activities were child or adult initiated, the findings clearly indicate that a defining factor in children's cognitive outcomes was the quality of the adult intervention in extending the child's engagement with, and thinking about, any particular activity. Such work is grounded in Vygotsky's (1978) theory of teaching and learning as a social-constructivist activity.

In addition to promoting dialogue, caregivers and teachers should work towards developing monologue, through activities such as retelling stories, answering open-ended questions, giving explanations, describing, recalling, reporting events and processes and defining words (Snow, 1989).

A number of implications can be derived from research on developing young children's oral language. First, children need frequent encounters with vocabulary and other elements of language before they acquire a deep understanding of word meanings. Further, when words are heard in context, children can also gain information about parts of speech and other aspects of grammar. Third, children should be supported in learning words within taxonomic categories (e.g., a fox is an animal). Children in disadvantaged circumstances may need more intensive vocabulary instruction than children not in such circumstances, including instruction in tier 2 words (those that provide more refined labels for concepts that are already familiar). For all children, vocabulary should also be taught in the context of content-lessons (e.g. science, mathematics), where there is a strong focus on developing conceptual knowledge as well as labelling objects.

Research on shared reading involving parents and young children shows reasonably strong effects on oral language (mainly receptive vocabulary) for children in the 2-3 years age range, but less powerful effects for older children (4-5 years). This might be interpreted as indicating that parents need support in maximising gains for older children, as well as children who are at risk for language and literacy difficulties. Research involving pre-school and infant school children provides mixed results, with one large-scale meta-analysis showing strong effects of shared reading (and dialogic reading in particular) on oral language development, for both low and high-SES children, and another showing moderate effects for shared reading, and weaker effects for dialogic reading. Significantly, experimenters/researchers were more effective than teachers in general in raising vocabulary knowledge levels in Mol et al.'s (2009) meta-analysis, indicating that extensive teacher preparation may be required if teachers are to significantly raise children's oral language proficiency through dialogic and other forms of interactive reading. Mol et al.'s work also

raises questions about the effectiveness of activities that may follow interactive reading such as play, art and drama, and how best these activities can be structured to build on ideas, vocabulary, and sentence structures encountered during interactive reading.

Proficiency in narrative discourse is viewed as an important outcome of early learning programmes, in that such proficiency can impact positively on a range of related outcomes, including social and emotional development and later reading and writing development. Development of narrative skill, whether in the context of recounting personal experiences, or stories listened to, provides children with an opportunity to engage in monologue, while using and reflecting on language. This represents a move away from conversational language towards decontextualised language. Teachers who adopt a co-constructive interactional style with children (similar to the enabling style described earlier), where they frequently stop during the reading to engage the class in analytical and evaluative talk about the story, have been shown to be effective in developing children's language and literacy skills. Development of explanatory and informational discourse knowledge is also important in the early years, and can be accomplished in English classes and in other curriculum areas.

A key principle in developing children's early language (and literacy) skills is meaningfulness. Hence, the content of instruction should be meaning and interesting. For this reason, activities such as the morning news, which is often based on children's personal experiences, can be used to promote language skills, as well as some early reading skills.

CONTEXTS FOR LANGUAGE LEARNING

Differences in the language of children living in socio-economically disadvantaged circumstances, and the impact of such differences on

their achievement in a range of areas, were examined. Drawing on the concept of decontextualised or academic language in an effort to understand differences and address them in school contexts, it was noted that recent conceptualisations of decontextualised language refer to the context of language use – social out-of-school contexts, and academic contexts in school involving curriculum-content language and school navigational language. Differences in language performance between socio-economically disadvantaged and non-disadvantaged children encompass vocabulary size, grammatical development, and communicative style. For example, disadvantaged children as a group tend to experience difficulty with discourse-related tasks such as giving explanations, re-telling stories, and giving oral narratives and formal definitions. Some of these differences may be associated with the language input children receive at home or in early care settings, where higher-SES mothers talk more to their children, provide more opportunities to use language, and use a wider range of vocabulary when talking to their children. The nature of the language used in storybook reading can also differ across social groups. A consequence of these differences is that disadvantaged children may be less well prepared for the language-related challenges of school.

Not surprisingly, language differences, such as those described above, have led to calls to improve early language skills of disadvantaged children. Nevertheless, studies of oral language development in pre-school and early years settings suggest that discourse is dominated by teacher talk, while teachers may struggle with how best to respond to children's language needs. However, researchers (e.g. Dickinson & Tabors, 2001) have identified features of pre-school and infant classrooms that are associated with effective language development, including teacher use of rare words, lower rates of teacher talk to child talk during free play, and a focus of teacher talk on extending children's contributions. Interactive strategies, which

expand children's oral responses through prompts, open-ended questions, expansions and recasts have also been found to be effective. Moreover, there is evidence that gains in language ability can be achieved with relatively small shifts in the details of conversational exchange and social-emotional engagement in pre-school classes. Prerequisites for effective early language teaching include care-giver/teacher knowledge of how spoken language is developed, the ability to assess the linguistic development of children, and the capacity to promote spoken language as needed. Strategies such as use of language enrichment groups, talking time, and shared reading have also been shown to be more or less effective in developing children's language skills, with level of intensity being an important variable.

A key factor in understanding language differences between more and less-disadvantaged children concerns the frequency with which complex language is used, rather than the children's underlying capability. Another critical issue is the pressure brought to bear on schools and teachers to prioritise written language, when children's oral language needs may be considerable. Hence, specific guidance in this matter may need to be provided to teachers.

Another group of children who may struggle in school settings is children learning English as an additional language. One approach that has been identified as being useful in this context is content-based language teaching. This entails maintaining a focus on both language and content during teaching, and, while potentially effective, it requires high levels of knowledge about language among teachers. Other strategies that have been shown to be effective include input enhancement (Lyster & Saito, 2010), recasts and interactional feedback.

Finally, research on children with language delays and difficulties points to the importance of early intervention. A range of

interventions consistent with the view of language acquisition as a developmental continuum, with different children on different points along the continuum, was outlined. Naturalistic approaches to intervention are embedded in natural classroom activities, and may involve prompting, reinforcement, time delay, shaping, fading, prompting without imitation, modelling, questioning, recasts and expansions. These are based on target objectives, and can include strategies such as prelinguistic milieu teaching, milieu teaching, enhanced milieu teaching, responsive interaction, and pivotal responsive interaction. These strategies draw on both behavioural and social-interactionist perspectives. The responsive nature of the social-interactive approach which emphasizes reciprocity, following the child's lead, and sensitive modelling of increasingly complex forms along a continuum of development, is complemented by the behavioural focus on tightly structured strategy use for prompting and practice.

The Developmental Pragmatics approach is presented as an approach that may meet the needs of some children with autism. The development of social-pragmatic aspects of language, including sharing affect and social orienting, is a central focus and the work is based on structuring the environment to motivate child initiations and follow the child's lead. It places an emphasis on teaching non-verbal forms of communication as a support to children.

Other approaches considered include Responsive Interaction (a naturalistic, play-based intervention, used to promote communication and interaction in young children with developmental disabilities) and Augmentative and Alternative Communication (ACC) techniques (a suite of multimodal techniques suitable for working with young children who have significant communication and language difficulties arising from autism, Down syndrome, intellectual and developmental disabilities, social-emotional disorders and physical

disabilities). The literature indicates that ACC should be used to maximise communication throughout the early childhood years, rather than waiting until a consistent delay has been measured over time.

For children who are deaf or hard of hearing (DHH), readers are referred to a recent policy document by the National Council for Special Education. The document, which draws on a best-evidence review, stresses that there is no evidence to support the view that one language modality or another is universally superior for DHH children, nor is it possible to predict which children will benefit most from spoken or signed language.

LINKS BETWEEN ORAL LANGUAGE, READING AND WRITING

Links between oral language and literacy, and, in particular, ways in which oral language can support literacy development and vice versa were considered. A distinction was made between oral language as a skill upon which future success in reading (and writing) is based, and oral language as a context for learning and practising reading skills. The former view highlights the links between oral language and later phonological processing and reading comprehension. The latter stresses the important role of the teacher in promoting high levels of cognitive interaction, including fostering children's engagement in extended oral language discourse and scaffolding children as they deploy strategies and engage in perspective-taking and reasoning.

The literature indicates that, whereas early oral language is highly predictive of constrained skills such as letter-name knowledge, concepts of print, phonemic awareness and oral reading fluency in the junior classes in primary school, its effects on unconstrained skills such as vocabulary knowledge, phonological memory and reading comprehension is less clear. Indeed, it may not be until fourth class or later that the real effects of work on vocabulary knowledge (particularly academic vocabulary) and knowledge of discourse (e.g.,

narrative discourse) impact on reading comprehension. This may be because the texts that younger readers encounter in their early reading depend more on decoding knowledge and understanding of individual word meanings than on higher-level oral language skills. Nevertheless, the evidence supports the teaching of oral language and reading comprehension from pre-school onwards, so that children can begin bridge the gap between basic reading texts encountered in early reading instruction, and more complex texts that they encounter from third or fourth class onwards, not only in English classes, but across the curriculum.

The research literature has identified a number of approaches to teaching reading comprehension that draw heavily on oral language, including discussion. For example, instructional activities that teach children how to use reading comprehension strategies, and instruction on strategies that involve identifying the organisational structure of texts have been shown to have high or moderate impact on reading comprehension. It is less clear how these strategies impact on oral language since it is generally not possible to separate out the effects of the strategy from the effects of language usage or development (most studies of reading comprehension have reading comprehension rather than oral language as their outcome).

Despite the fact that some studies involving early learners have shown disappointing effects for discussion-based strategies on children's reading comprehension, researchers (e.g., Shanahan et al., 2010; Lawrence & Snow, 2011) strongly recommend the use of comprehension strategies that place a strong emphasis on oral language usage. These strategies, which target young children, include: structuring post-reading discussion questions so that they require children to think deeply, asking follow-up questions that facilitate discussion, and having children lead discussion groups. Lawrence and Snow identify specific reading strategies such as Reciprocal Teaching,

Collaborative Reasoning, Questioning the Author and Accountable Talk, which are designed to foster pupil engagement in discussing texts. Features of effective instruction include modelling by the teacher, direct explanation of the strategies, marking (where the teacher responds to a student question or answer by highlighting a particular aspect of the text), and verifying and clarifying students' understandings. Children should also reflect on their use of reading comprehension strategies, so they can better understand when it is appropriate to use them (metacognitive knowledge).

Young children's writing (composition) development can also be supported by engaging them in language-based activities. For example, instruction in identifying the structure of text genres (which is sometimes embedded in reading instruction) can also form a part of the preparation for writing. Similarly, children can describe and explain their own written texts in the same way as they explain texts they have read. Reading and writing share several important cognitive processes, and it is important to promote an awareness of these in young children. Children's creativity can also be enhanced in the context of developing their writing through oral language.

ASSESSING ORAL LANGUAGE AND PLANNING FOR INSTRUCTION

The complexity of assessing oral language and the range of factors that can impact on assessment outcomes should be recognised. The ephemeral nature of talk means that unlike assessment in other domains where more permanent records of performance may be available, it is especially important to keep accurate records of oral language outcomes. It was also noted that language development is not linear in young children and performance may vary across tasks and contexts. Hence, development should be observed over time and in different contexts before firm conclusions can be drawn. Nevertheless, it was concluded that caregivers, pre-school and infant teachers can play an important role in identifying possible language difficulties.

Given the importance of performance assessment in assessing young children's language development, key principles of performance assessment were outlined: the active involvement of children in communicative situations, the engagement of children in situations where they can use language and exchange meaning according to their purposes in spontaneous ways, the use of multiple indicators and sources of information collected over time, the use of assessment outcomes to plan instruction, and the need for collaboration among parents, teachers, children and other professionals in sourcing and interpreting assessment outcomes.

In identifying which aspects of oral language should be assessed, a framework presented earlier in the report, which outlined the components of the language system (listener-speaker relationships, language uses and content and structure) was also proposed as a possible framework for specifying the content of oral language assessment in language in the early years. The value of drawing on a framework such as this is that it could be used to specify the content and processes of language teaching as well the specific aspects that should be assessed.

Other assessment frameworks and systems were also examined. These included the assessment framework underpinning *Aistear*, where the Communications component might be a useful way of organising assessment. However, it was noted that whereas *Aistear* specifies learning goals (aims), other frameworks, such as the Common Core Standards in the US, specify learning outcomes. Another potential difficulty is that *Aistear* does not currently support the generation of an overall indicator of a child's competence in oral language, which teachers may need for reporting purposes. The *Drumcondra English Profiles* was examined as an assessment framework designed for this purpose, and strengths and weakness were noted.

The role of parents in providing assessment information was noted – in particular the fact that parents can often provide useful information about children’s language usage in out-of-school settings. This information can be obtained from parents on an informal basis, or by using a structured method, such as the *Child Observation Record*.

Specific tools and recording systems that could be used for classroom assessment of oral language were identified. These included language samples, anecdotal notes, learning narratives, rating scales, scoring rubrics, and standardised tests of oral language. Regardless of the overall assessment framework that it adopted, it would seem important for teachers to be aware of the strengths and limitations of each of these tools, and ways in which they could collaborate in assessing children’s language.

Issues in assessing children with specific speech and language disorders and children for whom English is an additional language were briefly considered. The use of standardised criterion-referenced tools was identified as one fruitful approach to the assessment of language among children with disabilities, as such a tool can provide both normative and criterion-referenced information. The complexity of assessing children with English as an additional language was noted, and the need to draw on information about a child’s first language, particularly in the area of vocabulary, was highlighted.

SUPPORTING ORAL LANGUAGE DEVELOPMENT ACROSS THE CURRICULUM

A key action in the *National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020* is to extend literacy instruction to all curriculum subjects, with the expectation that this will improve overall literacy standards, and support children in acquiring disciplinary knowledge in various subject areas. Part of this

entails more effective use of oral language to teach subject-specific knowledge and concepts. The need to identify strategies that can be used to improve oral language is all the more urgent since curricular frameworks for young children (e.g. *Aistear*) are quite clear on the importance of teaching important key subject-area and cross-curricular concepts that young children should know. Aspects of language that were identified in the research as being important for young children across subject areas included subject-specific terminology, taxonomies, nominalisations, causality, contrasts and alternatives, modality and understanding of metaphors (Askeland & Maagerø, 2010). Dialogue types associated with teaching subject matter knowledge to young children included associating dialogue, philosophical dialogue, technical dialogue, text-associated dialogue, and metalinguistic dialogue.

A variety of strategies that can be used to teach language in science classes were identified, including vocabulary visits, read-alouds involving information books, hands-on activities, journal writing and partner-reading of information books. Any or all of these strategies may require teachers to scaffold young children's use of language to develop conceptual knowledge and associated vocabulary and grammatical structures. The potential of inquiry-based learning to support language learning in science was noted.

The use of language in mathematics lessons was addressed from two perspectives – the use of language and discussion in the context of problem-solving, to enhance children's understanding of problems, and to bolster their ability to discover mathematical procedures in the context of solving problems and communicate their understandings, and the need to teach mathematical vocabulary in creative and systematic ways from an early age. Evidence from the literature (e.g., Lambert & Cobb, 2003; Neuman et al. 2011) was cited in support of both approaches. What appears to be relatively

ineffective, especially for at-risk children, is use of textbooks as the main focus of mathematics teaching and learning, in the absence of in-depth mathematical discourse.

TOWARDS CHANGE

In moving forward, there is a need for conscious, deliberate, focused systematic teaching of oral language in English and across subject areas. Adults (parents, caregivers, teachers) need to know what to teach and how to teach it. Some broad principles that can underpin the approach to language development outlined in this report include:

- Awareness among adults (parents, caregivers, teachers) of the emergentist view that language development is longitudinal, maturational and linked to input as well as the child's cognitive and linguistic competence.
- Familiarity among caregivers and teachers with models of or frameworks for language development and their components (e.g. listener-speaker-communicator skills, language uses and content and structure of language) and the implication of these for planning, interaction and assessment.
- The importance of creating and maintaining high-quality adult intervention in contexts where children are motivated to talk.
- Implementation of a range of strategies that have been shown to enhance language learning in the context of dialogic interaction, including repetitions, recasts, expansions, prompts and questions.
- Modelling of decontextualised language including use of more sophisticated vocabulary and sentence structures, more

encounters with different styles of language, explicit articulation by the teacher of expectations in relation to use of this language, and scaffolding children to produce this language as appropriate.

- Awareness of relationships between oral language and reading/writing, how these change over the course of reading development, and how language comprehension activities that support reading development can be presented.
- A recognition among caregivers, teachers and parents of the large variation across children in the rate/time they present with language capacities including delay and impairment, and how this variability can be addressed in formal and informal teaching.
- Awareness among caregivers and teachers of how parents and others can be supported in promoting children's language development outside care/school contexts.
- A knowledge among caregivers and teachers of the range of approaches that can be used to assess children's oral language, including approaches that incorporate parents' observations on their children's language development.

I N T R O D U C T I O N

There are many reasons why we should prioritise oral language in pre-school and school settings for children aged 3–8 years. According to Cregan (1998):

Oral language is the child's first, most important, and most frequently used structured medium of communication. It is the primary means through which each individual child will be enabled to structure, to evaluate, to describe and to control his/her experience. In addition, and most significantly, oral language is the primary mediator of culture, the way in which children locate themselves in the world, and define themselves with it and within it (p. 7).

In addition to being important in its own right, oral language is important because of its associations with reading and writing. Oral language, reading and writing draw heavily on each other, and on a common set of phonological, meaning and grammatical structures, as well as on common processes or purposes. However, oral language may be especially important since it functions as a prerequisite for success in many aspects of reading and writing.

In many respects, the 1999 Primary School English Curriculum (PSEC) was innovative. It was built on a framework that emphasised the role of language in all aspects of literacy and sought to capitalise on similarities across the language modes. However, not all educators understood the framework underlying the PSEC very well, and difficulties arose during planning and implementation. Furthermore, classroom assessment was not linked in a systematic way to the PSEC during initial implementation, though some progress has been made since then. These problems highlight the need to build a new framework for English, one that again capitalises on synergies between oral language and other aspects of literacy, and one which has clearly defined links between instruction and assessment.

A number of key research outcomes relating to oral language have emerged since the introduction of the PSEC. These include a growing understanding of how language develops in young children, and how variation in development can be interpreted. There is a growing awareness of the role of dialogue (for example, between parent and child, or carer/teacher and child). There is a better and more informed understanding of the role of decontextualised language in language development, and of how such language can be promoted in pre-school and infant settings. There is a better understanding of the role of play in children's development, and of the ways in which play can be structured to extend children's language skills.

There has been considerable change in the education system in the years since the PSEC was introduced. Not least among these is the presence of large numbers of children for whom English is not the main language spoken at home. This has presented a significant challenge to many schools, but it has also heightened interest in language development, in identifying how knowledge of one language can support children in learning an additional language, and in understanding how culture interacts with language as children create meaning.

Another important change has been the increased focus on pre-school education, and, in particular, the publication of the *Aistear* framework. This framework is designed to support pre-school carers and infant teachers in promoting children's early learning, including their ability to communicate effectively with others. The importance of language development in pre-school and infant programmes is also recognised in the Department of Education and Skills' *National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020*. Another important context for the current report is the *Early Childhood Care and Education Scheme*, which grants all

children free early childhood education for 2 hours and 15 minutes per day for fifty weeks prior to entering school.

In August, 2011, the NCCA commissioned the current report, based on the following key questions:

1. What are the theoretical perspectives underpinning recent and current research and reflection on children's oral language development?
2. Does current and recent research propose distinct stages in children's oral language development? If so, how are these defined and what are the essential indicators and skills at each stage (including, but not limited to *vocabulary, morphology, complexity, fluency and pragmatics*)?
3. According to research, what are the features of good oral language pedagogy for children aged 3-8 years
 - (a) at individual teacher/classroom level?
 - (b) at school level?
 - (c) through partnership with parents and the wider community?
4. In the case of each of the above, what strategies does research highlight as being particularly effective in supporting children's oral language development in different language-learning contexts, including children from socio-economically disadvantaged backgrounds, children whose first language is not the medium of instruction, and children experiencing language delay/difficulties?
5. What practical advice does the literature on assessing and planning for progression in children's oral language development offer (with reference, where relevant, to the stages in Q2):

- (a) at teacher/classroom level?
 - (b) at school level?
6. How can teachers ensure that children's oral language development supports their literacy development?
 7. How can children's oral language development be promoted across the breadth of the curriculum?

It should be noted that the current report is one of a series of three reports commissioned by the NCCA, relating to children's language development and related areas. The others look at recent research on literacy in early childhood and primary education (Kennedy et al., 2012), and at research towards an integrated language curriculum in early childhood and primary education (3-12 years) (O'Duibhir & Cummins, 2012).

We have organised this report with reference to these key questions. The first chapter provides background to the current report, including research on the implementation of the PSEC. Chapter 2 provides a theoretical overview of language development in the early years, focusing in particular on emergentist views of development, and how variation in development can be situated within these views. Chapter 3 describes the development of children's language between 3-8 years of age, focusing on both modes of meaning and the development of content, form and pragmatics. Chapter 4 looks at effective practice in language teaching, including ways in which adults can support children's development. Chapter 5 examines the different contexts in which young children learn language, and places particular emphasis on addressing the language needs of children in disadvantaged contexts, and those for whom English is an additional language. Chapter 6 looks at links between oral language, reading and writing including ways in which oral language skills can contribute

to reading comprehension. Chapter 7 looks at approaches to assessing children's language development, and suggests ways in which the outcomes of assessment can be used to plan for language teaching. Chapter 8 looks at how oral language can be used as a tool for learning across the curriculum, with particular emphasis on mathematics and science.

CHAPTER 1:
THE CONTEXT
OF THE CURRENT
REPORT

This chapter seeks to establish a context for the current paper by examining a number of significant documents with implications for children's oral language development, including: the 1999 Primary School English Curriculum (PSEC) (DES/NCCA, 1999a, b); studies on the implementation of PSEC in subsequent years (2000–2001 in English-medium schools and 2001–2002 in Irish-medium schools) (NCCA, 2005; DES, 2005a, b). *Aistear* (NCCA, 2009a, b), a curriculum framework for early childhood (birth to 6 years of age); *SÍOLTA*, the national quality framework for early childhood education (Centre for Early Childhood Development and Education, 2006); and the *National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020* (DES, 2011). Implications of national assessments of English reading for language development are also considered as are implications of recent technological developments for children's oral language development.

ORAL LANGUAGE IN THE PRIMARY SCHOOL ENGLISH CURRICULUM (1999)

Structure of the Primary School English Curriculum

The 1999 Primary School English Curriculum (PSEC) (DES/NCCA, 1999a) places a much stronger emphasis on oral language than its predecessors. This is apparent in the curriculum framework, where each of the original Strands is framed in terms of language, and each includes oral language as a Strand unit (substrand) (table 1.1).

Table 1.1: Structure of the 1999 Primary School English Curriculum: Strands and Strand Units

Strand	Strand unit
Receptiveness to language	Oral language Reading Writing
Competence and confidence in using language	Oral language Reading Writing
Developing cognitive abilities through language	Oral language Reading Writing
Emotional and imaginative development through language	Oral language Reading Writing

According to the introduction to the PSEC (DES/NCCA, 1999a), the following ideas underpin oral language development:

- The process of language learning is linked with a growing knowledge of the world; language is therefore a central factor in the expansion of the child's conceptual framework and body of knowledge.
- A large part of the child's learning experience is verbal, and it is through oral language activity that much of the child's learning takes place both in and out of school.
- Language learning is an integrated process in which it is difficult to separate the functions of oral language, reading and writing. All three are intimately related and each interacts with the others in a myriad of ways.
- Because of its pervasive influence, English is not just concerned with language learning but also with learning through language.
- In the process of acquiring language skills and in developing the ability to use language, other crucial elements of the child's personality and potential are cultivated.

The introduction to the PSEC also elaborates on the different aspects of oral language (and reading and writing) that are associated with each strand in the English language curriculum. These can be summarised as follows:

Receptiveness to language:

- Developing an awareness and appreciation of context, grammar, tone of voice and gesture to achieve understanding.
- Developing an appreciation of the listener-speaker relationship, learning to attend actively, and responding to all the verbal and non-verbal cues that are used to convey meaning.

Competence and confidence in using language:

- Developing oral fluency and expressiveness, and, in the process, learning to initiate and sustain conversations and to take turns in a classroom environment that promotes tolerance for the views and opinions of others.
- Learning to use language for the purpose of everyday social interaction, performing social functions such as greeting, expressing appreciation, expressing sympathy and concern, and welcoming visitors with confidence.
- Engaging in activities that are directed towards extending vocabulary, developing a command of sentence structure, and mastering the conventions of grammar, punctuation and spelling.

Developing cognitive abilities through language:

- Exploiting the complex relationship that exists between language and thought.

- Through naming, describing, classifying and modifying things and ideas, extending the command of language already developed so that language subsumes experience.
- Drawing on words, in their multilayered meanings and interconnections, to build knowledge and concepts.
- Using language to learn through engagement in such activities as: using questions to gain maximum information, seeking and giving explanations, discussing different possible solutions to a problem, arguing a point of view, persuading others and examining fact and opinion, bias and objectivity.

Emotional and imaginative development through language:

- Exploring everyday experiences and feelings through talk, writing, play and drama, thereby generating understanding of experiences and giving order to emotions and to reactions to people and events.
- Connecting with a wide variety of emotional life through stories and literature, and, through talking (and writing) about responses, coming to a better understanding of human motivation and feeling.

Several of the broad objectives of the English curriculum are also relevant for understanding the role of oral language, including its role in learning across the curriculum. These include:

- Gaining pleasure and fulfilment from language development.
- Developing the skill of listening actively and appreciating the significance of tone of voice, facial expression and gesture.
- Learning to understand the conventions of oral language interaction and using oral language in a variety of social situations.

- Expanding vocabulary and developing a command of grammar, syntax and punctuation.
- Becoming fluent and explicit in communicating ideas and experiences.
- Exploring and developing ideas and concepts through talk, directed discussion and writing.
- Identifying and evaluating the key points, issues and central meaning of a text or oral presentation and organising efficiently the information gained.
- Using oral language to manipulate images in problem-solving.
- Expressing intuitions, feelings, impressions, ideas and reactions in response to real and imaginary situations through talk, discussion and writing.
- Organising, clarifying, interpreting and extending experience through oral language activity and writing.
- Creating, developing and sustaining imaginary situations through talk, discussion and improvisational drama.
- Exploring, experimenting with and enjoying all the playful aspects of language.

Guidelines for teaching oral language

The section of the PSEC Teacher Guidelines (DES/NCCA, 1999b) dealing with oral language highlights five contexts for developing language: talk and discussion, play and games, story, improvisational drama, and poetry and rhyme. It was recognised that talk also permeates all of the other contexts, and a framework for classroom discussion was proposed. The framework set out how the teacher

could manage talk in the classroom through, for example, providing appropriate vocabulary and sentence structure, and modelling different types of response. Several instructional activities that can promote children's oral language development were put forward, including:

- story-based activities such as listening to and retelling stories, recalling particular events in a story, asking questions, and communicating the narrative through role-playing, language games, rhymes, songs, poems and jingles, through which an awareness of sounds may be fostered
- approaches to interacting with children during play such as proposing new directions for play, encouraging role-playing, and encouraging cooperation among children
- strategies for developing vocabulary (naming objects, parts of objects, and functions of objects)
- a range of different ways in which children can respond to stories, including use of improvisational drama.

Clearly, the 1999 PSEC viewed oral language as critical in its own right, as well as being important for development in reading and writing. The focus on developing cognitive abilities through language, including engagement in vocabulary development, discussion and problem-solving is especially important, since, as we show later in this paper, international research since 1999 has also validated several of these approaches.

Research on curriculum implementation

In a review of implementation of the PSEC (NCCA, 2005), teachers were generally positively disposed towards the oral language component. However, some teachers involved in focus group

discussions expressed confusion with the terminology used to describe strands (receptiveness to language etc.). Although a majority of teachers across all class levels surveyed in the review felt that the oral language component of PSEC had the strongest impact on children's learning, just 30% felt that the teaching of oral language represented their greatest success in implementing the PSEC (62% chose children's literacy). Also in 2005, a document, *English Curriculum: Additional Support Material* (DES/NCCA, 2005), was released, in which the main strands in the PSEC were presented as oral language, reading and writing, and the original strands (receptiveness to language etc.) were presented as strand units. It is unclear to what extent the restructuring of the PSEC in this way facilitated teachers' understanding and implementation of oral language and other aspects of the PSEC.

In 2005, the inspectorate of the (then) Department of Education and Science (DES, 2005a) published their own evaluation of the implementation of the PSEC. The evaluation was based on focused inspections of the teaching of English in 59 classrooms in 26 schools, as well as focus group interviews with the teachers in those schools. Key findings of the evaluation for oral language across all class levels include the following:

- In two-thirds of schools, whole-school plans were deemed to be in need of further development, as they were general in nature, not specific to the particular school and its environment, not linked to the structure and focus of the English curriculum (as it was at the time), and lacking detail regarding the methodologies adopted in the school.
- Four-fifths of teachers used the (then) strand units of oral language, reading and writing as opposed to the strands as their starting points for classroom planning.

- More than half the teachers did not link their individual planning with the school plan, with some teachers indicating that they used textbooks or commercially-produced materials as a basis for planning, rather than the content objectives in the curriculum.
- In a quarter of classrooms no reference was made in long-term or short-term planning to the allocation of discrete time for the development of oral language objectives.
- Oral language was taught effectively in a little over three-quarters of classrooms.
- Receptiveness to language was emphasised in three-quarters of classrooms, with pupils in the junior classes afforded opportunities to observe simple commands, to play with language, and to develop an awareness of sounds.
- Three-quarters of teachers made effective use of a variety of approaches for oral language development including talk and discussion, play and games, story, improvisational drama, poetry, and rhyme.
- Practice in relation to assessment (of English in general) was good in three-fifths of classrooms as teachers used assessment information to inform teaching and learning. Records of pupils' progress were maintained in two-thirds of classrooms.

It is also of interest to note the effects of curriculum implementation in schools with particular characteristics. In a report on teaching literacy and numeracy in 12 schools designated as disadvantaged (DES, 2005b), the inspectorate noted the following in relation to teaching oral language in such schools:

- Teachers made frequent reference to the fact that children come to school with a significant oral language deficit, and that the

necessary oral skills and competencies that are a prerequisite for the development of literacy skills had not been established (p. 25).

- In a few schools, attention was given to the development of assessment profiles to monitor children's progress in reading and oral language (p. 36).
- Teachers commented that oral language development received much attention, and this improved classroom learning experiences for the children (p. 45).

The report also noted that lessons gleaned from the Early Start programme should support the teaching of oral language in community-based pre-school provision in areas designated as disadvantaged.

Finally, a report on the teaching of English based on incidental visits to primary schools by members of the inspectorate (DES, 2010) noted that, despite the importance accorded to oral language in the English curriculum teachers did not facilitate talk and discussion to support children's learning in one-sixth of the English lessons observed (p. 5).

In general, the picture is one in which overall implementation of the oral language component of the English curriculum is deemed to be appropriate, though a sizeable minority of schools and teachers are viewed as struggling with aspects of teaching, assessment or planning. The importance of providing a more intensive approach to oral language development in schools with large numbers of children living in disadvantaged circumstances is also suggested.

Assessment of oral language in English and across the curriculum

When the PSEC was introduced in 1999, assessment was identified as an integral part of teaching and learning in English and in other

aspects of the curriculum. A suite of assessment techniques was described, ranging from less structured to more structured. These were designed to enrich the learning experience of the child and provide information for children, teachers, parents and others. In the case of each curriculum strand, suggestions on what to assess were given. Hence, in the case of receptiveness to language, teachers were advised to take into account the child's ability to engage in appropriate listener-speaker relationships, to respond to non-verbal cues, to follow directions, to understand ideas and to appreciate different ways in which language is used. For competence and confidence in using language, attention was drawn to the child's ability to listen, talk about experiences, present ideas, give and take turns, initiate and conclude conversations, and perform social functions using language. In the case of developing cognitive abilities through language, reference was made to the child's ability to focus on detail and be explicit about it, to use language in order to elaborate, qualify, modify and explain ideas, and to discuss solutions to problems. For emotional and imaginative development, there was a focus on the child's ability to express feelings and reactions and to formulate and articulate imaginative ideas, to respond to fiction and poetry and relate these to personal experience, and on the quality of personal reactions to literature. The curriculum document called for balance between the use of less and more-structured approaches to assessment, and between records that are more detailed versus less detailed. The English Teacher Guidelines (DES/NCCA, 1999b) argued for a systematic approach to assessment throughout the school and outlined goals for assessment of English.

In 2007, the NCCA issued more specific and detailed guidelines on assessment in primary schools. The guidelines elaborated on approaches to assessment outlined in the primary school curriculum, and provided advice to schools on planning for assessment. They also provide examples of assessing children across a range of curriculum

strands, including oral language. Examples relate to:

- Targeted child observation to assess a 4½ year old's understanding of colours and draw inferences about possible language delay.
- A shadow study in Social, Environmental and Scientific Education (third/fourth classes) that tracked a child's oral presentation of ideas.
- A teacher-child conference (fifth/sixth class) where a child was asked to talk about the strengths and weaknesses in a story he had written.
- Observation of children (first/second) responding to a mime in Irish. The focus of the assessment was on the ability of the children to use cues to support them in communicating effectively.

The examples illustrated the importance of recording what was observed during teacher-child and child-child interactions, even if observations were recorded later in the school day rather than during the target activity.

AISTEAR – A CURRICULUM FRAMEWORK FOR EARLY CHILDHOOD

Recognising the importance of supporting children's learning from birth onwards, *Aistear*, a framework for early development (NCCA, 2009a, b), describes learning and development from birth to six years through four inter-connected themes: well-being, identity and belonging, communicating, and exploring and thinking. The guidelines are organised around four key contexts: building partnerships between parents and practitioners, learning and developing through interactions, learning and developing through play, and supporting learning and development through assessment. Since oral language forms a significant component of the

communicating theme, the aims and learning goals for oral language are summarised in table 1.2.

Table 1.2: Aims and selected learning goals from the *Communicating* theme in *Aistear*

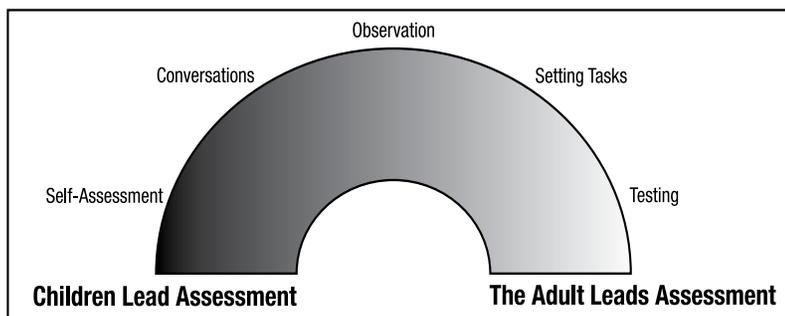
Aims	Learning goals (selected). In partnership with the adult, children will
Aim 1 Children will use non-verbal communication skills.	<ul style="list-style-type: none"> • interpret and respond to non-verbal communication by others • combine non-verbal and verbal communication to get their point across.
Aim 2 Children will use language.	<ul style="list-style-type: none"> • interact with other children and adults by listening, discussing and taking turns in conversation • explore sound, pattern, rhythm and repetition in language • use an expanding vocabulary of words and phrases, and show a growing understanding of syntax and meaning • use language with confidence and competence for giving and receiving information, asking questions, requesting, refusing, negotiating, problem-solving, imagining and recreating roles and situations, and clarifying thinking, ideas and feelings • become proficient users of at least one language and have an awareness and appreciation of other languages • be positive about their home language, and know that they can use different languages to communicate with different people and in different situations.
Aim 3 Children will broaden their understanding of the world by making sense of experiences through language.	<ul style="list-style-type: none"> • use language to interpret experiences, to solve problems, and to clarify thinking, ideas and feelings • use books and ICTs for fun, to gain information and to broaden understanding of the world • build awareness of the variety of symbols (pictures, print, numbers) used to communicate, and understand that these can be read by others.
Aim 4 Children will express themselves creatively and imaginatively.	<ul style="list-style-type: none"> • share their feelings, thoughts and ideas by story-telling, making art, moving to music, role-playing, problem-solving, and responding to these experience • use language to imagine and recreate roles and experiences • respond to and create literacy experiences through story, poetry, song, and drama.

Source: NCCA, 2009a, p. 35

The oral language-related learning goals are not dissimilar to those in the PSEC in that they include use of language in a range of contexts, and a focus on imaginative thinking, in the context of drama as a response to story. They go beyond the PSEC in acknowledging that some children may speak home languages other than the language of instruction.

Assessment in *Aistear* is defined as ‘the ongoing process of collecting, documenting, reflecting on, and using information to develop rich portraits of children as learners in order to support and enhance their future learning’ (NCCA, 2009a, p. 30). It focuses on assessment in four key areas: dispositions, skills, attitudes and values, and knowledge and understanding. The area, knowledge and understanding, seems particularly relevant to this report, since it includes a knowledge that words have meanings. Five approaches to gathering assessment data are proposed, ranging from child self-assessment to testing (figure 1.1). Methodologies, challenges and strengths associated with each approach are outlined in the *Aistear* manual. Dunphy (2008) produced a paper on assessment in early childhood for the NCCA in which she outlined approaches to formative assessment that were consistent with the *Aistear* framework, including its underlying principles and approaches to learning. The assessment strategies included structured observations that formed the basis of narrative reports, and portfolios.

Figure 1.1: Assessment modes in Aistear



Since January 2010, children aged between 3 years 3 months, and 4 years 6 months on 1st September each year can avail of the free (government-supported) pre-school year in early childhood care and education (ECCE). This scheme provides programme-based activities in the year before they start primary school. Instruction is for 2 hours and 15 minutes per day, over 50 weeks.

SÍOLTA – A QUALITY FRAMEWORK FOR EARLY CHILDHOOD

Síolta is a National Quality Framework for Early Childhood Education published by the centre for early childhood development and education (CECDE, 2006), on behalf of the Department of Education and Skills. Síolta is designed to define, assess and support the improvement of quality across all aspects of practice in early childhood care and education (ECCE) settings where children from birth to 6 years are present, including full and part-time daycare, child-minding, sessional services, and infant classrooms. Hence, Síolta overlaps with the age range covered by the *Aistear* (birth to 6 years of age) and by the current report (3-8 years).

The Síolta manuals provide a broad range of standards covering such topics as rights of the child, environments, parents and families, curriculum, play, professional practice, and legislation and regulation. Hence, its remit is quite broad. It is intended that the framework be used by individuals or groups appraising the quality of early childhood provision, including providers themselves.

The standard for curriculum in the Infant Classes User Manual (CECDE, 2006) is as follows: ‘Encouraging each child’s holistic development and learning requires the implementation of a verifiable, broad-based, documented and flexible curriculum or programme’ (p. 49). Elements of the standard are further defined in a series of components. These include the following:

- It is evident that the child's learning and development are holistic experiences and processes, that play is central to integrated learning and development and to curriculum/ programme implementation (Component 7.1).
- Curriculum/programme implementation is achieved through a variety of adult strategies, close and supportive relationships in the setting and a wide range of experiences which are made available to the child (C7.4).
- Planning for the curriculum or programme implementation is based on the child's individual profile, which is established through systematic observation and assessment for learning (C.7.6).

The curriculum standard and its components are consistent with *Aistear*, which envisages a holistic, child-centred curriculum based on play, yet involving adult-led strategies based on a structured and planned curriculum and related assessment activities.

NATIONAL STRATEGY TO IMPROVE LITERACY AND NUMERACY AMONG CHILDREN AND YOUNG PEOPLE 2011-2020

In July 2011, the *National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020* was published by the Department of Education and Skills. The strategy can be viewed as a response to concerns about standards in literacy and numeracy, including a decline in performance in reading literacy and mathematics among fifteen-year-olds on the OECD Programme for International Student Assessment (PISA) (Perkins, Moran, Cosgrove & Shiel, 2010). The national strategy has significant implications for the current paper since it refers to the following:

- A national target to improve the communication and oral-

language competence of young children in early childhood care and education (ECCE) settings.

- An intention to ensure that training and education courses completed by those entering the early childhood care and education (ECCE) workforce include units on both content and pedagogical knowledge in literacy (including oral language and a focus on additional language learning).
- The provision of interventions at an earlier stage in ECCE settings and in junior infants, for children with early learning problems, including oral language difficulties.
- Explicit and systematic attention in a revised English curriculum to teaching and assessing key literacy skills and strategies, including oral and aural skills.
- An acknowledgement that standardised tests have limited utility in assessing some aspects of oral language.

NATIONAL ASSESSMENTS OF READING LITERACY

Although recent national assessments at primary level have focused on reading rather than oral language or writing, their recommendations have pointed to the need to capitalise more strongly on the potential of oral discussion as a medium for developing reading comprehension. For example, Eivers et al. (2005) recommended that ‘teachers require additional support in teaching reading comprehension skills as they relate to different text genres, and in developing pupils’ ability to respond to reading (including emotional and imaginative responses) through oral language and writing’ (p. 159), while Eivers et al. (2010) recommended that ‘further changes to the English curriculum should promote use of self-regulated comprehension strategies at all class levels, across a range of paper and digital texts’ (p. 89). Since comprehension instruction is

often language-based, efforts to enhance comprehension will also need to draw on children's oral language repertoires. Concerns about children's reading comprehension levels have arisen because average performance in fifth class did not change significantly between 1980 and 2004, despite changes in curriculum and in the levels of support provided to schools. National studies of reading literacy levels in schools in disadvantaged areas (e.g. Eivers et al., 2004) indicate lower average levels of reading achievement in such schools, as well as concerns about oral language, though a recent report on the implementation of DEIS¹ (Weir et al., 2011) indicates an improvement in reading standards in recent years.

LANGUAGE AND CHILDREN'S VIRTUAL WORLDS

A new context that has emerged since the initial implementation of the PSEC is increased access to, and use of, a range of information and communication technologies (ICTs), by children of all ages, including 3-8 year olds. However, some researchers (e.g., Marsh, 2004, 2011) have pointed to discontinuities between young children's literacy practices in home settings, where they may interact with others in virtual worlds and across a range of fixed and mobile devices, and literacy in school settings, which is often print-based and static. Burnett (2010) distinguishes between three uses of technology in school settings with young children: technology as a deliverer of the literacy curriculum with multi-media elements designed to meet objectives associated with the existing print literacy curriculum (e.g., presentation of computer-animated stories to children), technology as a site for interaction around texts (e.g., children engage in discussion around information accessed on the internet); and technology as a medium for meaning-making (e.g., use of networked technologies to enable children in different locations to post, review and comment

1 DEIS, Delivering Equality of Opportunity in Schools (DES, 2005) comprises a package of interventions implemented in schools with large numbers of children from socio-economically disadvantaged backgrounds.

on their own and others' photo-journals). The second and third uses of technology are particularly relevant to a language curriculum that seeks to build on children's home experiences and ensure that school-based learning experiences transfer back to the home. They are also consistent with a socio-cultural view of learning, which underpins the development of oral language, as described in this report.

SUMMARY AND IMPLICATIONS

Much work has been accomplished in recent years in terms of highlighting the importance of oral language development in educational settings. There is already a strong emphasis on oral language development in the Primary School English Curriculum (DES/NCCA, 1999a, 1999b), though there is evidence that, initially, at least, some teachers may have struggled to implement the language development component because the underlying framework was unclear to them. A further feature of PSEC was the disconnection between curriculum and assessment. Hence, consideration needs to be given to the structure of the new oral language (and English) framework, and how this might align with a corresponding assessment framework. It seems particularly important to align curriculum and assessment frameworks from the outset (something not done in 1999), since understanding and implementation of the curriculum can be supported by assessment based on the framework (and vice versa).

The issue of alignment also arises in the context of developing a curriculum covering the 3-8 years age range. While some children in this age range (mainly children 3-5 years) will attend pre-schools, others (4-8 years) will attend primary schools. Most children 4-7 years will be in the infant classes, but some will be in the first or second class. The *Aistear* framework provides a broad blueprint in

terms of how learning can be conceptualised and organised in early years settings. Indeed, the learning goals in the Communications strand focus on several important aspects of oral language development, and are quite well aligned with the current PSEC (see NCCA, 2009c). A challenge for the current report is to identify ways in which children's language development in particular can be supported at home, in pre-school, and in infant classes, taking into account the different structures and contexts of these settings.

One of the most significant changes to have occurred in Ireland since 1999 is the participation in the education system of large numbers of children for whom the language spoken at home is different from the language of instruction. Ten percent of children in second class in *The 2009 National Assessments of Mathematics and English Reading* did not speak English/Irish at home, and this group had an average reading score that was significantly lower than that of children who spoke English/Irish at home. Hence, the current report focuses in particular on implications for curriculum for children who do not speak English or Irish.

The *National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020* draws attention to the needs of children who are struggling with language development. A proposed action in the strategy is the development of learning outcomes for the curriculum, including learning outcomes in oral language for pre-school children and children in infant classes.

CHAPTER 2:
CURRENT
THEORETICAL
PERSPECTIVES AND
IMPLICATIONS FOR
PRACTICE

What are the theoretical perspectives underpinning recent and current research and reflection on children's oral language development?

Recent analyses of current theoretical perspectives on language acquisition and development (Shatz, 2007; Bavin, 2009) show that enduring questions and disagreements about the origins and nature of the child's entry into language continue to generate debate in the literature and to influence the direction of research. However, the analyses also show that, in recent decades, shifts in emphases within what have been opposing theoretical positions have enabled a move away from long standing, and, at times, polarised arguments to a more integrative view.

Traditional disagreements within the field are grounded in the opposition between what are described as nativist and empiricist accounts of language acquisition (MacWhinney, 1999); whether the human capacity for language is innate and biologically determined or is realised through, and reliant on, environmental input. An extension of these positions and a further critical distinction between them is that, in the nativist tradition, language is seen as a special cognitive capacity, a specific and unique domain which is part of human biological endowment, whereas empiricists view language as part of, rather than separate from, general cognitive abilities.

Notwithstanding the fact that fundamental differences remain, recent emphases in the literature suggest a move towards some consensus on the most fruitful avenue of enquiry for identifying critical factors in language acquisition and development. Across the literature, there is a general concern for greater understanding of the role of development in language acquisition processes. This focus brings a renewed interest in the nature of the child's contribution and provides for an area of common concern across the various strands of enquiry within linguistic theory and research. While concern to understand the role of caregiver

input in language acquisition has been a constant focus in the literature, and has been at the heart of the nativist-empiricist controversies, the question of what the child brings to the task is receiving new attention.

The current focus has been described by MacWhinney (1999) as a concern to provide a conceptual framework which can account for interactions between biological and environmental processes. It requires a renewed evaluation of the roles of the child's physiological status, cognitive skills and social precocity in language acquisition and of the interactions between these and caregiver input. In her analysis of current trends, Shatz (2007) concludes that the literature is showing an increased appreciation of the multiple interacting factors which contribute to language acquisition and of the ways in which the relative importance and contributions of these factors may vary with development. Within the intervention literature, Warren and Abbeduto (2007) characterise current understandings of language acquisition and development as a receding of the old *nature versus nurture* argument in favour of a more refined understanding of the interaction between genetic endowment, neurological development and the moderating and mediating effects of environment.

The focus on the interaction between the child's individual biological endowment and environmental input is most strongly expressed in what is described as an emergentist view of language acquisition and development (Ellis, 1998; Hollich, Hirsh-Pasek & Golinkoff, 2000; MacWhinney, 1999, 2004; Poll, 2010; Tomasello, 2003; 2009). Essentially, the emergentist position seeks to explain language acquisition in terms of the interaction between child learning mechanisms and environmental input (Hoff, 2004). This view draws from both nativist and empiricist positions to present what is posed as a more complete account (MacWhinney, 1999). It allows that particular structures are encoded in human DNA

(MacWhinney, 1999) and, among the proponents of the emergentist view, there are varying shades of agreement on the relative importance of innate knowledge in language acquisition (Hoff, 2004). Equally, there are stronger and weaker positions on the role of social precocity as the mechanism for entry into language, with Snow (1999) taking the stronger view and proposing that language emerges from the child's understanding of, and engagement in, early social relations.

While there are variations in positions, the central premise of emergentism is that, in human development, structures emerge through the interaction of particular processes. The fundamental concern is with the ways in which linguistic and cognitive structures emerge during processes of learning and development where these processes are mediated by the quality of environmental input.

The emergentist position on language acquisition and development allows key roles for both child and adult. Acting on innate social and cognitive capacities, through adult-child interaction, the child develops particular intention reading and pattern finding skills with which to segment and to process adult linguistic input (Hollich, Hirsh-Pasek & Golinkoff, 2000; MacWhinney, 2004; Hoff, 2006a, b; Tomasello, 2003, 2009). In this way, the child exploits a combination of social precociousness and neural processing skills to develop learning mechanisms through which to construct a language. The adult provides a model of linguistic input on which the child can act and is a critical partner in the social interaction which is the context for the child's learning (Hoff, 2006a, b). The adult model is characterised by specific features which are regarded as facilitating the child's acquisition skills and the adult's contribution is considered to be part of the construction process.

AN INCLUSIVE THEORETICAL FRAMEWORK

Within an emergentist view of language acquisition and development, it is possible to provide a theoretical framework for a language curriculum which can support the development of a diverse population of young children where diversity includes children of diverse cultural and linguistic backgrounds, children whose development may be inhibited by social/environmental circumstances and children whose development may be compromised by particular biological and/or environmental conditions resulting in special educational needs.

Variation in language acquisition and development

A theoretical framework which links language acquisition to general developmental processes necessarily allows for variation in children's developmental profiles with a concomitant variation in rate and progress of language acquisition. From an emergentist perspective, within the individual child, language develops in tandem with, and is influenced by, physiological, cognitive and social development (Shatz, 2007). The child is an active learner who brings various capacities to what is a complex task and language emerges in the interaction between the predispositions the individual child brings – the individual biological, social and cognitive profile – and his/her social linguistic environment.

Historically, the literature which has focused on typically-developing children has been dominated by an emphasis on the amount of language acquired by children in the first three years of life and by the remarkable similarities in the sequence of that development as observed across children acquiring a given language. At a global level, the passage from sounds to words to grammar appears to be a universal of child language development (Bates & Goodman, 1999, 2001). However, research has also highlighted very large individual differences, among typically developing children, in onset time, and

in rate of growth, for all of the critical components of the language system: word comprehension, word production, word combinations and sentence complexity (Fenson, Dale, Reznick, Bates, Thal & Pethick, 1994; Shore, 1995; Bates, Dale & Thal, 1995). The variation in children's rates of development of the components of language is much greater than the variation usually observed in other maturational milestones such as crawling or walking and is considered so significant as to challenge any notion of a universal, maturational timetable account of early language development (Bates et al., 1995). Rather, in keeping with an emergentist/developmental perspective, the view in the literature is that variation in rate of development is so large as to require substantial contributions from both genetic and environmental factors with particular emphasis on the interaction of these factors (Bates et al., 1995; Bates & Goodman, 1999).

In their seminal research dating from the 1990s, Bates and her colleagues afford particular insights into the range and nature of variation that exists across the population of early language learners. The research is particularly significant in that it includes children with typical development and children with a range of developmental disabilities including Down syndrome, Fragile X syndrome and children who are described as late talkers where no specific aetiology has been established. One of the most critical outcomes of this body of work is its conclusion that most of the variations observed in children with atypical development represent extensions of the variations that are also observed in children with typical development and that any reliable theory of language acquisition and development will have to account for these variations as observed in early language learning (Bates, Dale & Thal, 1995).

Developmental disabilities

Delayed or disordered communication and language development are

intrinsic to a definition of developmental disability and autism and are key indicators in the identification of learning disabilities and behavioural disorders (Warren & Abbeduto, 2007). A developmental disability is described as a delay or impairment of at least 40% in one domain of development or delay or impairment of greater than 20% in two or more domains of development (Rosenberg, Zhang & Robinson, 2008). Disruption to the child's biological system during pre-natal and early development is likely to result in delay in developing language. When intellectual disabilities are present, children typically show language delay which is in keeping with or sometimes greater than their levels of cognitive delay (Kaiser, Roberts & McLeod, 2011). Given the heterogeneity of the population of young children described as having developmental disabilities, there is wide variation in the communication and language skills of this group, with severity of delay or impairment linked to factors such as the aetiology and severity of the disability, the nature and quality of environmental input and the presence or absence of effective early intervention (Brady & Warren, 2003).

Because of the heterogeneity of the population involved, research into the nature and causes of children's language delays and disorders, and research on effective intervention, has tended to focus on communication and language characteristics associated with specific aetiologies. The intervention literature reports significant advances in our understanding of the specific language profiles of children with particular genetic syndromes such as Down syndrome, Fragile X syndrome and Williams syndrome (McDuffie & Abbeduto, 2009; Roberts, Price & Malkin, 2007; Abbeduto, Brady & Kover, 2007; Mervis & Becerra, 2007) and of children with autism (Charman, 2006; Landa, 2007; Gerenser, 2009). Identification and understanding of the presence or absence of syndrome specific features of communication and language are critical to effective intervention and to informing a language curriculum. However, along with

stressing the need for syndrome specific knowledge, the intervention literature points to the importance of taking a developmental perspective on the communication and language strengths and needs of children with disabilities so that, in addition to the child's diagnosis, intervention must take account of the child's developmental level. This view is based on the evidence that, within a given diagnosis such as autism or Down syndrome, children of the same age often vary greatly in terms of their cognitive, social and communicative development (Brady & Warren, 2003; Abbeduto, Brady & Kover, 2007). Brady & Warren (2003) quote an example where one 5-year-old child with autism may be nonspeaking and have severely limited social skills where another 5-year-old child with autism may speak and interact reasonably well. They make the point that the first child's needs may be more similar to another non-speaking child who does not have a diagnosis of autism.

The case for a developmental perspective is also underpinned by the now clear acceptance in the intervention literature of the link between language acquisition and development and patterns of strengths and weaknesses in the child's wider cognitive and social domains (Warren & Abbeduto, 2007). These patterns can vary according to the nature of the genetic syndrome and so the association between language and cognition can differ in character and outcome for differing kinds and levels of developmental disability (McDuffie & Abbeduto, 2009). Cross-syndrome comparisons have shown 'differences in magnitude' in the associations between language and cognition across three syndromes: Down syndrome, Fragile X syndrome and Williams syndrome (McDuffie & Abbeduto, 2009, p. 44).

Within the intervention literature also, research on children's differential responses to language intervention techniques further highlights the need for a developmental focus in relation to language

acquisition and development. This research shows that individual developmental levels are a key determinant for identifying goals for intervention and stresses the need to match language teaching strategies to the characteristics of the child as learner. In a landmark classroom intervention study from 1995, comparing two types of teacher talk strategies, Yoder and his colleagues showed that children benefited differentially from teacher talk strategies that used either eliciting/prompting styles or expansion and recasting styles. The different outcomes were related to the children's developmental levels at the start of the intervention and the degree to which teaching approaches matched the characteristics of the children as learners (Yoder et al., 1995a). These findings have been supported by subsequent research (Yoder, Warren, McCathren & Leew, 1998; Hancock & Kaiser, 2006).

Interpreting the implications of this research for classroom practice, Warren and Yoder (1997) proposed that a major focus for research should be to identify a continuum of optimally effective, developmentally appropriate communication and language intervention procedures' (p. 360). In a more recent analysis of this work, Brady and Warren (2003) reiterate the point that, for children with developmental disabilities, there is a need to consider developmental levels as well as diagnoses in planning for teaching and learning in language acquisition and development. They suggest that, based on research to date, it is likely that a continuum of appropriate communication and language teaching strategies would apply to children across diagnostic categories.

It can be argued that an emergentist/developmental perspective is an inclusive one proposing a model of language acquisition and development which accounts for children whose language develops in an orderly way and children for whom the course of language development is delayed or disrupted by conditions of varying severity

ranging from at-risk status, resulting from environmental circumstances, to serious developmental delays and disabilities associated with genetic syndromes and with conditions of motor and sensory impairment.

Second language acquisition

An emergentist/developmental position is also compatible with accounts of second language acquisition and a number of strands of enquiry within the field can be interpreted from a developmental perspective. The literature on child bilingualism distinguishes between simultaneous bilingual children who acquire both of their languages in the pre-school years and children acquiring a second language (L2). In the latter case, children have established one language (L1) before beginning to acquire a second and, typically, speak the L1 at home and the L2 at school (Paradis, 2009; Paradis, Genesee & Crago, 2011).

Cummins's hypothesis about the interdependence of first and second language and his common underlying proficiency model (Cummins, 1979; 1991; 2000) are compatible with a developmental perspective on second language acquisition. In this view, first language skills support second language learning because similar underlying proficiencies in linguistic-conceptual knowledge are in play and earlier language acquisition provides a broad facilitative base for second language learning (Scheffner Hammer, Scarpino & Davison, 2011).

The developmental aspect of second language acquisition has been most robustly demonstrated by research on the stage of acquisition described as interlanguage. This is the period in child second language development between when the learner starts to use the language productively and he/she achieves levels of competence comparable to a native speaker (Paradis, Genesee & Crago, 2011).

Interlanguage is regarded as a rule governed linguistic system but it does not include the full range of characteristics of the target language (Paradis et al., 2011).

Research on interlanguage shows common patterns of error across child L2 learners regardless of first language. The acquisition of grammatical morphemes poses particular difficulties and the omission of tense agreement markers is a particular characteristic of child L2 interlanguage. Research has shown these errors to be present whether the L2 is French, German or English and regardless of the L1 background (Ionin & Wexler, 2002; Paradis, 2009). In addition, developmental patterns in children's acquisition of L2 English show many parallels with patterns of monolingual acquisition of English by younger children (Paradis et al., 2011). For example, the sequence of development of morpheme usage in children acquiring English as their L2, from early acquired morphemes of tense such as progressives and plurals, to those that are late acquired such as past tense and third person singular, is similar to the sequence of development in children acquiring English as their first language (Dulay, Burt & Krashen, 1982). Notwithstanding the patterns of error which characterise it and distinguish it from the target language, interlanguage has been described as evidence that children are creatively constructing sentences in the target language and are progressing towards competence (Paradis et al. 2011).

The evidence for a developmental trajectory in second language acquisition, and the notion of second language learning as a progression towards competence in the target language, is compatible with the emergentist perspectives outlined in the discussion so far. The discussion suggests the need for a developmental perspective in which children's growth of knowledge, understanding and use of first and second language is conceptualised as progression along a continuum where that continuum allows for similarities and

variations in children's individual profiles as learners.

CONCLUSION

Current work on understanding language development in young children has been focused on providing a conceptual framework which can account for interactions between biological and environmental processes (MacWhinney, 1999). It recognises the role of the child's physiological status, cognitive skills and social precocity in language learning, and how these elements interact, while also recognising caregiver input. The emergentist view is compatible with socio-constructivist views of knowledge acquisition, in which the contribution of a knowledgeable adult is considered to be part of the language construction process.

Within an emergentist view it is possible to provide a framework for a language curriculum which can support the development of a diverse population of young children including children of diverse cultural and linguistic backgrounds, children whose development may be inhibited by social/environmental circumstances and children with biological and/or environmental conditions, resulting in special educational needs.

Recent research has highlighted very large individual differences, among typically developing children, in onset time, and in rate of growth, for all of the critical components of the language system: word comprehension, word production, word combinations and sentence complexity. This challenges the view that language develops in the same way for all children. Variations observed in children with atypical development represent extensions of the variations that are also observed in children with typical development (Bates, Dale & Thal, 1995).

In recent years, there has been considerable development in our

understanding of the specific language profiles of children with particular syndromes such as Down syndrome, Fragile X syndrome and Williams syndrome, as well as autism. Along with stressing the need for syndrome specific knowledge, this literature points to the importance of adopting a developmental perspective on the communication and language strengths and needs of children with disabilities so that, in addition to the child's overall diagnosis, intervention takes the child's developmental level into account.

An emergentist/developmental position is also consistent with accounts of second language acquisition (e.g. Cummins, 1979,1991,2000). The developmental aspect of second language acquisition has been demonstrated by research on the stage of acquisition described as *interlanguage*. This is the period between when the second language learner starts to use the language productively and he/she achieves levels of competence characteristic of a native speaker.

CHAPTER 3:
A CONTINUUM
OF LANGUAGE
DEVELOPMENT

Does current and recent research propose distinct stages in children’s oral language development? If so, how are these defined and what are the essential indicators and skills at each stage (including, but not limited to vocabulary, morphology, complexity, fluency and pragmatics)?

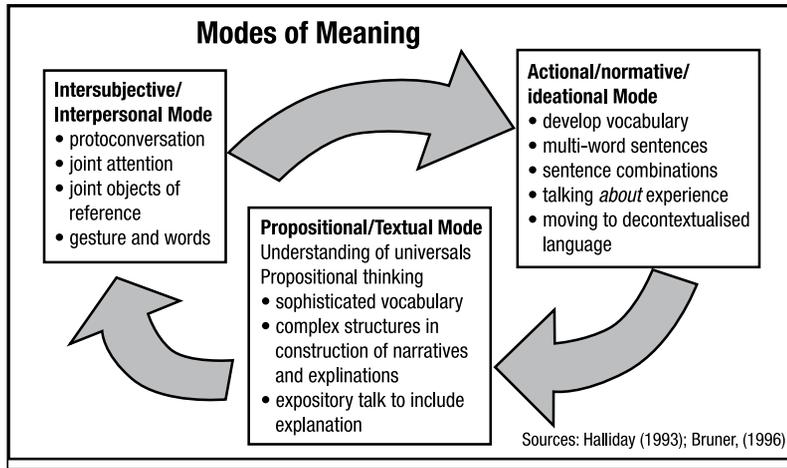
This chapter describes a theoretical framework in which language acquisition and development in an early years curriculum can be described as a continuum of learning through increasingly complex modes of meaning. Such a continuum can allow for recognition of variation in children’s rates and quality of acquisition and development, identification of delay and difficulty and appropriate intervention.

The emergentist perspective and social/interactive model of language acquisition and development provide a theoretical and empirical construct within which it is possible to articulate a theory and practice for language development within an early years curriculum. In this view, human learning is described as a process of making meaning. With entry into language, children have access to a meaning system, a resource, through which experience can be interpreted, represented and reflected upon, and can become knowledge (Halliday, 1993; Wells, 1999). From this perspective, language is the basis of learning. In learning language, children are also learning through language and new modes of language provide for new forms of knowledge.

The relationship between language and learning is characterised as the interaction between acquisition of the language system and use of that system in constructing knowledge at increasing levels of complexity, including talking and thinking about abstract propositions.

Bruner (1999) identifies four modes of meaning: the intersubjective (interpersonal), the actional, the normative and the propositional. These are compatible with Halliday's (1993) meta-functions of language: the *interpersonal* through which children enact interpersonal relationships, the *ideational* through which children both construe experience and reflect upon it, and the *textual* through which children enter into discourse and have access to, and engage with, the academic language of the curriculum. These modes or meta-functions are created or realised through adult-child interaction. Each leads to a particular form of understanding and within each, language is the principal sign system through which meaning is constituted and transmitted. The modes are both progressive and cumulative. Children are initiated into the intersubjective mode or interpersonal meta-function during their first year of life. With this learning, they begin to engage in the actional and normative modes or ideational meta-function during their pre-school years: this learning continues into the school years but, by age three, children will already have been initiated into the use of decontextualised language and will have begun to move towards the use of propositional language and operating in the propositional mode or textual meta-function. In the propositional mode, children use language for entry into domains of knowledge or modes of meaning which are abstract in nature and which rely on the symbolic function of language. This is the language of schooling, the *academic language* which underpins learning in the curriculum. Children need to be initiated into this mode of language use from school entry.

Figure 3.1: Modes of meaning in language acquisition



THE INTERSUBJECTIVE MODE

In the intersubjective mode, in the first year of life, children are initiated into a primitive form of dialogue through which meaning is jointly constructed with the adult, and children begin to learn how the language system functions as a resource for construing experience and for communicating about that experience. The symbolic function of language first begins to be understood by the child when, in a context of intersubjective understanding, the adult attaches a name or sign to their joint object of reference. It is the first mode, or frame of reference, for intentional meaning-making between adult and child and, in this mode, the child gains a first understanding of how meaning is achieved in a social context. As well as providing a context for children's entry into the understanding of words and their meaning, the intersubjective mode enables children to begin to understand that others are intentional communicators and that they can have access to other minds. Equally, children come to understand the conditions for achieving meaning. They learn that it is based in joint attention and intention, that there are conventions of turn-taking involved and that contributions from the conversational partners will be relevant to the meaning context.

In the intersubjective mode, language emerges during the first year of the child's life through what has been described as a transactional model of social-communicative development in which learning proceeds through bidirectional, reciprocal interactions between the child and his/her caregiver (Sameroff & Fiese, 2000; Warren, Yoder & Leew, 2002). In the first few months of life, adult-child interaction is characterised by what Bruner (1999) describes as a developing mutuality of awareness; a primitive intersubjectivity between child and adult. The pattern of reciprocal interactions has been described as 'a developmental dance' in which first one partner and then the other takes the lead (Owens, 2012, p.117).

Emergent conversations

During the period birth to 6 months, the child and adult can be said to be establishing a communicative relationship. This period is described as a time of pre-linguistic and pre-intentional communication when the child's behaviours are not intentionally directed towards a partner but are interpreted as communicative by the adult who assigns meaning and facilitates the development of the communicative relationship (McCathren, Warren & Yoder, 1996). The interactions are described as *protoconversations* or *emergent conversations* and include identifiable elements such as initiation, mutual orientation through eye gaze and exchange of smiles, and what has been characterised as early turn-taking (Dockrell & Mercer, 1999; Clark, 2003; Owens, 2012). Owens's perspective on early turn-taking behaviour is that the adult conversation is interspersed with pauses and the infant vocalises during these pauses (Owens, 2012). This perspective suggests a more equal contribution by adult and child than the view proposed by Dockrell and Mercer (1999) which is that adults attempt to support the child's perceived communicative acts by fitting their own initiations and responses in among the child's vocalisations.

Joint attention, gesture and early word use

A major milestone in the intersubjective mode is reached with the onset of intentional communication when, before they are able to speak, children begin to use gestures for intentional communicative acts. Typically developing children begin to use gesture between 8 and 12 months. They begin with *hold-up* and pointing gestures where for example a child may hold up an object to draw an adult's attention to it and later may point to that object. The critical learning which is in evidence during this period is the achieving of joint or shared attention with the adult where interactions involve the child, the adult and an object of interest, for example a toy, to which both are attending.

Joint attention begins with the child following the adult's lead by tracking the adult's line of regard, to find a visual target (Tomasello, 1999). This is the child's route to achieving mutual understanding of context with the adult and to an understanding that others can perceive the world and can have intentions towards it. An early study by Bruner (1983) shows that children's comprehension of pointing by adults precedes the children's own use of pointing by 2 to 3 months. Tomasello's view (2009) is that when children then progress to engaging in communicative pointing, they are not just showing their new understanding of the world by directing attention to an object, they are engaging in acts of social cognition and comprehension, entering into shared understandings or common conceptual ground with their conversational partner. In this way, pointing gestures are an important early step towards the child's understanding and use of the symbolic function of language. Tomasello et al. (2007) show that within these joint attentional frames, children learn to comprehend both their role and the role of the communicative partner in the exchange. In these contexts they come to understand that communicative acts rely on mutual attention and intention, that they are based in action by an agent

who can achieve common ground with another and can influence how that person acts, feels or thinks. Tomasello (2009) draws a direct parallel between the conceptual understandings underlying these communicative acts – agents acting on others, agents acting on objects, giving things to others, objects being moved or changing states – and those which will later inform the child’s construction of complex sentences.

In terms of motivation to communicate, it has been well established that towards the end of their first year, pointing has both an imperative and a declarative function for children (Bates, Benigni, Bretherton, Camaioni & Volterra, 1979; Carpenter, Nagell & Tomasello, 1998). Recent research has identified the use of an informing function also in one-year-old children (Liszkowski, Carpenter, Striano, & Tomasello, 2006). The link between prelinguistic gestural communication and language development is evident here also: the imperative, declarative and informing functions of children’s prelinguistic gestures will be replicated exactly as the functions for which children will use their earliest words and sentences in the months ahead (Tomasello, 2009).

Pointing gestures are precursors to children’s one word utterances. One word utterances are described as *holophrases* and Tomasello (2009) credits them with the status of full communicative acts – early composite structures embodying both reference and motive and setting the frame for the development of vocabulary, grammar and understanding of the range of functions for which language is used.

The relationship between the use of gestures in episodes of joint attention and children’s early word learning has been well established in the literature. Goldin-Meadow (2009) describes children’s early pointing as constituting an important step in their developing understanding of reference and meaning. Through pointing, children

refer to objects before having the words for those objects and a large proportion of the nouns that eventually appear in children's vocabularies can be predicted from earlier pointing gestures (Goldin-Meadow, 2005; Bavin et al., 2008). Goldin-Meadow (2009) also proposes that children's pointing to objects resembles the use of context-sensitive pronouns such as *this* or *that* in that the adult has to follow the pointing gesture to its target to establish the specific object of the child's attention.

The achieving of joint attention and the use of gestures in prelinguistic communicative acts are critical developmental features of the intersubjective mode. They are fundamental to the child's understanding of both the communicative and the symbolic function of language and the conventions of dialogue and they pave the way for the child's acquisition of the semantics, grammar and pragmatics of the language system.

Variation in children's development within the intersubjective mode

The early communicative behaviours which develop in the intersubjective mode are rooted in social interaction and require the coordinated use, by the child, of cognitive, social, motor and linguistic skills (Hollich, Hirsh-Pasek, Golinkoff, 2000; Kaiser & Trent, 2007). The complexity of the social-linguistic communication system and its interdependence with other domains of development means that the communication and language systems are vulnerable in children with developmental delays (Kaiser & Trent, 2007; Kaiser, Roberts & McLeod, 2011). On entry to pre-school and school, children with delays in cognitive, motor or social development based in genetic or environmental factors, or a combination of both, are likely to show different patterns of strengths and needs in communication and language to children with typical development.

Children with genetic disabilities can show delays and impairments in critical features of the intersubjective mode of development. In a profile of the communication and language development of children with Down syndrome, Abbeduto, Warren and Connors (2007) point to a pattern of relative strengths and needs. Children can show some delay in the onset of canonical babbling¹ which may be related to more general motor delays and/or to the oral structural problems which are characteristic of children with this genetic condition. They also show delays in achieving joint attention, despite a high degree of social interest, and delay in the onset of their use of the imperative and declarative functions of language. The ability to use gesture is a relative strength in children with Down syndrome. There is evidence to show that prelinguistic children with Down syndrome can have a larger repertoire of gestures than typically developing children who are matched for developmental level (Singer-Harris et al., 1997). This strength is often developed through the teaching of signs to young children with Down syndrome. However, most children with Down syndrome do achieve speech, albeit later and at a more delayed pace than typically developing children (Abbeduto, Warren & Connors, 2007).

Children with autistic spectrum disorders (ASD) show serious impairment in their ability to achieve joint attention and in their development of the precursors to joint attention – initiation, mutual orientation through eye gaze and exchange of smiles – which characterise the emergent conversations of children's first few months of life (Wetherby, 2006). The emergent communicative profile of children with ASD is characterised in the literature as indicative of a lack of interest in the social function of language or lack of social motivation (Landa, 2007; Kaiser, Roberts & McLeod, 2011).

1 Canonical babbling is the use of consonant vowel syllables which conform to sound patterns in the first language, for example, ma-ma, ba-ba progressing to da-ba, do-ga. Canonical babbling is evident in children with typical development at around age five months and is predictive of expressive language development (McCathren, Warren & Yoder, 1996).

Compared with children whose difficulties are characterised as signalling a delay, children with ASD spend less time in joint engagement, have more difficulty following the adult's line of pointing and have greater difficulty in progressing to gestural use (Wetherby, 2006). A striking feature of the communicative behaviour of children is that their early use of the pragmatic functions of language shows the development of the imperative or requesting function but a marked absence of signalling for joint attention to label or comment upon an object (Wetherby, 2006; Landa, 2007).

Developing early communicative behaviours in the curriculum

Children's understanding of the purpose, nature and conventions of the communicative relationship which begins to be developed in infancy continues to develop through the pre-school and early school years. In an early years language curriculum, for the intersubjective mode, the focus for teaching and learning will aim:

- to identify, to capitalise on, to provide appropriate intervention for, and to further develop, children's understandings of their roles and the roles of others as both listeners and speakers in constructing meaning on a topic
- to develop the specific listener-speaker skills required for communicative competence in the school setting.

In teaching and learning contexts which are explicitly designed to engage children in both initiating and responding to topics, children will need to:

- show joint attention to a topic
- listen and attend to the topic
- show appropriate turn-taking

- respond appropriately to the topic showing appreciation of the listener's needs
- sustain the topic and contribute to developing it.

Within a listener-speaker component also, it is possible to have a focus on aspects of the phonology of the language which impinge on communicative competence – for example, audibility and articulation.

THE ACTIONAL OR IDEATIONAL AND NORMATIVE MODES

In this section, developments in semantics, grammar and pragmatics which proceed from the intersubjective or interpersonal modes of meaning are outlined and are located within what Bruner (1996) describes as the actional and normative modes of meaning. In these modes of meaning, during the pre-school and early school years, children's understanding and use of the forms and functions of language are extended beyond the interpersonal to the wider social world of actions and experience (actional mode), and to the obligations of social behaviour (normative mode). Bruner's actional and normative modes are compatible with Halliday's (1993) ideational function of language and are discussed here in combination with Halliday's work.

In the child's second and third year, as the adult supports him/her in the acquisition of vocabulary and the construction of multi-word utterances, the extension of linguistic competence enables the extension of the child's range of meanings. The intersubjective relationship continues to operate and the conditions for meaning created through the intersubjective – intentionality, relevance and turn-taking – continue to apply.

Vocabulary, sentence structure and language use

Children's language develops rapidly in their second and third years. The most obvious advance is the rapid growth in vocabulary. While there is considerable individual variation, children can move from an initial slow acquisition of first words at around 12 months, to rapid expansion where expressive vocabularies can have developed to between 150 and 300 words by age 2 years, and to close to 1,000 words by age 3 (Owens, 2012). During this period also, children move from single word utterances to the construction of multi-word utterances and to extending the functions for which they use language (Clark, 2003; Tomasello, 2006; 2009; Owens, 2012). The initial requesting of objects develops to including requests for the recurrence of objects or events using words such as *more*, or to indicate the wish for a change in events by using *up*, *down*, *out*, or *open*. Equally, the child's use of the declarative function progresses from naming to including comments on the location of objects and people with the use of words such as *outside*. New functions also emerge and children begin to ask basic questions (*what daddy doing? where daddy going?*), to attribute properties to objects (*hot; dirty*) and to use language for explicitly social behaviours such as greetings and farewells and protest (*bye-bye; no*) (Tomasello, 2006). Grammatical knowledge is also developing and children's early multi-word utterances show a developing competence, with syntax including the use of abstract constructions such as the use of the possessive (*This is X's ; your coat; my doll*), and the use of transitive (*Daddy cut the grass*), intransitive (*Mummy smiled; the bike broke*) and passive forms (*Spot got hit by a car*).

Research shows a strong relationship between vocabulary size and composition and the development of grammar in typically developing children (Bates, Dale & Thal, 1995; Bates & Goodman, 1999; Bates & Goodman, 2001; Marchman, Martinez-Sussmann & Dale, 2004; McGregor, Sheng & Smith, 2005; Moyle, Weismer, Evans

& Lindstrom, 2007). In the longitudinal study by Bates, Dale & Thal, with a uniquely large group of 1803 children aged between 8 and 30 months, the researchers found a strong correlational relationship between vocabulary size and the appearance of multi-word utterances and an equally strong, but later-emerging relationship, between vocabulary size and sentence complexity. For most children in the study, word combinations began when vocabulary developed to between 50 and 200 words while sentence complexity was accelerated markedly when total vocabulary exceeded 400 words. Bates et al. suggest that grammatical development depends upon a critical vocabulary base and that the development of different aspects of grammar may be linked to, and depend on, the composition of that vocabulary base. This work is strengthened by further research linking vocabulary size and grammatical complexity in 2-year-old children (McGregor, Sheng & Smith, 2005).

In terms of the child's contribution, the advances in language development in these years are credited to a dynamic relationship between the growth of semantic knowledge through vocabulary development, the emergence of grammar including the child's growing control of the phonology of the language, and the social motivation to communicate an intention and influence behaviour and to read intention in another (MacWhinney, 1999; Tomasello, 2009). This view of the interrelatedness of the semantics, grammar and pragmatics of language development is compatible with other trends in the literature which have been calling for a broader and more integrative view of the multiple factors which contribute to language acquisition and development (Bloom & Lahey, 1978; Hollich, Hirsh-Pasek & Golinkoff, 2000).

Understanding of the symbolic function of language

In these pre-school years (2½-3 years), with their growing command of the language system, children grow in their understanding of the

representational function of language. As children acquire utterances, they acquire the understanding attaching to them. In naming and commenting upon the phenomena of experience, children are simultaneously delineating concepts and categorising knowledge. Neuman (2011) makes the point that children's rapid vocabulary growth is paralleled by their development of categorisation. In its representative function, language is constitutive of meaning, not simply reflecting but actively constructing it. This view is compatible with Halliday's (1993) notion of language as both 'doing and understanding', 'action and reflection' (pp. 100-101). Children are simultaneously constructing language and conceptualising experience at various levels.

One of the critical developments in this period is the child's growing use of decontextualised language. Decontextualised language is described as language which is context-free (Bernstein, 1971), autonomous (Olson, 1977) or disembedded (Donaldson, 1987). It is not rooted in any immediate context of time or situation and does not rely on observation or physical experience (Painter, 1999) but stands as an unambiguous or autonomous representation of meaning (Olson, 1977). The literature on language and learning describes decontextualised language as representing the kind of semantic style or meaning-making which is necessary for educational knowledge (Bernstein, 1990; Halliday, 1993; Hasan, 1996; Bruner, 1996; Cloran, 1999; Painter, 1999; Pellegrini, 2001; Snow, Porche, Tabors & Harris, 2007).

Decontextualised language is central to Vygotsky's well-known account of the relationship between thought and language. In his view, decontextualised language first begins in play, in the form of talk to accompany play episodes. Vygotsky (1978) describes play as the first manifestation of children's emancipation from the constraints of context in that, through play, children enter an imaginary situation in which objects signify something other than their material

meaning. Vygotsky (1978) uses the example of a stick being used as a horse. The talk that accompanies the imaginary situation is also detached from the immediate sensory experience. It is decontextualised and it both constructs and represents the decontextualised thinking of the play.

In this period, through adult-child conversation, children move towards the use of language at two levels which are critical for the development of decontextualised language. Firstly, from the time children are aged 2½-3 years (Phillips, 1986; Hassan, 1992), adult-child dialogue is characterised by talk which is not just, as heretofore, focused principally on naming and describing experience but which is also *about* experience. These dialogues include explorations of logical-semantic relationships in the form of explanations of cause and effect, hypothesising about behaviours and outcomes, and consideration of abstract principles and feelings such as sharing, friendship and sadness (Halliday, 1993; Painter, 1999). Halliday (1993) quotes evidence of his own child, Nigel, at age two years seven months, engaging in a form of hypothetical reasoning as he explains, *if you walk on the railway line the train will come and go boom and knock you over* (p. 104). Halliday credits this development from commenting on experience, to reasoning about experience, to the conversations about logical-semantic relations that are structured for children by the adults in their environments and the models of language that are provided in these conversations. Secondly, children begin to extend their range of conversational partners and this new form of social interaction provides the opportunity to use language to impart information which is rooted in the child's experience but is unknown to the listener. Until now, utterances have been context-bound and verifiable by both listener and speaker. With this significant departure, children begin to use language not just to represent or rehearse shared experience but to create the experience for the listener, through words alone.

This development of the use of the informative function of language marks a critical milestone in children's understanding of the symbolic function of language. In contexts of adult-child conversation, the child comes to appreciate the complementarity of telling and knowing: that through the telling of unshared experience, new knowledge can be constructed for the addressee. The child is learning about the nature of information and about the kinds of roles adopted by listeners and speakers in the exchange of it. At this stage, in the dialogue context, the child is moving beyond the use of language for achieving joint attention and action and for commenting on observations and experiences and recreating shared experience, to learning how to enact dialogue as an exchange of knowledge.

Painter's (1996) longitudinal study² conducted with her own child from the time he was 2½ until he was 5 years, is very significant in that it offers unique and detailed insights into language learning during this period for a child with typical development. For this reason, this study is quoted at length here. Painter (1996) shows that by age 2½, the child is engaged in discussion about and reflection upon experience, including discussion in decontextualised contexts. She identifies the beginnings of this level of meaning-making with the child's first use of what she describes as cognition clauses as in the following dialogic exchanges: mother: *where's the blue cup?* child: *I expect daddy's got it*; child: *I think my jean has got pocket*, mother: *your jeans have, yes*. Here the child is beginning to use language structures which are usually used to represent internal cognitive processing of information. At this point, while new structures are in evidence, the substance of the utterance, and its function, are still rooted in the interpersonal, in the management of the immediate giving and receiving of information and in the enactment of dialogue rather than in reflection upon it.

² There are similarly detailed case studies in the literacy field – e.g., Bissex's (1980) GYNS at WRK: A child learns to read and write.

In her discussion of the child's progress from this point, Painter provides a useful analysis of the role of adult-child dialogue in the development of language and cognition. She suggests that the communicative context together with the child's developing command of the system enable the child to move towards symbolic processing at two levels: externally, by using language to comment on, recall, report experience (*he told me; I said*) and internally, by being required to use language to reflect upon and to show understanding of, and knowledge about, experience (*I thought, she might be..., he knows*). These levels of symbolic representation are key milestones in early learning. The child's understanding of what Painter calls the external forms of symbolic representation now includes expanded knowledge of the role of listener and speaker. As givers and receivers of information, participants in dialogue can reconstruct meaning at second hand, in a context different from the original and through the function of indirect speech. In the course of the study, the child's understanding of givers and receivers of information and how these roles are enacted is extended to understanding that written texts can also take the role of information giver or primary speaker. Painter suggests that this knowledge is constructed with the child in dialogue. She describes how, referring to printed information, e.g. a road sign, printed label or written text, the adult uses phrases like *it tells* you or *it says*. This suggests to the child the communication of information from a primary speaker to an addressee in a way which is continuous with and comparable to the processes the child is familiar with in relation to the human speakers of his/her experience.

Equally, Painter suggests that by participating in dialogue, the child's understanding of the internal forms of symbolic representation develops to include an understanding of others as thinking and reflecting beings. In Painter's study, the child's use of language for reflection as an internal mental process began to be in evidence from

the end of his second year, e.g. mother: ...*Hal's seven*, child; no *Hal's four*, mother: *no, he's seven*, child: *oh seven, I thought he's four*. There is some evidence also of awareness of the internal mental processes of others, e.g. child: (to mother who has been out) *Daddy thought it was bedtime*; mother: *did he?*; child: *mm, and I thought it was bath time*.

However, strong evidence of talk about third parties as thinking, reflecting beings and representations of their thoughts and knowledge did not appear until the child's fourth year e.g. child: (recounting the cat's reaction to a game) *we used a bath brush and she (cat) thinks...she thinks it was her own one. It was a toilet brush*. By his fifth birthday, the child was confidently representing mental activity using cognitive verbs in a variety of tenses, representing his own thoughts and knowledge and those of third persons e.g. (1) child: *a long time ago, when you didn't know, we swapped beds*; (2) child: *It is for Hal but he's got to guess what it is, he doesn't know what it is*.

Painter also shows that in his third and fourth year, as a listener and speaker in dialogue, the child was engaged in the process of using language to reason about perception and to reorganise his own knowledge. He was also learning to be guided in the linguistic construal of reality as sometimes more reliable than perception e.g. father: (discussing cars, in traffic) ...*and they go fast because they've got a big engine*, child: *but that one doesn't go faster than us. See (as they move off) we will go faster*, father: *he's not trying, if he was really trying he could go much faster than us*, child: *if he goes very fast he can- if he goes very fast he can beat us*. He was also learning that while utterances or texts are a means of knowing, when subjected to reflection and discussion they can also be contested or interrogated as in the case of the expression, *big boys don't cry*. Painter's analysis is that the dialogue context enabled the child to reflect upon this expression and to reconsider its validity in relation to his own experience (mother: ... *well everybody cries sometimes*, child: (remembering real incident) *somebody might step on somebody's toes*, mother: *oh yes...even mummy*

cries then, child: yes, even mummy cries). Equally, the child was aware of the talk of others as a source of knowledge and learning, e.g. *I know 'cause Hal told me*, and also of the fact that they too had to have sources of knowledge, e.g. mother: *he likes it really*, child: *how do you know? Did he tell you?*

Painter's study shows the child's progression, over a two and a half year period, through the actional or ideational modes of meaning to a sophisticated level of symbolic processing where the nature of the dialogue is often propositional and is conducted in decontextualised language, signifying decontextualised thinking. Painter identifies dialogue as the source of this learning and the intersubjective mode or interpersonal meta-function of language as its impetus. Her analysis is that the child's development of the lexico-grammatical resources to represent his own thoughts and ideas and those of others, emerges from a desire to extend the options for interpersonal communication. Secondly, she points to the fact that when the child does move towards the representation of decontextualised meanings, it is by constructing these meanings in exploration and negotiation with the current dialogue partner.

The construction of decontextualised meaning requires particular knowledge and use of the language system. Here the child is choosing the appropriate words and phrases and structuring them in the meaning-carrying sentences while also using the linguistic devices which will maintain semantic relations between the sentences. Halliday (1993) identifies some of these linguistic devices as the use of conjunctions, ellipsis, and synonymy. The rules for dialogue continue to apply, so the conditions of intentionality, relevance and turn-taking must also be met. Bruner and Halliday see the child's use of decontextualised language as entry into new forms of knowledge. For Bruner (1996) it is the route to propositional thinking and a way of proceeding from the particularities of the

intersubjective, actional and normative modes in which meaning is context-bound, to an understanding of universals and to achieving decontextualised meaning. For Halliday it represents the textual meta-function of language in which language is autonomous and context-free and becomes what he describes as the means and the model for representing action and experience. Both Bruner and Halliday regard the use of decontextualised language as necessary for access to written language and to any form of theoretical knowledge.

THE PROPOSITIONAL MODE

Halliday (1993) describes the child's acquisition of the language system as the acquisition of a meaning potential or a resource. Language learning can be considered as a process of change or development in the child's meaning potential – a progression through increasingly complex modes of meaning. Meaning potential is actualised in words and grammatical structures and through choice of language function and development of the language system allows for development of the conceptual system or frames for thinking which underlie it (Halliday, 1993; Painter, 1999; Wells, 1999).

Educational knowledge is concerned with concepts which are both more specialised and more abstract than those of every-day common sense knowledge; what Bernstein (1990) describes as the transmission and development of universalistic orders of meaning as opposed to meanings which relate to local situational contexts. Halliday (1993) describes educational knowledge as construed in a different kind of language. Typically, it is embodied in written discourse which is abstracted from any situational context shared by author and reader. Meaning is carried purely through the symbolic function of language and the text will include words which themselves refer to abstract entities. Further, within the text, meaning is built in a systematic, logical fashion, maintaining an internal coherence which places particular contextual demands on the reader. The reader must

decipher ideas and concepts in the immediate context of the sentence while following the logic of the text by simultaneously back referencing to earlier content, and constantly reinterpreting meaning as new knowledge unfolds through the reading (Halliday, 1993; Painter, 1999). Equally, the language itself is challenging, with more complex and more abstract forms including more sophisticated vocabulary and the use of metaphor where meaning is not expressed in its typical linguistic form (Halliday, 1993; Painter, 1999).

The consensus in the literature, over a long period of time, is that educational knowledge requires a particular linguistic learning style (Halliday, 1993; Painter, 1999; Snow, Tabors & Dickinson, 2001; Snow, Porche, Tabors & Harris, 2007) in which language, and in particular the propositional function of language (Bruner, 1996), is brought to deliberate and conscious awareness for children (Halliday, 1993; Snow & Tabors, 1993; Snow, Tabors & Dickinson, 2001; Snow, Porche, Tabors & Harris, 2007) so that they can both reflect on language and use it as a tool for reflection. The propositional function of language requires that children use language as a symbolic, syntactic and conceptual system to construct context-free ideas (Bruner, 1996; Painter, 1999).

In her discussion of preparation for academic language or the language of schooling, Painter (1999) suggests that in the years between three and five, children need to be inducted into a style of meaning-making which relies on the symbolic function of language rather than on concrete reference or language which is context-bound. She identifies five features of language engagement which initiate children into the style of language use required: (i) an ability to learn vocabulary through definitions; learning the meaning of a word by relating it to another meaning rather than by pointing physically to the object; (ii) learning to categorise and attending to the principles underlying categories by learning to specify and

explain criteria for category membership, e. g. *a cat is an animal because it's got fur*; (iii) going beyond personal experience to construct and relate experiences where shared meanings are not assumed; (iv) being able to attend to linguistically presented (or textual) information rather than relying on physical or observational experience; (v) construing information exchange as a means of learning by being alert to language as an information carrying system and being overtly conscious of the way in which meaning is being constructed in the dialogue context.

The academic language of discourse

In the early school years, academic language is developed through children's use of decontextualised language in discourse. Discourse requires that children produce several utterances or conversational turns to build a linguistic structure such as a narrative, a factual or explanatory account, an argument or explanation or combination of these. For discourse children must go beyond the sentence and develop an understanding of the intrinsic relation between utterances and their context of use. Coherence in terms of the organisation of the structure and cohesion between utterances are two of the basic conditions for discourse (Hickmann, 2003). Hickmann, like Halliday (1993) and Bruner (1996), argues that linguistic competence simultaneously requires knowledge of the semantic and syntactic properties of well-formed sentences and knowledge of the pragmatic properties of well-formed discourse. Further, she argues that discourse is constitutive of meaning and gives children a mechanism for acquiring the linguistic elements, or forms that discourse itself requires (Hickmann, 2003).

Expository discourse is a basic aspect of children's development in discourse in the early years. It embodies the relationship between language as system and resource and is critical to children's understanding of decontextualised language. It begins children's

initiation into this kind of disembedded cognitive and semantic style which is developed further through more developed explanations and through narrative.

Narratives and explanations both provide children with opportunities to engage in extended discourse on a topic. They are regarded as providing children with opportunities to build linguistic structures representing both complexity and coherence (Beals & Snow, 1994). Narrative has been defined as the oral sequencing of temporally successive events, real or imaginary (McCabe, 1991). It is regarded as a vital human activity through which we represent and make sense of ourselves and our experiences. Various kinds of narrative have been identified, including the relating of accounts, recounts, events and stories (Heath, 1982). Children's personal narratives have also received attention in the literature (McCabe & Peterson, 1991; Peterson & McCabe, 1992; Peterson & McCabe, 1994; McCabe, 1997).

Narrative structure provides a particular paradigm for children's constructions of meaning. While cultural diversity in narrative structure is documented in the literature (McCabe, 1997), there is also consensus on the general structural properties of the well-formed story. Generally, within a narrative, meaning is constructed in terms of a setting, a complication and a resolution, with an evaluation which denotes the narrator's attitude to the story content (Hickmann, 2003). These general structural requirements are often further refined to include character, episodes, and temporal and spatial location, with intentionality, goal-based behaviour and causal relations related to all of these (Stein & Albro, 1997). Two of the defining features of narrative are coherence in the general structure of the story and cohesion between the sentences which relate it (Hickmann, 2003).

The relationship between narrative and explanation is well argued in the literature (Beals & Snow, 1994; Beals, 2001) and discussions on

what are regarded as necessary properties of stories such as the behaviours, motivations and dilemmas of characters, also include recognition of the need for children to engage in explanation in relation to these story elements (Stein & Albro, 1997). In a discussion on the relationship between narrative and explanation, Beals and Snow (1994) outline the similarities between the two. They describe both as structural forms of extended discourse on a specific topic, requiring formulation of a goal, and requiring control over inter-utterance cohesion markers. They point to the fact that both forms of discourse require the participants to use decontextualised language. They also make the point that explanation can be regarded as a primary function of narrative, central to an explication of the temporal and causal connectives which afford insight into the purposes, intentions and feelings of the storyteller. This view is compatible with Stein & Albro's (1997) account of narrative as chronicling aspects of dilemma or conflict requiring appraisal and resolution, and also requiring evaluation of goals and explanations of consequences. These perspectives allow for the development of explanation, as a form of discourse, within the various contexts for narrative that arise in early years settings in pre-school and school. Equally, opportunities for explanatory discourse, other than in a narrative context, arise in the context of early years curricular activities.

DEVELOPING LANGUAGE AS SYSTEM AND RESOURCE IN THE CURRICULUM

In the pre-school and early primary school years (3-8 years), children are learning in, and progressing through, the intersubjective and the enactive, normative and propositional modes of meaning. In these years, together with the key areas of learning in the inter-subjective mode, critical areas for development include:

- Growth in understanding of the process of information exchange, with the accompanying growth in understanding of the roles of speakers and listeners as givers and receivers of information, and the development of the concepts of telling and knowing.
- The capacity to reflect upon, and to comment on, experience in decontextualised language and to see oneself as a thinking, knowing being.
- Ability to identify others as thinking, knowing beings and to represent the knowledge and thoughts of others.
- The use of decontextualised language in the construction of narratives and expository discourses which include explanations and require sophisticated vocabulary, complex sentence structures and increasingly complex language use.

Variation and diversity

Children will show huge variation in the language skills they will bring to their pre-school and school settings and varying rates of development in their progress within these settings. We can expect that most children aged 3-4 years, whose development has followed a usual trajectory and for whom the language of the setting is their first language, will show a well-developed knowledge of the communicative function of language and will engage in conversations with an adult on a range of topics. They will have developed a wide vocabulary including use of nouns, verbs, adjectives and pronouns, will structure sentences and show knowledge of grammatical elements such as use of tense, tense markers ('ed') and plurals, and will use language for a range of purposes (Owens, 2012, pp.416-424). However, along with children who have a basic command of the components of the system, there will be many children who will have developed knowledge of language which is in advance of this

and others who will be farther back in the acquisition process. Children will differ widely in the size of their vocabularies, the complexity of the structures they produce and the skill with which they communicate (Hoff, 2006b).

There is a strong literature to indicate that young children whose families experience difficult socio-economic circumstances can have smaller vocabularies (Hart & Risley, 1992; 1995, 2003; Arriaga, Fenson, Cronan & Pethick, 1998; Hoff, 2003b) containing less sophisticated words than their more advantaged peers (Hart & Risley, 1992; Snow, Tabors & Dickinson, 2001) and may produce complex sentences at a later age (Snow, Tabors, Nicholson & Kurland, 1995; Snow, 1999; Arriaga et al., 1998) than more socially advantaged children. There is also evidence which indicates that children from socially disadvantaged backgrounds can manifest variation in speaking style but have good control of equally complex and rule-governed grammar (Gee, 2001; Wolfram, Adger & Christian, 1999; Edwards, 1997; Vernon-Feagans, 1996).

Young children with developmental disabilities arising from genetic causes may show global developmental delay in all of the components of language. For example, on arrival in school, a young child with Down syndrome may have only a small number of words in his/her expressive vocabulary, may not yet have progressed to using a basic sentence structure and may also exhibit delay in the spontaneous use of language to request or comment (Abbeduto, Warren & Connors, 2007). By contrast, a young child with autistic spectrum disorder may show an uneven profile of development with more serious impairment in his/her understanding of the communicative function of language than in the acquisition of vocabulary and grammar (Landa, 2007).

On arrival in school, children acquiring a second language,

sequentially, already have prior knowledge of language and its uses and, from their first language acquisition, they will have a developed understanding of both the communicative and symbolic functions of language (Tabors, 2008). In the pre-school or school setting, they are faced with the challenge not of acquiring language but of acquiring the new forms of a new language.

A continuum of learning

For children aged 3–8 years, within a language curriculum, language teaching and learning can be conceptualised as the development of children's knowledge of language as a system and a resource, for the co-construction of meaning between adult and child, and between children and other children, through progressive modes of meaning or levels of complexity with an explicit focus on the academic language of schooling. Progression through the modes of meaning can be represented as a progression through, and accumulation of, levels of understanding of both the system and the resource, along a continuum beginning with the intersubjective. The continuum allows for differential rates of progress by children, for acquisition of more than one language and for inclusion of children whose acquisition of the language system, and opportunity to use the system to construe meaning, may be compromised by biological or environmental factors or by a combination of these.

Models for practice

In acquiring the language system, children have to acquire the components of language: semantics, grammar including phonology, and pragmatics. They have to understand and use language as a meaning system constructed through the use of explicitly chosen words and combinations of words, as a structured, rule-governed system of sound sequences, and as a communicative system relying on particular listener–speaker conventions and including audibility

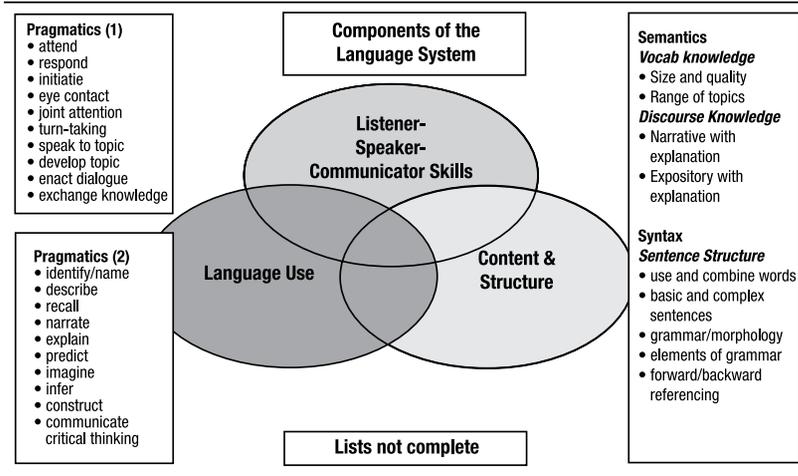
and clear articulation, and relying also on knowledge of how to adjust one's talk to ensure understanding of purpose and intent, in any particular social context. These components include both the receptive and expressive dimensions of language. They are interactive and are integrated in speech utterances.

The interactive and interdependent nature of the components of the language system has been characterised in models of language acquisition as interaction between the meaning *content* of the language, and the *form* or *structure* of the language including the phonology and the pragmatic *use* of language (Bloom & Lahey, 1978; Wiig & Semel, 1984; Cole, 1995). This conceptualisation of language in terms of *content*, *structure*, and *use*, provides a useful way of describing and analysing acquisition of the language system within a curriculum. Because of the critical importance of children's understanding of the communicative function of language and the conventions of the listener-speaker relationship – initiating, responding, joint attention, turn-taking, speaking to the topic – listener-speaker skills can be given an explicit focus within the curriculum. Figure 3.2 presents a model of the language system and shows the components as interactive and interdependent. This model is adapted from Bloom and Lahey (1978). In the present model, listener-speaker skills are included for explicit focus and content and structure are combined to illustrate the relationship between words and sentences. Children acquire words in contexts of use and semantic knowledge must include understanding how words combine and function together in the construction of meaning in sentences.

This model of the language system can be interpreted in conjunction with the model of the modes of meaning presented in figure 3.1. Taken together they provide a model for conceptualising language

teaching and learning within an early years curriculum as the development of children’s knowledge of language as a system and a resource, along a continuum of learning and through progressive modes of meaning.

Figure 3.2: Components of the language system



LANGUAGE DEVELOPMENT IN THE EARLY SCHOOL YEARS

The overwhelming majority of research on children’s oral language development has focused on the linguistic attainments of very young children in the initial acquisition phase, from birth through the toddler, pre-school years (Nippold, 2007), since this is thought to be the most critical period in the process of language learning (Owens, 2012). However, recognising that ‘becoming a *native* speaker is a rapid and highly efficient process, but becoming a *proficient* speaker takes a long time’ (Berman, 2004, p. 10), interest in the phase of later language development has expanded and is emerging as a significant body of literature in the field of oral language development. Concern in this literature is targeted at ‘development’, reflecting a focus on the ‘mastery’ of linguistic knowledge’ (Berman, 2004 p.8; Saxton, 2010), which has a protracted developmental trajectory but is considered as important as early language acquisition (Nippold, 2007). Typically, this

research looks at developments in language after the age of five, defined as ‘a frontier age psycholinguistically’ (Karmiloff-Smith, 1986 p. 455), the age at which the basics of spoken language are acquired (Hoff, 2009b), and continuing into adolescence and beyond (Berman, 2007). The scope of this research covers the nature of later language development, sources of influence on this development, and best practice in supporting later language development, in particular, the role of the school in promoting language development in the early school years.

Nature of language development in the early school years

Between the ages of 3 and 4, the nature of language growth is largely one of refining and further developing those very complex and sophisticated language skills which are already in place, in particular, skills of syntax, so that sentence structures become increasingly complex (Hoff, 2009a). After the age of 4, children’s language skills continue to grow in every domain, showing developments in articulation, vocabulary, sentence structure and communicative skills (Tolchinsky, 2004; Berman, 2007; Nippold, 2007; Hoff 2009a). Due to the remarkable and rapid developments which take place in spoken language during the pre-school years, evidence of language growth during this period is not difficult to mark. However developments during the early school years are more subtle, and therefore, more difficult to identify (Nippold, 2007), especially in the case of conversational discourse. Often, it is when developments in the written forms of language of older children are examined that the extent of language growth during the early school years becomes clear (see Figure 3.3). By the age of 5, a substantial amount of language has been acquired, and the vast majority of children are already very competent language users. According to Tolchinsky (2004) and Nippold (2007), characteristics of the language use of typical 5-year-olds include:

- articulation which is intelligible more than 90% of the time
- knowledge of more than 10,000 different words
- reduced tendency to over/under-generalise word meanings
- sentence structures containing relative, adverbial, nominal clauses; multiple embedding; secondary verbs (e.g. infinitives, gerunds); clause conjoining strategies using co-ordinate/sub-ordinate conjunctions to produce compound and complex sentences
- mean length of utterance of 6.0 morphemes
- command of 'wh' questions, negation, past, present and future tense verb forms, evident in a capacity to discuss topics beyond the 'here and now'
- participation in conversations – taking turns, staying on topic, asking and answering questions, sharing personal anecdotes. (See Nippold, 2007, p. 22, for a full outline of the linguistic attainments of a typical 5-year-old child).

The writing sample of a 7-year-old child (see Figure 3.3) shows evidence of a keen awareness of narrative structure (clear introduction, introducing characters, setting), complication, suspense, building to a climax ...Evidence of a familiarity with a literary style of language use (e.g. *she begged, shouted Kate, screamed Kate, as she was dragged into the car, off she went*); use of explicit, apt vocabulary (*wreck, nooks and crannies, old, torn*); awareness of listener/reader (*you see*); clear organisation of text with appropriate use of anaphoric reference across sentences; sequencing of events and the passing of time (*it took them an hour; finally*).

Figure 3.3: Written story sample: 7-year old child

The Ghost of . . . !
by Una Tuohy (age 7 years)

Kate and her mom and dad were going to move house. The house they were going to move into was big and old. When Kate first saw it she begged her Mom and Dad to pick a different house. But they wouldn't. You see this house was cheap, had a lot of room and was very interesting. ^{Repet.} NO! Shouted Kate when they were going. No no and I am not going to live in a wreck. Yes you are said her mom. ^{Repet.} NO! Now get into the car. NO!!! Screamed Kate as she was dragged into the car. Can we please stay here? NO! said her mom and dad.

It took them an hour in the car. Kate kept asking, when will we be there?! when will we be there? ^{Repetition} Finally they got there. Now you go look around while we unpack. Ok said Kate and off she went. She found loads of books and cranes. But what she was most interested in was an old torn book. She found it in the room witch was to be her room. In ^{Suspense} that room there was a old old bed, a old dressing table, and a set of (very old) hair things.

During the middle childhood years children improve in the co-ordination of speech production, becoming increasingly adept at articulating complex sequences of sounds and multi-syllabic words (Vihman, 1988), as well as improving in their ability to perform tasks such as repeating novel sound sequences (phonological memory), rapid naming tasks, and phonological awareness (Goswami, 2000). The development of these phonological skills is linked to children's emergent reading skills, while learning to read contributes to the development of phonological awareness (Hoff, 2009a).

Successful lexical acquisition requires a child to identify the sounds of the word in a speech stream and encode a phonological representation, develop a detailed semantic representation for the new vocabulary item, including knowledge of its morpho-syntactic forms, and link the new word to a conceptual domain – a mapping between form, meaning, and world (Dockrell & Messer, 2004, p. 36). As with younger children in the process of language acquisition, for older children this process depends on exposure to language as well as children's cognitive and linguistic competence (Dockrell & Messer 2004). Significant vocabulary gains are made during the early school years, although estimates of vocabulary size and rate of learning vary (Anglin, 1993). It is estimated that a 6-year-old has acquired approximately one-sixth of the words that will be known by the end of formal schooling (Bloom, 2000b) and that children's vocabularies grow by about 9,000 words between first and third grade (Anglin, 1993), an average 6-year-old knowing about 10,000 words (Dockrell & Messer, 2004). Of these, about 2,600 words are part of the child's expressive vocabulary (Owens 2012). These findings suggest that vocabulary growth during the school years 'reflects the systematic development and stabilization of word-formation and sentence-structuring rules' (Owens 2012, p. 319), which some argue, proceeds even more rapidly than during the pre-school years (Hoff 2009a). Not only is there a significant increase in vocabulary *size* during this

period, there is also a change in vocabulary *quality*, evidenced in increasing complexity of the semantic system. With increased vocabulary size comes a change in lexical properties such that there are increases in lexical diversity (the number of different words used), lexical density (the ratio of content words to total words) and lexical complexity (the frequency of polysyllabic words) (Hoff, 2009a, p. 335), leading to the development of interrelated semantic concepts, semantic classes, synonyms, homonyms, and antonyms (Owens 2012 p. 332), which both arise from and contribute to children increasingly knowing and understanding a wide range of vocabulary. In a study investigating naming and knowing objects based on visual input among children between 3 years and 7 months and 11 years and 6 months, Funnell, Hughes et al. (2006) found that naming and knowledge increased steadily with age, but younger children's (below 6 years and 6 months) ability to name objects exceeded their ability to know about the objects, while the corollary was true of older children, whose ability to know about the objects exceeded their ability to name them. The authors conclude that 'older children increasingly learn about new objects through exposure to factual knowledge expressed through written and spoken language' (Funnell, Hughes et al. 2006 p. 286), leading to the conclusion that changes in the quality of the learning experience as children grow are instrumental in the changing relationship between knowing a lexical item and merely naming it (Funnell, Hughes et al., 2006, p. 287).

In a study by Anglin (1993) which examined the types of vocabulary children in the early school years add to their repertoire, five word types were explored – root words (*door, run*), inflected words (root + grammatical inflection – *doors, running*), derived words (root + affix – *sadness, builder*), compounds (*hairdresser*), and idioms (*carrying on – misbehaviour*). The growth in knowledge of derived words found in this study suggested that, building on previous research (Berko 1958), an important part of lexical development during the school years is

morphological knowledge, the type of language knowledge which enables children to decipher the meaning of new words by using their knowledge of root words and affixes. Children's knowledge of inflectional morphology (forming plurals and past tense forms – ability to use prefixes comes later) is thought to be more developed at an earlier age than their knowledge of derivational morphology (Clark, 1993), since an inflectional morpheme adds to a word but does not make it into a different word, whereas the addition of a derivational morpheme to a word typically changes the syntactic category of a word, in the process changing its meaning. It is thought that full control of compounding and derivational morphology is acquired gradually through the school years (Hoff 2009a, p. 337), and that there is stable growth in both inflectional and derivational morphologically-structured words across the elementary school years (Rabin & Deacon, 2008, p. 463).

Increasing precision of expression is evident as children acquire more features of a concept, for example, in spatial-relational terms. The ability to use specific spatial terms improves between the ages of 4 and 7 from the general, nonspecific use of here and there, through environmental-based referents (away from the window, towards the door), to specific spatial terms (on top of, up, to the left ...) (Owens, 2012, p. 333). The use of a wider range of connectives – but, however, although, first, last, before, after... is also an important part of development during the early school years.

In terms of lexical development, children move from acquiring knowledge of concrete words heard spoken at home or in childcare environments, to increasing knowledge of abstract vocabulary encountered in the context of the classroom from the teacher or from textbooks (Nippold, 2004), including knowledge of polysemous words, lexical ambiguity, and figurative language. Words that are polysemous pose challenges for many children. Less-familiar

meanings of such words show a more protracted developmental pattern than common, familiar meanings (Tolchinsky, 2004).

An important element of language growth during the early school years is facility with figurative language use (Crutchley 2007), the non-literal use of language, evident in for example, metaphor, irony and idiomatic language. Such language features prominently in classroom language use, in conversation, and in literacy activities. Figurative language performs such a rich variety of functions in these contexts that it is argued its use should be considered as an important feature of communication in early years education contexts (Pramling, 2010). Both children from an early age and teachers have been found to use figurative language frequently in the school context (Jakobson & Wickman 2007; Crutchley, 2007; Pramling, 2010). Research on children's comprehension of non-literal language has focused on 'classic' idioms (e.g. *beat around the bush*; *kick the bucket*; *jump down someone's throat*) and has found that it is affected by the semantic transparency of expressions. For example, where there is a link between the literal and idiomatic expression (*hold your tongue*; *cry over spilt milk*), comprehension is accessed earlier than where the link is not transparent (*paper over the cracks*). Similarly, attributive metaphors with a direct physical connection between the compared elements (*white as snow*) are understood earlier than relational metaphors (*feeling blue*) (Tolchinsky, 2004; Owens, 2012). Comprehension of non-literal language develops through the school years and into adolescence (Nippold, Moran et al., 2001; Levorato, Nesi et al., 2004; Owens, 2012). Similarly, findings in relation to the highly idiomatic nature of 'ordinary' language in the classroom context (e.g. *look up*; *pick up*; *cross out*; *get on*; *die down*; *make up*; *put away*; *give in*) indicate that children's facility with this language increases with age, and suggests that 'increased meaningful exposure leads to increased ability to interpret non-literal language correctly' (Crutchley, 2007, p.217).

Semantic developments during the early school years can be summarised as follows (Berman 2004; Dockrell & Messer, 2004; Tolchinsky, 2004; Funnell, Hughes et al. 2006; Nippold, 2007; Hoff 2009a; Owens, 2012):

- movement from concrete to abstract lexical items
- gradual increase in ability to know as distinct from just name an object
- morphological growth from inflectional to derivational morphology and knowledge of compound words
- increase in vocabulary size, quality, diversity, density, complexity
- larger vocabularies support faster acquisition of new words
- enhanced knowledge of semantic relations – synonymy, ambiguity, figurative language
- increased precision of expression, associated with growth in cognitive maturity
- there is variability in the rates and size of children’s growing vocabularies. After the age of 5, children’s syntactic skills develop in that they produce longer sentences (Rice, Smolik et al., 2010) and become adept at manipulating a wider repertoire of syntactic constructions, both in terms of understanding and production (Tolchinsky, 2004, p. 233).

Development of syntactic skills involves:

- children using the complex structures at their command more frequently
- internal expansion of their existing syntactic forms

- acquisition of new syntactic forms (Hoff, 2009a; Owens, 2012).

Examples of syntactic developments which emerge gradually during the early school years (Sutter & Johnson, 1995; Crutchley, 2004; Nippold, 2004 p. 3; Owens, 2012 p. 338) include:

- internal sentence expansion through elaborated noun (*sparkling silver bracelet*) and verb phrases (*he ran quickly*)
- improved ability to use pronouns accurately – differentiating better between subject pronouns, *I, he, she, we, they* and object pronouns, *me, him, her, us, them*; using reflexive pronouns, *myself, himself, herself, ourselves*; carrying pronouns across sentences improving anaphoric referencing ability – (*Mary's mother was very sick. Mary knew that she must obtain a doctor for her*)
- gerunds (verbs to which ‘-ing’ is added, fulfilling a noun function – he enjoys *fishing*)
- passive voice
- conjoining and embedding functions – evident in increasing ability to use sub-ordinate clause structures (*the cat that the dog chased pounced on the mouse*)
- ‘cause’ clauses
- ‘if’ and ‘so’ clauses – conditionals (not fully acquired until between eight and eleven years of age)
- past perfect marking (the cat *that had climbed up the tree* tried to catch the bird)
- modal auxiliaries (could, should, might)
- low-frequency adverbial conjunctions (meanwhile, moreover,

consequently).

Owens (2012, table 10.7, p. 339) provides a summary of children's development of language form (syntax/morphology and phonology) between 5 and 12 years of age. It can be taken as broadly indicative of the sequence of development in these aspects of language.

Syntactic change during the school years is more evident in formal speaking tasks requiring a literate language style, such as narrative tasks, or expository speaking tasks, typically expected in the school context, than in informal conversational speech (Nippold, 2007; Eisenberg, Ukrainetz et al., 2008; Owens, 2012). One particularly sensitive indicator of syntactic growth during the school years which has been the subject of research is the elaborated noun phrase (Nippold, 1998). This is one of the elements of literate language style, which contributes to a clarification of meaning, providing both precision and descriptiveness in expression. Developmental changes in elaborated noun phrase production during the school years have been documented. A study by Eisenberg et al. (2008) examined children's use of elaborated noun phrases (ENP) across ages three, five, and eleven in narrative production. Four types of ENP were examined:

- simple designating noun phrases (determiner + noun – *the aliens*)
- simple descriptive noun phrases (adjective or noun modifier + determiner + head noun – *these weird people*)
- complex pre-modification (two or more modifiers + determiner + head noun – *this little weird house*)
- complex post-modification (qualifying elements after head noun – *the aliens with lots of legs*) (p. 152).

Findings from this study and others (Allen, Fillipini et al., 2010;

Ravid & Berman, 2010) indicate that the grammar of noun phrases is in place for all children at an early age, as all children frequently use simple designating noun phrases; the number of children frequently using an elaborated noun phrase construction, the simple descriptive noun phrase, increased between the ages of 5 and 8; children's use of pre-modification increased substantially between 5 and 11 years of age; post-modification also showed a developmental increase between these years.

It is thought that perhaps the area of most dramatic language growth during the school years is language use (pragmatics) (Owens, 2012, Table 10.1, p.317).

Through the school years, children grow in their ability to engage in and sustain different types of discourse, most notably, narrative production and conversation (Hoff, 2006b). By the time children enter school, they are already familiar with four *narrative* genres:

- recount – recounting an experience
- eventcast – explanation of a current or anticipated event
- account – spontaneous narrative, sharing an experience
- story – fictionalised narrative (Owens, 2012).

During the school years, children's narratives are characterised by the more sophisticated use of causal connectors along with a more varied range of temporal markers (Peterson & McCabe, 1991). Children learn to link events in narrative in a linear fashion first, and later use causal connectives (*because, as a result of, since*) to establish links. The conjunction *and* continues to feature prominently in children's narratives. Causality requires children to move forwards and backwards in time. Pre-school children can sequence events in a

forward direction, but have difficulty with the reverse.³

- 4 and 5-year-olds: include many elements of narrative (e.g. plans, scripts) but lack the linguistic skill to construct a coherent narrative.
- 5 to 7-year-olds: narrative plots emerge.
- 7-year-olds: narratives have a beginning, a problem, a plan to resolve the problem, and a resolution; use beginning and ending markers.
- Growth after the age of 7 involves increasing story length and more complex expression (Owens 2012, p.322).

Linking growth in ability to produce narratives with development of syntactic skills, a significant development in children after the age of five is their increasing capacity to use syntactic devices to link clauses and utterances together into longer and more coherent stretches of discourse (Hoff, 2009a, p. 340). Emerging facility with the linguistic device of pronominalisation (using pronouns to refer to things), while available to 4-year-olds, is confined to use in reference to things in the world, but for the 9-year-old, is used to refer to things in other utterances expressed. Growing facility with this linguistic device significantly increases the coherence and ultimate communicability of the discourse, in particular for an unfamiliar audience, which is especially important in the context of school.

The following examples (Cregan, 2010) illustrate children's developing use of pronominalisation, in the context of retelling narratives:

Narrative sample: senior infants

there's a dog and there's paint and am there's some ...and at

³ See Hoff (2009a, p.347) for examples of children's narrative growth.

the other picture it's spilling cos the dog is ... is going to run there and the dog is running there and it tumbled over am and then the thing is all the way over and am when ... when it was over it all went on the ground and the puppy stepped into it ...am and then the puppy went over there and then the paint am came out on one of the paws

Narrative sample: third class

Once there was a dog chasing a cat and the cat was really scared and the dog was mad and the cat ran up the tree and the dog couldn't get him and the little boy saw the cat up on the tree and the little boy was worried. He ran into the shed and got a ladder and came back out and he got the ladder and put it on the tree and then the little boy climbed up and got the cat and when the cat came down the little boy gave the cat some water

Despite the very impressive linguistic developments of 5-year-olds, much remains to be developed in order to engage effectively in conversation and to produce and understand messages in interaction with others (Hoff, 2009a; Owens, 2012). For school-age children, adults continue to maintain control of the conversation and children's responses are more likely to be brief and simple with relatively little elaboration. In conversation with peers, however, children's responses are more complex and more varied (Owens, 2012). The features of growth in conversational skills described below have been reported in Owens (2012, pp. 328-331), Hoff (2009, pp. 340-350), and Tolchinsky (2004, p. 240).

An important feature of successful conversation involves an ability to take perspective, being aware of the listener and the listener's needs in the conversational context, and adapting the contribution accordingly to ensure effective communication. While children as young as 2 and

3 years of age show a facility to take account of their listener, children of 4 and 5 years will often give incomplete messages (Hoff, 2009a, p. 348) because they are not yet aware when a message is inadequate. A developing understanding that others may not share your knowledge, thoughts and beliefs and that messages need to include all the information to be transmitted (Beal, 1988) contributes to increasing capacity to engage successfully in conversational interactions.

With entry to the school context, children are required by the demands of the classroom to use language for a greater variety of functions than would have been the case in the pre-school setting – needing to use language to explain, describe, imagine, hypothesise, persuade, infer cause, and predict outcomes. Use of an increased repertoire of language functions necessitates a development of vocabulary and syntactic forms to express these functions.

Switching speaking style, already in place by the age of 4, becomes more pronounced by the age of 8. Children demonstrate style-switching capacity when interacting with younger babies and toddlers, with peers, with parents and with non-family members.

A frequent conversational strategy used by adults, the indirect request, again increases throughout the early school years. Indirect requests are first produced by pre-school children. They increase in frequency between the ages of 3 and 5 years. Between 5 and 6 years of age, the internal structure of children's indirect requests increases in complexity. The 7-year-old has more facility again with the form and by 8 years of age, children are more polite when making an indirect request, particularly if interacting with an adult or someone unfamiliar. Comprehension of indirect requests develops during these years also. While children become increasingly aware of the need for clarification in conversational interaction, the most frequent repair

strategy used up to the age of 9 is repetition.

Children's understanding and production of deictic terms develops with age also, where the predominant use of *here* and *there* is complemented over time with the use of *this*, *that*, *these*, and *those*, or words which indicate clearly to which object or event the speaker is referring.

Influences on early years language development

The source of encounter with language is associated with the promotion of later language development in children (Nippold, 2007). School-age children increasingly encounter language not just through spoken communication but through the increasingly important role played by written language in the school context. Non-egocentrism – the growing ability to take the perspective of another – develops an awareness of the thoughts, feelings and needs of co-conversationalists, building gradually over time the ability to adjust the content and style of talk to suit the listener and enhance communication. During the school years, this is manifest in children's developing capacity to resolve interpersonal conflicts by compromising and showing concern for others (Nippold, 2007; Owens, 2012). Developing decentration (recognising that there are multiple dimension to a topic) also contributes to enhanced social perspective-taking by enabling a child to present better, more elaborate descriptions (Owens, 2012). The development of metalinguistic competence enables children to reflect on and analyse language as an entity in itself. This influences children's language development during the school years, as does children's increasing capacity for abstract thought which requires more complex language use. Central to these influences is children's experience of school.

Role of the school in early years language development

The ability to operate institutionally...is something that has to be learnt; it does not follow automatically from the acquisition of the grammar and vocabulary of the mother tongue (Halliday, 1973 p. 11).

There is widespread agreement that significant language demands are made of children by the classroom context. Research findings are unequivocal in establishing that there is a difference between the language of the home and the linguistic knowledge demanded by the school. There are language challenges for all children when interacting in the school context and these challenges are in place from the very earliest days of a child's schooling. According to Schleppegrell (2004, p. 22), 'Schooling is a context in which the kinds of meanings that are made are quite different from the meanings made in more informal contexts of everyday life'.

In the school context, children are required to engage in new and different kinds of tasks involving language use for new and different purposes interacting with a different type of audience (e.g. Bearne et al., 2003). Expectations in relation to language use in school are such that children are required to present information structured in conventional ways (Schleppegrell, 2001). Teachers have expectations in relation to typical speech events in school such as describing objects, or 'sharing time' (news time), that objects will be named and described even when these objects are plainly to be seen, that children's talk will be explicit in terms of time, space and location, that minimal shared background knowledge will be assumed on the part of the child and that specific vocabulary, expanded appropriately will be used (e.g. Michaels & Collins, 1984, p. 223). Reviewing the findings of this research clarifies that school-based language tasks share many common features that are less likely to occur in more informal uses of language.

Because language use in the classroom involves the sharing of ideas and knowledge rather than sharing of more personal experiences, activities and relationships, it differs from language use in other situations (Schleppegrell, 2004, p. 24).

The particular genre of language used for the purpose of teaching and learning contrasts with talk used in interpersonal communication. It is described by Wolfram et al. (1999, p. 127) as less elliptical, less dependent on the surrounding talk and other contextual factors. In academic talk meaning is usually made explicit through words. This genre of language may also serve different functions such as the display of information in answering questions. Wolfram et al. conclude that 'some explicit instruction about academic language conventions may be necessary, especially in the early years and especially for children from non-mainstream backgrounds' (1999, p. 127). Academic style of language more closely approximates written language in style because:

It is the purpose of the text that most influences grammatical and lexical choices. School-based genres typically structure information so that it can be presented efficiently and arguments can be hierarchically constructed for a non-interacting audience. This is reflected in the grammatical features that typically occur in these genres, whether spoken or written (Schleppegrell, 2001, p. 435).

These features of language are expected from the earliest encounters of children at school and are required to be present in both oral and written form throughout the school years (Watson, 2002). According to Owens (2012):

The demands of the classroom require major changes in the way a child uses language. Very different rules for talking apply between the classroom and conversation. A

child must negotiate a turn by seeking recognition from the teacher and responding in a highly specific manner to questions, which may represent over half the teacher's utterances. "Text-related" or ideational language becomes relatively more important than social, interpersonal language. A child is held highly accountable for responses and is required to use precise word meanings. A child who comes to school with different language skills and expectations may suffer as a consequence (p. 319) .

The experience of school plays a critical role in the child's language development (Nippold, 2004) but school needs to recognise that this language development will not occur by chance (Macrory, 2001; Evans & Jones, 2007). There is evidence to suggest that involvement in school promotes more rapid language development and in particular promotes those language skills necessary in the school context (Kurland & Snow, 1997; Huttenlocher, Levine et al., 1998) although oral language development is promoted more in some classrooms and by some teachers than others and the oral language skills of some children are promoted by school more than those of other children (Dockrell & Messer, 2004; Hoff, 2009a). Specifically in relation to lexical development in school, Dockrell and Messer (2004) report that:

- Support for lexical acquisition can take the form of direct instruction, use of a dictionary, or incidental learning through exposure.
- The most successful contexts for word learning are direct instruction and explicit highlighting of word meanings, word exposure with definition and lexical contrast (Ralli, 1999).
- Despite teachers acknowledging its importance, little time is spent in school on direct vocabulary instruction.

- Much of school children's vocabulary exposure is incidental.
- Children are not necessarily given enough opportunities to build a rich vocabulary in the early school years.
- The rate of language development during the school years is influenced by children's initial root word vocabulary (Biemiller & Slonim, 2001).
- Active engagement of children during story-reading – interactional reading – facilitates vocabulary acquisition of children both 6 and 8 years. (Brabham & Lynch-Brown, 2002).

Among the favoured approaches to facilitating oral language development in the school context reported in the literature is the use of oral narratives, for example, developing children's oral narrative skills through five levels from labelling, to listing, connecting, and sequencing to narrative (Stadler & Ward, 2006). Other research emphasises the importance of an environment which promotes reflection and authentic engagement in conversation, encounters with literature, frequent use of developmentally-appropriate oral language activities such as news time, and engaging curricula which are planned around relevant child-initiated tasks and the integration of content area subjects (Kirkland & Patterson, 2005).

CONCLUSION

In this chapter, we outlined a two-pronged framework for children's early language development. First, it was noted that, in acquiring language, children engage in three modes of meaning – the interpersonal (through which children enact interpersonal relationships with significant others), the ideational (through which children both construe experience and reflect on it), and the textual (through which children enter into discourse, and have access to, and engage with, the academic language of the curriculum). The

progression within each meaning mode was outlined from birth onwards, and it was stressed that there is considerable variation among children in their development within each mode. Hence, conditions such as Down syndrome and autism spectrum disorders can be conceptualised in terms of deviations from the expected course of language development within and across modes.

Implications for curriculum development in respect of each meaning mode were outlined.

In the context of outlining the ideational model, key aspects of language development, such as the development of vocabulary, sentence structure and language use, were described. The interdependence between vocabulary, grammar and pragmatics in early language development was highlighted. Vocabulary was examined not only with respect to emergence of understanding of individual words, but also with respect to the ability to categorise words – a process that occurs as the child reflects on language in addition to using it.

Decontextualised language was defined as language that is context-free, autonomous and disembedded. It is not rooted in any immediate context of time or situation, and does not rely on observation or immediate physical experience, but stands as an autonomous representation of meaning. The early emergence of decontextualised language, often in the context of imaginative play, was outlined, and it was stressed that growth in decontextualised language and other aspects of language arose from children's desire to engage in communication (dialogue) with and express meaning to, others.

The most complex mode of meaning, the propositional or textual mode, was discussed with reference to the language of written texts, where meaning is built in a systematic, logical fashion, maintaining an internal coherence which places particular contextual demands on

the language user (reader). It was noted that the literature supports a view of educational (propositional) knowledge as requiring a particular linguistic learning style in which the propositional function of language is brought to deliberate and conscious awareness for children so that they can both reflect on language and use it as a tool for reflection. It was pointed out that the propositional function of language requires that children use language as a symbolic, syntactic and conceptual system to construct context free ideas. Similarities between narrative and expository discourse were outlined, as was the need to develop explanation as a form of discourse arising from narrative, in the pre-school and early school years. Challenges that children living in disadvantaged socio-economic circumstances may encounter in acquiring propositional (academic) language were noted.

In order to support a 'modes of meaning' approach to language development, a model incorporating the forms and structure of language was presented that includes listener-speaker relationships, language use and language content and structure. This model, which specifies key subcomponents in each of these areas, could serve as a framework for both curriculum development and assessment.

In sum, for children aged three to eight, within a language curriculum, language teaching and learning can be conceptualised as the development of children's knowledge of language as a system and a resource, for the co-construction of meaning between adult and child, and between the child and other children, through progressive modes of meaning or levels of complexity with an explicit focus on the academic language of schooling. Progression through the modes of meaning can be represented as a progression through, and accumulation of, levels of understanding of both the system and the resource, along a continuum, beginning with the intersubjective. The continuum allows for differential rates of progress by children, for

acquisition of more than one language and for inclusion of children whose acquisition of the language system, and opportunity to use the system to construe meaning, may be compromised by biological or environmental factors or by a combination of these.

The school years are crucial for the development of children's oral language. Due to the remarkable and rapid developments which take place in spoken language during the preschool years, evidence of language growth during this period is not difficult to mark. However, developments during the early school years are more subtle, and therefore, more difficult to identify. Nevertheless, interest in the phase of later language development has expanded and is emerging as a significant body of literature in the field of oral language development. This focuses on development in semantics, syntax and pragmatics, and also looks at specific aspects that might be attended to in school settings, including narration, figurative language and use of metaphor. As noted earlier, these aspects develop best in meaningful dialogue around authentic language tasks that involve teacher and children, and children talking among themselves.

C H A P T E R 4 :
E F F E C T I V E
P R A C T I C E S F O R
L A N G U A G E
D E V E L O P M E N T

According to research, what are the features of good oral language pedagogy for children aged 3-8 years

- a. at individual teacher/classroom level?**
- b. at school level?**
- c. through partnership with parents and the wider community?**

LANGUAGE PEDAGOGY

Language pedagogy is grounded in a social-interactionist view of language acquisition and development. In this view, language emerges through adult-child interaction in contexts of mutual attention and intention in which each participant influences the nature and quality of the communicative exchange (Snow, 1999; Clark, 2003; Hoff, 2004; Warren, Yoder & Leew, 2002, Tomasello, 1992; 2003, 2009).

While language is regarded as an emergent system, the goal of language is communication and the acquisition of vocabulary and grammar is meaningful only to the extent that children use these elements effectively to interpret and to convey intended meaning in social contexts (Barton & Tomasello, 1994).

From a social-interactionist perspective, the pragmatic use of language, its communicative function, is seen as the driving force of language learning for the child, and the motivation for the child's acquisition of the structural components of vocabulary and grammar (Tomasello, 2003). Following from this, the adult's role is seen as rooted in the desire to facilitate the child's communicative intent and to develop the child's communicative competence (Snow, 1989, 1999; Bruner, 1983; Bruner & Bornstein, 1989, Clark, 2003; Chouinard & Clark, 2003). This view can be extended to define the teacher's role as continuing to enable children's acquisition of the components of the language system – listener-speaker skills, vocabulary, grammar, and range of language use – for the construction of meaning at the

complex levels and in the abstract forms required for the academic language of the curriculum and for educational knowledge and academic achievement.

Children are initiated into the communicative relationship during their first year of life. Language acquisition and development proceed in contexts of adult-child dialogue and in their early communicative exchanges children learn the conventions of dialogue such as joint attention and turn-taking. Adult-child dialogue is the primary context for language acquisition in the preschool years and it remains the key context for language teaching and learning when children enter preschool and school. Researchers who have addressed the issue of first language teaching and learning in the school years (Tough, 1977, 1981; Wells, 1985a, 1985b, 1986, 1999; Mercer, 2002) have identified adult-child dialogue as the essential classroom context for language acquisition and development and for extending the frames for thinking or modes of meaning through which children learn and develop. Recent literature focusing specifically on developing language and literacy skills in children at-risk for reasons of socio-economic disadvantage, again emphasises teacher-child dialogue as the essential teaching and learning context, and the nature and quality of teacher interactional style as the critical factor in predicting children's outcomes (Justice, Mashburn, Hamre & Pianta, 2008; Henry & Pianta, 2011).

There is a well-established literature on the specific aspects of adult speech which facilitate children's language acquisition and development in the years before school for typically developing children (Snow, 1999; Bruner, 1999; Tamis-LeMonda, Bornstein & Baumwell, 2001; Dodici, Draper & Peterson, 2003; Chouinard & Clark, 2003; Saxton, 2005; Masur, Flynn & Eichorst, 2005) and for children with developmental disabilities (Yoder, Warren, McCathren & Leew, 1998; Hauser-Cram Warfield, Shonkoff & Krauss et al., 2001; Warren, Yoder & Leew, 2002). More recently, there is an emerging

literature which reports a focus on the adaptation and use of these facilitative features as pedagogic strategies in classroom settings. This recent literature reflects concerns to identify the nature and quality of teacher interactions which support the development of language and literacy skills in young children at-risk for reasons of socio-economic disadvantage (Wasik, Bond & Hindman, 2006; Justice, Mashburn, Hamre & Pianta, 2008; Henry & Pianta, 2011) and in children with developmental disabilities (Rogers, 2006; Camarata & Nelson, 2006; Hancock & Kaiser, 2006; van Kleeck; Vander Woude & Hammett, 2006; Kaiser & Trent, 2007).

The facilitative features of adult talk to young children can be described as specific talk strategies which are characterised by distinctive interactive styles and are embedded in adult-child dialogue.

Facilitative interactive style – fine-tuning the listener-speaker context

Interactive style or *style* of adult response to children's communicative attempts has been an important issue in the language acquisition literature for typically developing children and for children with disabilities (Tamis-LeMonda, Bornstein & Baumwell, 2001; Dodici, Draper & Peterson, 2003; Yoder, Warren, McCathren & Leew, 1998; Hauser-Cram, et al., 2001) and has also been identified as a factor for quality in language teaching and learning for school age children considered to be at-risk for reasons of socio-economic disadvantage (Justice, Mashburn, Hamre & Pianta, 2008; Henry & Pianta, 2011). In a significant study with this population, children acquiring a second language were included in the research participants (Justice, Mashburn, Hamre & Pianta, 2008).

A supportive style is one in which the adult *scaffolds* the learning for the child and facilitates his/her interpretation of meaning (Bruner, 1983; 1999), firstly by structuring the dialogue in contexts which are highly motivating for the child and which occur regularly and so help

to situate meaning and, secondly, by providing what are described as contingent responses. Contingent responses are those which immediately follow the child's utterance, are semantically contingent to the utterance and are sensitively matched or finely tuned in complexity to the child's level of communicative functioning (Yoder, Warren, McCathren & Leew, 1998; Hauser-Cram et al., 2001). For children in the early stages of language acquisition, this style of response is regarded as one which engenders feelings of efficacy in the child and eases the tasks of matching words to objects and combining words in sentences (Rollins & Snow, 1998; Tamis-LeMonda, Bornstein & Baumwell, 2001). Contingent response is also an important feature of teacher interactive style for children of school age whose language is delayed or impaired (Kaiser, Yoder & Keetz, 1992; Kamps, Kravits & Ross, 2002; Rogers, 2006) and for children acquiring a second language (Tabors, 2008).

Within the literature, a number of studies have attempted to address contingent responsiveness in more specific terms by attempting to identify styles of response which, while qualifying as temporally contingent to the child's utterance, may be more or less facilitating or inhibiting. In these studies, styles of response are distinguished according to whether the adult *follows* the child's initiation about an object of joint attention, or *directs* the child to respond.

Adults who follow the child's attentional lead are those who label, describe, or comment upon, objects, actions or events to which the child is currently attending. There is consensus that these styles are generally facilitative of children's language development (Tomasello & Farrar, 1986; Akhtar, Dunham & Dunham, 1991; Tamis-LeMonda, Bornstein & Baumwell, 2001; Hoff & Naigles, 2002). Directive responding styles are characterised as attempts to control children's communicative behaviour and to change their focus of attention. These styles have been shown to be negatively-related to measures of children's language development (Mahoney & Neville-Smith, 1996;

Tomasello & Farrar, 1986). However, there is an emerging view which suggests that this may be too simplistic a characterisation and that depending on the context, age, and typical or delayed status of the child, both styles can support children's learning (Yoder, Warren, McCathren & Leew, 1998; Warren, 2000; Masur, Flynn & Eichorst, 2005; Hancock & Kaiser, 2006).

In their study from 2005, Masur, Flynn and Eichorst attempt to define following or directing styles more specifically and to conduct a more rigorous investigation of the contributions of these styles to children's vocabulary development. Two types of following styles are identified: *follow descriptions* and *imitation*. *Follow descriptions* are adult labels and descriptions which are mapped on to children's on-going activity and which make reference to aspects of the environment to which children are currently attending. *Imitation* is where the adult copies the child's vocal behaviour or action. Two kinds of directive styles are defined: *intrusive directives* which may disrupt a child's on-going activity and *supportive* or *follow directives*. Follow directives are defined as adult utterances which are an immediate response to the child's focus of attention and which map language to that focus, including naming and describing the object and extending the child's engagement with it, through suggested actions (e.g. *that's the square block*, when the child is holding or looking at the block; *try it in this space*, when the child is looking at the shape box) (Masur, Flynn & Eichorst, 2005).

In this study, follow descriptions, imitation and follow directives were all strongly predictive of children's growth in vocabulary development whereas intrusive directives were negatively associated with children's development at all three age periods for which data were collected: 13 months, 17 months and 21 months.

Follow descriptions were most effective for children at the later time interval, that is, during the second half of the children's second year.

At this stage of development, children whose mothers provided more utterances describing aspects of the environment to which the children were currently attending acquired larger vocabularies. It would appear that utterances describing action and events, more than those simply labelling objects, are more relevant to children's learning at this stage of accelerated language development. It may be that the greater semantic content represents a more finely tuned response and a more appropriate challenge to the child's current comprehension levels. These findings are compatible with the research which shows the importance of both the quantity and the quality of adult talk to children acquiring language (Hart & Risley, 1995, 2003).

The outcomes for imitation of the child's utterances and for the supportive role of follow directives are also particularly significant. The role of imitation or repetition of the child's utterances has not had much attention in the research on efficacy of utterances which immediately follow the child's initiation or focus of attention. Equally, in the research with typically developing children, any form of directiveness has largely been regarded as inhibiting of children's language learning (Tomasello & Farrar, 1986; Mahoney & Neville-Smith, 1996; Landry, Smith, Miller-Loncar & Swank, 1997). The significant point here may be that imitation and follow directives are important features of fine tuning and of adult's sensitivity and adaptation to the child's need for greater scaffolding in achieving intentional communication.

The positive role of follow directives, or prompts, is recognised in the literature on language intervention (Marfo, Dedrick & Barbour, 1998; Yoder et al., 1998; Kelly & Barnard, 2000; Warren, 2000; Warren et al., 2002). Early intervention research suggests that directives may be a necessary part of teachers' repertoires of supportive strategies, constituting an adaptive response to children who themselves are less responsive and who display less differentiated cues to adults during

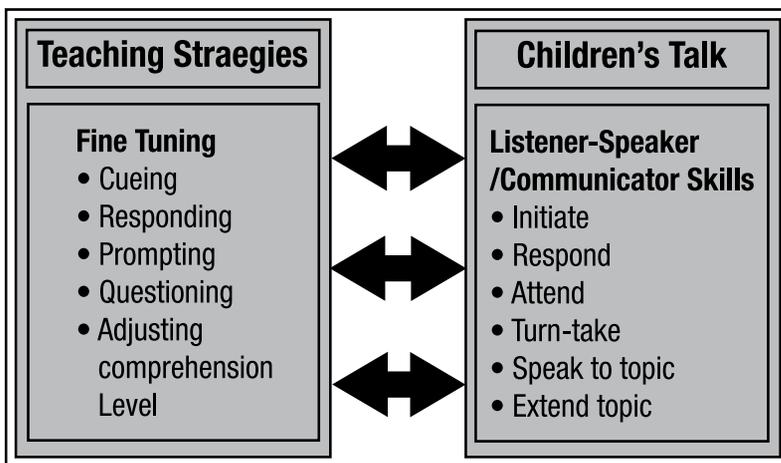
interactions (Marfo, Dedrick & Barbour, 1998; Yoder et al., 1995a; Yoder et al., 1998). For children with communication and language difficulties and delays, follow directives can act as finely tuned adjustments to children's levels of engagement and disengagement (Kelly & Barnard, 2000), and can maintain synchrony in the interactions (Sameroff & Fiese, 2000).

Implications for practice

For young children 3-8 years, language teaching and learning will rely on dialogue contexts in which the teacher engages with children in one-to-one, small group and whole group settings. The literature on adult styles which support children's communicative development, signals the kinds of enabling styles which teachers can adopt to support and develop children's engagement in dialogue. Essentially, an enabling style is one in which the teacher fine tunes the context and his/her talk to match the interest and comprehension levels of the child/children and to enable the child/children to engage with and speak to the topic. One of the conditions for fine tuning the context and a pre-requisite for achieving mutual attention and intention is that the children must be interested in, and motivated to attend to the topic. Another condition is that, as meaning on any particular topic is co-constructed between the teacher and child/children, the children's contributions are critical and the dialogue builds through the turn-taking contributions of the participants. With this intention, the teacher can draw from a repertoire of strategies designed to provide the maximally responsive environment (Warren, Yoder & Leew, 2002). These strategies can include: following the child's/ children's lead, mapping language to the child's/children's focus of attention, cueing/prompting or inviting further comments and extending the topic by providing comments. An enabling style is also one in which the teacher can initiate the topic or prompt the child/ children to achieve joint attention. A critical feature of an enabling style is that the teacher's talk is adjusted to match the comprehension

levels of the child/children. These strategies can be linked directly to developing the listener-speaker skills component of the curriculum: initiating or responding to a topic; listening and attending to a topic; turn-taking; contributing in accordance with the listener's needs, and developing the topic. The strategies are drawn from across the literature on language acquisition and development including the intervention literature for children with language delay and impairment and the literature on children's second language acquisition. The strategies can be adapted and differentiated according to the abilities and needs of the children. For example, for a child with autism, one of the fundamental challenges may be to achieve joint attention on a topic and to motivate the child to engage in the reciprocal exchange required by the listener-speaker relationship. A child acquiring a second language in school will require that the context is finely tuned to ensure comprehension, including supporting words and phrases with objects and gestures and matching the teacher's talk to the comprehension level of the child. The proposed relationship between the fine-tuning strategies and the children's development of listener-speaker-communicator skills is illustrated in figure 4.1.

Figure 4.1: Relationship between fine-tuning strategies and children's development of listener-speaker-communicator skills



TEACHER TALK STRATEGIES: MODELLING VOCABULARY, SENTENCE STRUCTURE AND USE THROUGH REPETITIONS, RECASTS AND EXPANSIONS, PROMPTS AND QUESTIONS

Along with particular kinds of interactive style, specific features of adult talk have been identified as facilitative of children's language development. Adult talk or communicative behaviour in the form of imitation, prompts, repetitions, recasts and expansions of children's utterances and the provision of multiple models of vocabulary use and of verb forms in use, for example modelling the use of the passive and active voice, has been shown to support children's acquisition of vocabulary, grammatical structures and verb complexity. Findings in this regard include typically developing children (Chouinard & Clark, 2003; Saxton, Backley & Gallaway, 2005; Vasilyeva, Huttenlocher & Waterfall, 2006) and children with language delay and impairment (Hancock, Kaiser & Delaney, 2002; Hancock & Kaiser, 2006; Camarata & Nelson, 2006; Rogers, 2006).

Repetitions, recasts and expansions

There is broad consensus in the literature that exact repetitions by adults of children's utterances almost exclusively follow well-formed child utterances and probably serve as reliable indicators to children of successful communication, in appropriately structured linguistic forms (Snow, 1989; Chouinard & Clark, 2003). Conversely, expansions and recasts are considered to present a challenge to the child's emergent system, juxtaposing a contrast utterance to the child's and offering an alternative and enhanced form on which the emergent language user can act (Snow, 1989; Richards, 1994; Fey & Proctor-Williams, 2000; Saxton, 2005).

Definitions of expansions and recasts vary slightly in the literature and some definitions of recasts include expansions or treat the two as synonymous (Snow, 1989; Fey & Proctor-Williams, 2000). In an

example of a combination recast and expansion from Snow (1989), *child: bird sing, adult: the bird is singing* (p. 91), she interprets the adult response as expanding the child's utterance and confirming its content, while recasting and correcting its form. However, some earlier studies have focused on expansions as distinctive strategies. Two experimental studies, with children with disabilities, treat expansions as utterances which literally add one or more words to the child's utterance. In the first study, aimed at developing word combinations in preschool children with autism, when children were at the single word stage of expressive language development, Scherer and Olswang (1989) found that repeating the child's object label, e.g. *teddy* and adding one more semantic element to it, e.g. *soft teddy*, facilitated children's spontaneous imitation and later spontaneous production of targeted early word combinations, denoting possession, location and attribution. In the second study, Yoder, Spruytenburg, Edwards and Davies (1995b) used a similar procedure with children with developmental disabilities who were also at the one word stage of expressive language development. Here, expanding children's utterances in the context of a very familiar activity resulted in increased length of utterance by the children. This study is significant in that the increases in children's utterance length were generalised to new contexts with different adults and new sets of objects.

The distinguishing feature of the recast is the element of change. Fey and Proctor-Williams (2000) describe adult recasts as responses that immediately follow the child's utterance, maintain the child's meaning, and incorporate content words from the child's utterance, while modifying one or more of the constituents (subject, verb, object), e.g. *child: he need it, adult: he needs it*, or changing the grammatical form of the utterance (affirmative to negative; declarative to interrogative) e.g. *child: this James, adult: is this James?* (p. 179). Snow's (1989, 1999) definition includes the same essential elements. In her view, the facilitative aspect of recasts rests in their

provision of responsive feedback to the child as communicator and emergent language user. Essentially, they act as requests for clarification from the adult to the child. Recasts and expansions repeat the key aspect of the child's utterance but recast the ill-formed structure e.g. child: bird singing pretty song, adult: he's singing a pretty song (Snow, 1989, p. 91) and may add one or more semantic elements, e.g. child: teddy leep (sleep), adult: teddy is sleeping, in his bed. In this way, they serve the dual purpose of acknowledging the child's communicative intention and the legitimacy of the communicative attempt, while indicating that the form of the utterance is somehow inadequate. Snow's rationale for the role of recasts in supporting children's language acquisition is commonly articulated in the literature as the negative evidence model (Chouinard & Clark, 2003). This, in turn, is exactly compatible with Saxton's more recent Direct Contrast model in which he argues that recasts are error contingent adult utterances, which act as corrective input to children, in contexts of naturalistic conversational interaction (Saxton, 2005).

Two recent studies provide evidence that recasts which constitute negative evidence are facilitative of children's development of grammar (Chouinard and Clark, 2003; Saxton, Backley and Gallaway, 2005). The study by Chouinard & Clark shows that adults reformulated a range of child errors in phonology, morphology, and syntax and that children attended to and took up these corrections in their responses. Saxton, Backley and Gallaway (2005) found positive effects for adult recasts on children's acquisition of grammatical structures. This was a longitudinal, time-lagged, correlational study in which frequencies of adults' recasts, in their conversations with 2-year-old children, were correlated with the children's use of grammatical structures 12 weeks later.

The principle of fine-tuning in contexts of joint attention underpins these aspects of adult facilitative input. In this context, fine-tuning is

achieved through the adult adjusting the level of his/her talk to the level of the child's own output and comprehension level. In Snow's (1989) view, the adult is seeking optimal discrepancy between the child's level and his/her level of input. She describes optimal discrepancy as occurring when the gap between the child's level of receptive/expressive functioning and the level of input is small enough that the child understands the meaning of the utterance, but is also large enough to model new structures not yet mastered. In this regard, recasts and expansions are seen as optimally beneficial to the child when they provide a manageable combination of challenge and comprehensibility. Effective decisions on optimal levels of discrepancy require close knowledge of the child's level of functioning and assume differentiation in levels of complexity of adult input, in accordance with levels of child competence.

Modelling using prompts and questions: two models of language teaching and learning

The use of explicit prompts and questions by teachers, to model and to elicit target words and phrases has been a focus for research and comment in the language intervention literature. Two models of language teaching and learning described as Milieu Teaching and Responsive Interaction respectively, have established strong research bases (Kaiser, Yoder & Keetz, 1992; Wilcox & Shannon, 1998) and are widely quoted as providing effective approaches to communication, language teaching and learning, in natural classroom settings, for children with language delay and impairment (Kamps, Kravits & Ross, 2002; Warren, Yoder & Leew, 2002; Rogers, 2006; Hancock & Kaiser, 2006).

Milieu Teaching techniques and Responsive Interaction techniques rely on adult-child dialogue. They are described as naturalistic language intervention procedures through which specific teaching episodes, employing specific talk strategies, can be used in response to

children's initiations and can be embedded in the on-going stream of interactions in the early childhood setting (Warren, Yoder & Leew, 2002; Hancock & Kaiser, 2006).

Milieu Teaching was developed from an earlier model described as Incidental Teaching. Incidental teaching is a technique first described by Hart and Risley (1975) and originally designed for children at risk for reasons of socio-economic disadvantage, to give children opportunities to develop language skills in unstructured play situations. In this approach, the teacher follows the child's lead and explicitly develops the child's conversational topic, mapping words and phrases on to the child's focus of attention, prompting and questioning the child for particular, target responses, expanding on the child's responses and modelling responses for the child to imitate. Milieu Teaching includes all of these strategies but also allows for teacher-initiated topics and the use of explicit prompts for response. These include prompts for elicited responding, e.g. *what are you playing with?* and prompts for elicited imitation, e.g. *say I'm playing with the train set*. The teacher may also use time-delay techniques to prompt a communication from the child. For example, during turn-taking games, where the adult and child are matching pictures, dressing a toy, playing a game or constructing materials, the teacher may delay his/her turn-taking, hoping to prompt a request from the child.

Responsive interaction shares many characteristics with milieu teaching such as embedding intervention techniques in typical activities, following the child's lead and mapping words and phrases to the child's object of attention. However, this technique relies more explicitly on child-initiated learning and does not include explicit elicitation and imitation prompts for specific child responses. Rather, adult talk is related to the child's topic of interest and focused input is provided through mapping words and phrases, topic continuing utterances, models of elaborated utterances and recasts and expansions

of the child's utterances (Wilcox & Shannon, 1998; Warren, Yoder & Leew, 2002).

In summarising the outcomes of research on both approaches, Yoder and his colleagues suggest that both Milieu Teaching and Response Interaction are effective intervention approaches which need to work in tandem in that they may serve children differentially, according to their developmental level or particular target language goals (Yoder, Kaiser, Goldstein, Alpert, Moussetis, Kaczmarek & Fischer, 1995a). The 1995 study by Yoder and his colleague comparing Milieu Teaching and Responsive Interaction affords valuable insights into effective approaches to language teaching and learning, in inclusive early years settings, for children with a range of language difficulties ranging from close to typical development to serious levels of delay. The children with language difficulties who were the participants in the study ranged in age from 3 to 7 years. The findings showed significant gains for all of these children on a specific measure of length of utterance and on two general measures of receptive language and two general measures of expressive language, with no appreciable differences between the two teaching approaches. The outcomes of this study provide cause for optimism in attempting to identify a repertoire of effective language teaching strategies for children with a diverse range of abilities. One of the striking features of the study is that the children varied greatly in their developmental levels and in the range of language goals which were specified for them. The study affords important insights into the possibility that children benefit differentially from teaching approaches, depending on their current developmental levels. It highlights the need for matching the teaching approaches to the characteristics of the learner. In recent publications (Warren, 2000; Smith, Warren, Yoder & Feurer, 2004), the naturalistic teaching strategies discussed above are described as recommended practice in early intervention settings, including those that are operating various models of inclusion.

In the recent literature, a third approach to language intervention, described as enhanced milieu teaching, (EMT) is emerging (Hancock & Kaiser, 2006). This approach combines milieu teaching and responsive interaction in what is described as a blended approach which emphasises the use of the full repertoire of teacher talk strategies in creating a maximally responsive environment.

The discussion on the relative merits of more and less highly structured forms of teacher talk strategies has largely been concentrated in the literature on language intervention for children with developmental disabilities. However, there has been a growing emphasis on quality of teacher interactional style and effective use of teacher talk strategies in the recent literature on language and literacy teaching and learning for children at risk for reasons of socio-economic disadvantage including children in these populations who are acquiring a second language in school (Snow, Dickinson & Tabors, 2001; Wasik, Bond & Hindman, 2006; Justice, Mashburn, Hamre & Pianta, 2008; Henry & Pianta, 2011). In this research, specific talk strategies of *repeating*, *recasting* and *extending* children's utterances, prompting vocabulary, questioning – with the emphasis on open-ended questions – and *developing* and *extending* children's topics, are identified as evidenced-based strategies for facilitating children's language development. This research also reiterates the need for the use of these strategies by teachers who are highly responsive in style and can fine tune the context and differentiate the use of the strategies in accordance with what children bring to the dialogue (Justice, Mashburn, Hamre & Pianta, 2008). One of the striking features of this recent research is the emphasis on the need for teachers to use these evidence based approaches in *systematic and explicit instruction* (p. 66) for language acquisition and development.

Implications for practice

The range of strategies which support children's acquisition and use of vocabulary and grammar can be broadly categorised as modelling strategies. The category includes strategies such as: repetition, recasts and expansions and explicit prompts and questions to elicit target responses. These strategies can be used in more and less structured ways according to the developmental level and abilities and needs of the children.

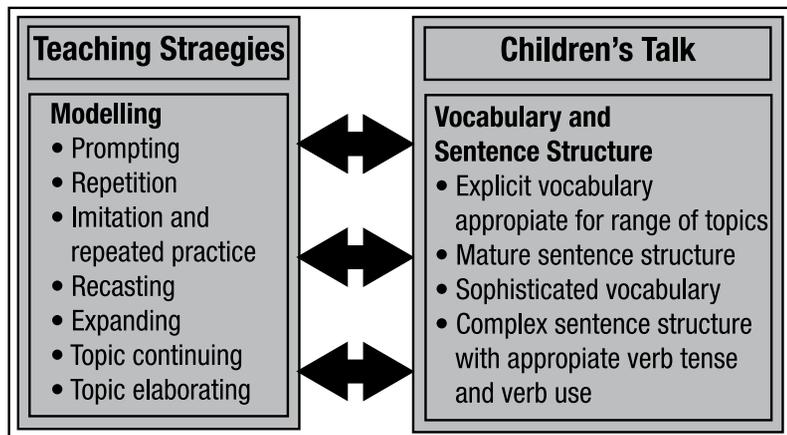
Direct prompts and repetitions can be used to teach new vocabulary, to model its use in sentences, with multiple opportunities for use in a variety of contexts, and to elicit appropriate use by the children.

Prompts, cues and questions are also used to fine-tune the context, delineating the parameters for meaning and scaffolding children's responses. In the following example, in a game where a toy animal is hidden and children guess the name from the description and then repeat the description adding their own further comment, the teacher scaffolds with a prompt and models vocabulary use and sentence structure: *This is the animal who has a long trunk and lives in the jungle.* She is also prompting knowledge of the category word animal and building the vocabulary of animal attributes and knowledge of criteria for category membership. In a context like this, in which the teacher is constructing the meaning with the children, prompts and questions could have been used, in an earlier exchange, to elicit target vocabulary from the children- e.g. *trunk, jungle*, and recasts and expansions could have been used in response to what might have been short or one or two word responses, e.g. child: *his trunk; in the jungle*; Teacher: *yes he has a long trunk; yes the elephant lives in the jungle.* Now, in the game format, there is an opportunity to model the utterance again in elaborated form. Through prompts and questions, the teacher is constructing the meaning with the children and through recasts and expansions is modelling how the words are combined to structure the sentence and how linguistic forms – *who*,

and – are used to extend the sentence and so extend the meaning. Recasts and expansions are used to reformulate children’s utterances and as models of how information can be combined to provide a more elaborated form of response.

Modelling strategies are proposed as the evidence-based strategies which support the development of children’s vocabulary including the use of nouns, verbs, adjective, pronouns and conjunctions, sentence structure and sentence combinations including specific elements of grammar such as verb tense and tense markers and the use of these components of language to name, describe, explain, reflect on the elements of experience and to engage in and contribute to topics in dialogue. Modelling strategies can be differentiated to prompt and to recast and expand early one/two word utterances from children with language delay and impairment (Warren, 2000; Smith, Warren, Yoder & Feurer, 2004; Hancock & Kaiser, 2006) and are identified as the teacher talk strategies which support vocabulary and grammar in second language acquisition (Langdon, 2008; Tabors, 2008). The proposed relationship between the modelling strategies and the children’s development of vocabulary, grammar and language use is illustrated in figure 4.2.

Figure 4.2: Relationship between modelling strategies and children’s development of vocabulary, grammar and language use



STRATEGIES TO ENABLE DISCOURSE

Together with the repertoire of strategies outlined so far, teachers need to use particular talk strategies and styles which enable the development of children's oral discourse skills or academic language. Snow and her colleagues equate oral discourse skills and academic language (Snow, Porche, Tabors, Ross Harris, 2007) and they identify the use of decontextualised language in the construction of coherent narratives, arguments and definitions, for a non-familiar audience, as the precursors of academic language and the focus for teaching and learning in the early years of schooling (Snow et al., 2007). In research over many years, Snow and various colleagues have been interested in the kinds of teacher-child exchanges which support the development of discourse skills in the early years of schooling (Snow, 1989; 1991; Snow & Tabors, 1993; Snow, Burns & Griffin, 1998; Snow, Tabors, Nicholson & Kurland, 1995; Snow, Tabors & Dickinson, 2001).

Topic extending and topic elaborating strategies

Styles of adult talk which facilitate children's construction of stories are described as *topic extending* and *topic elaborating* (Peterson & McCabe, 1992). As has been the case for acquisition of the components of language, insights into the teacher talk strategies which enable children's discourse skills have come, initially, from research on parent-child interactions. In a number of research studies dating from the 1990s, Peterson and her colleagues have shown that within a topic-extending and topic-elaborating style, parents use specific talk strategies. They contribute information on the story topic, naming objects and describing characters and events. They repeat, clarify and extend children's utterances through recasts and expansions, and they ask questions which elicit particular types of information from the children, including context setting questions establishing the time, location and nature of events and the characters

involved (Peterson & McCabe, 1992; Peterson, Jesso & McCabe, 1999).

Parents' sensitivity and responsiveness in the form of utterances which confirm interest and which encourage the child to continue, with an invitational and exploratory rather than a directive style from the parent, also contribute to story length and content (Peterson & McCabe, 1994; Peterson et al., 1999). Children's development in the use of explanations is supported by adult styles of interaction which contribute to a joint topic of attention by supplying words, word meanings and descriptions, by discussing, requesting and offering information about intentions and motivations and, particularly, by describing and by challenging the child to describe cause-effect relationships (Painter, 1999; Beals, 2001).

Narratives and explanations are described as structured forms of extended discourse on a specific topic. They require formulation of a general goal or outcome and control over particular linguistic features such as specific vocabulary and inter-sentence cohesion (Beals & Snow, 1994). Both forms are decontextualised in nature requiring the participants to talk about topics outside of the here and now and offering children the opportunity to make connections between ideas, events and actions (Beals, 2001). These modes of discourse happen in dialogue and rely upon the conditions of joint attention and fine-tuning as prerequisites for the maximally responsive environment. The process is described as collaborative participation (Beals & Snow, 1994) or co-construction (Peterson et al., 1999). Peterson, Jesso and McCabe (1999) found a positive correlation between parents' use of topic-continuing strategies and their children's immediate growth in vocabulary and between the parents' use of these strategies and their children's use of decontextualised language in the construction of narratives one year later.

Two major studies which have been reported in recent years (Dickinson & Tabors, 2001; Siraj-Blatchford & Sylva, 2004; Sylva, Melhuish, Sammons, Siraj-Blatchford & Taggart, 2010) provide important perspectives on the role of dialogue as a critical context for learning in an early years curriculum and on the use of effective teacher talk strategies in the development of more complex language skills. The Home-School Study of Language and Literacy Development (Dickinson & Tabors, 2001) is a longitudinal study of children's academic progress and achievement from age 3 years through to high school age and was conducted with children who were considered to be at risk for reasons of socio-economic disadvantage. The most recent analysis of data from the study is reported in Snow, Porche, Tabors & Ross Harris (2007). In the early phase of the study which focused on children from age 3, the quality of early school experiences was examined with a particular focus on the nature of adult-child interactions. In reporting findings on the relationship between teachers' talk strategies and children's language outcomes at age 4, Dickinson (2001) identifies a responsive style in which teachers listened and followed children's leads, and strategies which questioned for clarification and which commented on, extended, and elaborated on children's utterances, as all positively correlated to children's performances on end-of-kindergarten test measures of narrative production, formal definitions, emergent literacy and receptive vocabulary.

In commenting on the outcomes of the study, Dickinson stresses the need to develop teachers' awareness of the importance of intentional teaching in dialogue. This is a conscious and deliberate teaching which focuses on maximal intellectual challenge to the child. It is based in extended conversations requiring complex verbal reasoning, including reasoning about decontextualised topics and events (Dickinson, 2001). In a recent report on the study, Snow, Porche, Tabors and Ross Harris (2007) highlight the fact that moderate to

strong correlations were found between children's kindergarten scores on measures of receptive vocabulary, emergent literacy, academic language and narrative production and comprehension of texts in fourth, seventh and tenth grade.

A report (Siraj-Blatchford & Sylva, 2004) which summarises the findings on pedagogy from two closely related studies of early years provision in England also highlights the importance of the quality of adult-child interaction in children's learning. The Effective Provision of Preschool Education study (EPPE) was a five year longitudinal study, funded by the Department for Education and Skills (DfES), to assess the impact of preschool education on children's learning. The study followed the progress of approximately 3,000 children who were placed in 141 preschool settings across England. In addition to the broad range of quantitative and qualitative data collected in the study, 12 preschools were selected as meeting criteria for effectiveness based on child development outcomes, and these preschools were involved in further analysis on a case-study basis. The Researching Effective Pedagogy in the Early Years study (REPEY) built on this case-study analysis with classroom observations, interviews and focus group discussions. Two reception classes were added to the original 12 participating centres for the REPEY study.

The findings from the REPEY research suggest that, in the most effective settings, teachers maintained a balance between child-initiated and adult-initiated activities. Whether activities were child or adult initiated, the findings clearly indicate that a defining factor in children's cognitive outcomes was the quality of the adult intervention in extending the child's engagement with, and thinking about, any particular activity. A number of points relating to the nature and quality of adult interventions are relevant here. Firstly, the achievements of particular settings, as evidenced by children's cognitive outcomes, appeared to be directly related to the quantity and quality of the teacher/adult planned and focused group work

that was provided. Secondly, positive cognitive outcomes were closely associated with adult-child interactions which were characterised by high and sustained cognitive challenge; what Siraj-Blatchford and Sylva describe as sustained shared thinking (p. 720). This mode of adult-child interaction is defined here as the adult and child working together, in an intellectual way, to solve problems, clarify concepts, evaluate activities or to construct or extend narratives. Thirdly, adult interventions in child-initiated activities which increased the levels of cognitive challenge through what is described as thematic conversation and instruction, were identified as characteristic of centres evaluated as excellent in the case-study evaluations. An analysis of target child observations revealed that what are described as critical moments of learning (Siraj-Blatchford & Sylva, 2004, p. 723), when a child's thinking is developed further, were most common in interactions in which the adult extended a child-initiated episode. Further characteristics of excellence in pedagogic style were responsive teaching styles which differentiated the curriculum and achieved appropriate match in levels of cognitive challenge to the learner.

The Home School Project (Dickinson & Tabors, 2001; Snow, Porche, Tabors, Ross Harris, 2007) and the REPEY research project (Siraj-Blatchford and Sylva, 2004; Sylva, Melhuish, Sammons, Siraj-Blatchford & Taggart, 2010) provide further support for the role of adult-child dialogue as the key process through which early learning is conducted and mediated. Both studies stress the critical role of consciously planned and focused teaching, conducted through extended conversations with individual children and in small group and whole group situations. The studies emphasise the role of the teacher in arranging both the physical and intellectual environment (Siraj-Blatchford & Sylva, 2004, p. 727) and in allocating sufficient time and providing suitable materials (Dickinson, 2001, p. 285) to enable the appropriate levels of cognitive challenge and language use in the dialogue context.

In their discussion on adult-child dialogue, Siraj-Blatchford and Sylva identify particular characteristics of the interaction which they suggest constitute effective pedagogy. They advocate what is described as *responsive teaching* (Siraj-Blatchford & Sylva, 2004, p. 725); the establishing of shared purpose between the child and adult within a joint activity. This teaching is informed by the teacher's understanding of the cognitive, social and cultural perspectives of the learner. Close knowledge of the child as learner allows the teacher to choose the specific strategies which will provide optimal challenge to the child. Optimal challenge is defined as guiding the child towards the next appropriate level of achievement by providing the supports to allow the child reach that level and by graduating the level of support to allow for, and in accordance with, the child achieving independence in that particular skill or concept. The child is an active contributor to this process, responding to the perceived intentions of the teacher and influencing the teacher's perspective and strategy use. Siraj-Blatchford and Sylva describe this interaction as *a process of reflexive co-construction* (Siraj-Blatchford & Sylva, 2004, p. 720).

In their discussion of teacher talk strategies which support children's discourse skills, McKeown & Beck (2006) reiterate these points and again identify the key aspects of teacher talk styles which enable children's development of the styles and levels of language use required for school success. McKeown and Beck identify comprehension and use of decontextualised language as a major source of learning for young children in school and as a critical factor in academic achievement. They outline the teacher talk strategies which facilitate this learning as constituting a co-constructive, interactive style in which, for example in interactive story telling, teachers prompt children to show comprehension of, and reflection upon, the story content. They emphasise the need to go beyond a traditional 'question and answer' style of interaction to

one where, in dialogue, teachers model this style of reflecting on the text, showing the children how to think about the content and how to draw from it to structure a relevant contribution. Teachers need to scaffold children's responses, challenging for greater clarity and complexity and helping them to organise their thoughts and to explain, elaborate and connect ideas. While modelling this reflective style, teachers also recast and extend children's utterances, at once affirming the children's contributions and showing how their meaning intentions can be more fully articulated through more appropriate forms of vocabulary and syntax.

Teaching as dialogue

The pedagogic approaches outlined above are direct interpretations of Vygotsky's theory of teaching and learning as a social-constructivist activity and of Vygotsky's notion of effective teaching as teaching directed at the child's *zone of proximal development* (Vygotsky, 1978). Siraj-Blatchford and Sylva (2004) quote Vygotsky's term and their work is clearly grounded in Vygotskyian theory. Vygotsky's social-constructivist theory of teaching and learning is a unifying feature of the theoretical and empirical positions which underlie an emergentist perspective and a social-interactionist theory of language acquisition and development. For example, Vygotsky's notion of the zone of proximal development (Vygotsky, 1978, p.84) is compatible with Snow's notion of effective language teaching as achieving optimal discrepancy between the adult input and the child's current levels of language comprehension and use (Snow, 1989). Equally, Wells (1999), Painter (1996) and Mercer (2002) reference their views on the process of dialogue as the context for language teaching and learning, to Vygotsky's theory of the zone of proximal development. Painter proposes that finely tuned adult utterances provide both the appropriate level of challenge to the child's current level of functioning and the model for the next level of competence which the child must achieve. In the dialogue context

also, the adult employs supportive strategies including prompting, imitation, repetition, modelling, recasting and expanding which scaffold the child's learning. In his discussion of dialogue in classroom contexts, Mercer (2002) also adopts a social-constructivist approach which is drawn directly from Vygotskyian theory. In an interpretation of Vygotsky's zone of proximal development, Mercer poses a model of shared understanding which he describes as an *Intermental Development Zone* (IDZ) (Mercer, 2002, p. 143). Here the task for the teacher is to help the child to advance beyond his/her current frame of reference to new levels of understanding, frames for thinking or modes of meaning.

Teaching for monologue

The strategies outlined above have been discussed in terms of their support for children's discourse skills in dialogue contexts. However, children also need to employ decontextualised language in the use of discourse skills in autonomous presentations akin to monologues. The use of discourse skills in monologue contexts has been defined as the presentation of continuous, coherent and cohesive linguistic structures including retelling stories, answering open-ended questions, giving explanations, describing, recalling, reporting events and processes and defining words (Snow, 1989). The consideration here is to identify the kinds of adult strategies which support children in moving from the adult-supported, scaffolded dialogue context to the more autonomous use of discourse skills in what more closely resembles a monologue context.

Snow (1989) suggests that the construction of oral *texts* such as narratives and explanations, in dialogue and with exposure to the adult scaffolding strategies outlined in the previous section, facilitates children's abilities to produce these kinds of texts by themselves. So, participating in highly structured retellings of familiar events, where parents elicit report narratives or scripts from children, collaborate in

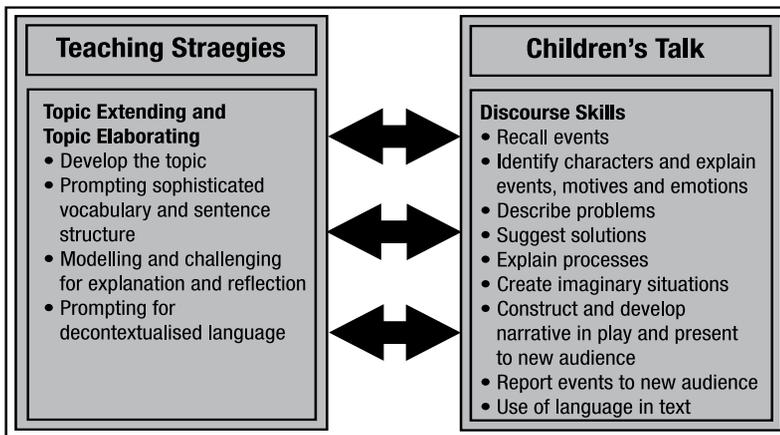
the production of them and provide opportunities for practice and display, may help children to develop skills in autonomous narrative. There is some research evidence to support this hypothesis. In the Peterson et al. (1999) study of parents' scaffolding of children's discourse skills, children whose mothers guided their retellings of personal narratives by providing particular prompts and cues through which the children could structure the narrative, later used these strategies independently in their autonomous constructions of narratives for a non-scaffolding researcher. Snow (1989) also draws from the early work of Ninio and Bruner (1978) to provide useful guidelines as to which adult strategies might support children's development of monologue skills. Here she suggests that shifting the burden of meaning-making more towards the child—with less emphasis on negotiation of meaning by the adult and greater insistence on the need for clear expression of meaning intention by the child—would help the child to move towards the monologue form (Snow, 1989). From this perspective, strategies such as requiring that the child contribute the greater part of the information when recalling jointly experienced events, or, when engaging in discussion on familiar pictures or picture storybooks, would constitute opportunities for the child to practice monologues and to learn about the listener/speaker demands of the monologue form.

Implications for practice

Topic extending and elaborating strategies include: contributing to developing the topic and modelling the use of decontextualised language, including sophisticated vocabulary and complex sentence structures in narratives and expository talk arising from a variety of teaching and learning situations. Talk strategies need to include examples of reflection and explanation and also need to provide opportunities for explanations and reflection, prompting for use of the language of text. These strategies are critically important in

scaffolding children in the use of their developing knowledge of vocabulary and grammar to construct meanings which go beyond observable experience and to use language for a range of purposes which rely on the symbolic function of language, including: recalling events in correct sequence; locating action in stories; identifying central characters and explaining events, motives and emotions; speculating about outcomes, describing problems and suggesting plausible solutions in real life and imaginary situations; using the sophisticated vocabulary, phrases and sentences of a text to narrate a story, describe an event, explain a process; creating imaginary situations; developing narratives in play, and reconstructing these narratives for a new audience; telling personal stories and reporting events of which they have had first-hand experience to a new audience; recalling/reporting processes such as construction with blocks, papier maché, science experiment or cooking, for a new audience. The teaching strategies identified will need to be used to support and challenge children in both dialogue and monologue contexts and to include children whose language is delayed or impaired or who are acquiring a second language. The proposed relationship between teachers' use of extending and elaborating strategies and children's discourse skills is illustrated in figure 4.3.

Figure 4.3: Proposed relationship between teachers' use of extending and elaborating strategies and children's discourse skills



RESEARCH ON PEDAGOGY

This section addresses four key pedagogical contexts in early childhood language development: developing meaning vocabulary, engaging in shared reading, developing a sense of text structure, and engaging in classroom discussion. Although the interventions discussed here are presented independently of one another, in practice there are links between all of them (for example, most language activities would be expected to develop vocabulary knowledge, even if that is not their primary function).

Meaning vocabulary

Numerous studies have shown an association between vocabulary knowledge in the early years and reading comprehension in the primary grades (e.g. Cunningham & Stanovich, 1997; Scarborough, 2001). It has also been established that:

- Initial gaps in vocabulary knowledge can appear as early as 9 months of age (Halle et al., 2009).
- By 18 to 20 months, vocabulary trajectories of children of high socio-economic status (SES) are accelerating away from those of ‘working class’ and ‘welfare’ children, and by 24 months, the trajectory of working class children has separated from welfare children (Hart & Risley, 1995).
- By age 3, children from disadvantaged homes hear roughly 25% of the words that pass the ears of their more advantaged peers, with lack of input having consequences for both quick language processing, and trajectories of language learning and literacy acquisition throughout primary schooling (Hart & Risley, 1995).
- By grade 4, children with below-average vocabulary levels, even if they have adequate word identification, are likely to ‘slump’ in reading comprehension, unable to profit from independent

reading (and hence further exposure to vocabulary) of most grade-level texts (Biemiller & Boote, 1996).

- The mere act of attending school does not raise vocabulary (Biemiller, 2006). Rather, planned instruction must support vocabulary development.

This section looks in detail at ways in which children can be supported in acquiring a knowledge of word meanings in preschool and junior primary school settings.

General principles for teaching meaningful vocabulary

According to Harris, Goldinkoff and Hirsh-Pasek (2011), ideas for developing vocabulary in preschool and kindergarten (infants) children should derive from practices that have been shown to be effective in home settings prior to age 3. Hence, practices such as using gestures (pointing things out in the environment), and honouring children's communicative bids continue to be relevant for vocabulary development. Yet instruction must involve more than simply exposing a child to a new word (an initial 'fast-mapping'). Children need to discern the range of meanings associated with a word through exposure to the word in a range of contexts, and have opportunities to use the word generatively in new contexts. Frequent encounters with a word in a range of contexts (preferably sentence-length utterances) can serve to amplify the meaning of the word and at the same time support the acquisition of grammar (Harris et al., 2011). This view is supported by Nagy and Scott (2000), who show that words are learned incrementally through repeated and meaningful exposures (i.e. more is learned about the meaning (and grammar) of a word each time it is encountered in a new or different context).

Harris et al. (2011) warn that while it is important to teach nouns because they label many concrete and non-relational concepts, other

parts of speech should also be addressed in vocabulary development in the early years, especially relational words (verbs, adverbs, adjectives and spatial prepositions). They identify six principles of vocabulary instruction that are relevant for preschool and early school settings:

- *Frequency is important: children learn the words they hear the most.*
When children hear varied and complex language, they have more opportunities to learn about word meanings and discover grammatical patterns, with effects heightened when the ratio of novel words to known words is high, including ‘sophisticated words’ that children are less likely to know. Book reading (see below), when it involves repeated exposure to vocabulary items (for example, through multiple readings of the same book), can also provide the frequency needed to strengthen vocabulary learning, especially if the book includes words that children are unlikely to know.
- *Make it interesting: children learn words for things and events that interest them.* According to Bloom (2000a), ‘language learning is enhanced when the words a child hears bear upon and are pertinent to the objects of engagement, interest and feeling’ (p. 19). Evidence comes from playful peer interactions which influence vocabulary development. Four-year-olds’ play, in the form of constructing shopping lists, and ‘reading’ story books to stuffed animals was found to predict language and reading readiness in kindergarten (Bergen & Mauer, 2000). When children communicate during socio-dramatic play, they may duplicate the talk associated with particular roles, negotiate the play itself, and participate in commentary about language.
- *Make it responsive: interactive and responsive contexts rather than passive contexts favour vocabulary learning.* This principle is based on the observation that adults, whether parents or child carers, who take

turns, share periods of joint focus, and express positive affect when interacting with children provide the kind of scaffolding needed to facilitate language and cognitive growth (Harris et al., 2011). The effect on language learning is particularly strong when adults provide rich lexical (vocabulary) input (Dickinson, 2001), and engage in cognitively and linguistically enriching conversations (discussions) with children.

- *Focus on meaning: children learn words best in meaningful contexts.* According to Neuman and Dwyer (2009), ‘strategies that introduce young children to new words and entice them to engage in meaningful contexts through semantically-related activities are much needed’ (p. 384). One such context is a play centre or learning station where literacy objects are available, since the availability of such objects can increase the frequency, duration and complexity of peer verbal exchanges. Harris et al. (2011) argue that play guided by adults (‘guided play’) promotes superior learning retention and academic behaviour compared with direct instruction. They note that ‘play is the ideal context for word learning because the child is actively engaged in a meaningful and pleasurable activity, eager to participate with an interested adult, and the language used often has instrumental purposes the child wants to achieve’ (p. 56).
- *Be clear: children need clear information about word meaning.* When a new word is encountered for the first time (e.g. a label for a new object), the child may establish a relatively cursory understanding of a word’s meaning (‘fast mapping’). This needs to be followed up with further encounters with the word in sentence contexts, or the provision of definitions to which the child can relate. Early years children can also benefit from explicit language-based information (e.g. information on the function of a word), which can contribute to their metalinguistic awareness.

- *Beyond the word: vocabulary learning and grammatical development are reciprocal processes.* According to Harris et al. (2011), there are two ways in which children learn vocabulary through grammar and vice versa: (1) by noting the context in which words appear, children gain information about a word's part of speech, and, (2) once a word is known, children detect nuances in word meaning by observing the linguistic contexts in which words appear. A corollary of this is that learning vocabulary is not a matter of learning words in isolation, but of hearing (and later seeing) words in sentences.

Research on vocabulary instruction

Arising from her concerns about the low vocabulary levels of disadvantaged children in the US, Neuman (2011) notes that reading to such children has only moderate effects on oral language development. Hence, at-risk children may need more intensive vocabulary instruction. According to Neuman:

- A combination of explicit instruction (e.g. where the meanings of words are directly taught, including the provision of definitions and examples before, during and after storybook reading, and follow-up discussion on the words in a story) and implicit instruction (e.g. teaching words within context of an activity such as story reading, without intentional stopping or deliberate teaching of word meanings) is more effective than either explicit instruction or implicit instruction on its own.
- Activities to enhance vocabulary should emphasise deep processing whereby children establish rich interconnected knowledge of concepts to drive understanding and comprehension of text. Hence, activities such as play, drama, and problem-solving tasks designed to create connections among words can make words more memorable.

- Effective vocabulary development programmes involve monitoring children's progress on an on-going basis so that instruction can be matched to learning needs. Teacher-developed measures of vocabulary knowledge (e.g. checklists) that document both frequency of usage and level of understanding are particularly effective in this respect.

An application of these principles to the evaluation of vocabulary development programmes for children in preschool and kindergarten in the United States (Neuman & Dwyer, 2009) showed a number of deficiencies including: (1) a mismatch between explicitly stated goals in the scope and sequence of programmes, and the practical manifestation of these within the curriculum materials themselves; (2) a general pattern of 'acknowledging' the importance of vocabulary, with sporadic attention paid to addressing the skills intentionally; (3) pedagogical strategies for teaching words that involved repeating words in choral response was common, with little attention to building sufficient background or conceptual knowledge; (4) little attention to which words to teach ('capricious' selection of words); and (5) limited or no opportunities to practice, review and monitor children's vocabulary learning.

In a related study in which the focus was on classroom practice in a range of early years classrooms, Wright and Neuman (2009) reported that there was little or no evidence of rich vocabulary instruction, that virtually all vocabulary instruction was embedded in activities such as reading aloud (with fewer than one-half of teachers providing instruction in content-rich areas such as science or social studies), that teachers rarely reviewed or repeated the same vocabulary words during instructional episodes (i.e. teachers relied on 'fast mapping' approaches), and that much instruction focused on what children already knew.

Selecting words to teach

If it is accepted that incidental learning of vocabulary may not adequately address the vocabulary needs of all children (e.g. those in disadvantaged circumstances), there is a need to identify a set of words that can be taught explicitly.

As noted earlier, teachers engaged in activities such as shared reading may select words for instruction because they appear in a specific story rather than because children need to learn them. According to Neuman (2011), this approach ignores the power or potential of the selected words to enhance children's vocabulary. Further, the difficulty level of words lacks control, and their importance in relation to specific concepts and content knowledge varies. A number of approaches to selecting words for instruction have been proposed:

- Instruction should focus on words that are partially learned already (between 40–70% of the words that children know). Children should be able to learn such words easily. Further, given the cumulative nature of vocabulary growth, this can accelerate language development (Biemiller, 2006). However, the approach has the disadvantage that children's attention may focus mainly on meaning and may not be drawn to important aspects of syntax such as inflectional endings, plurals, possessives etc.
- Words for vocabulary instruction should comprise sophisticated words of high utility that characterise written language (Beck & McKeown, 2007). Such words are categorised as tier 2 words (see below), where more refined labels are provided for concepts that are already familiar (e.g. *pleasant* for *nice*).
- Instruction should focus on words that help children develop rich content knowledge that enables them to derive meaning from texts in science, maths and social studies (Neuman, Dwyer, Koh &

Wright, 2007). Neuman et al. provide *habitat* as an example of a word that relates to a concept that children will learn in greater depth as they progress through their primary schooling. They also argue that a focus on content-rich words provides a catalyst for learning many related words.

The proposal to teach vocabulary words in conjunction with content knowledge is an important one, and will be revisited in Chapter 7, which deals with oral language development across the curriculum.

Where English language lessons are concerned, there may be value in adopting a thematic approach to selecting words for vocabulary development in the early years (an approach adopted in the Gaelige curriculum, where instruction is built around such themes as *myself, at home, school, food, television, shopping* etc.). If such an approach is adopted, it would be important to ensure that the selected vocabulary challenges children and is presented in a variety of contexts. Within this approach, storybooks and other selected texts that promote vocabulary development could be selected on the basis of their links to an over-arching theme.

Intensifying vocabulary instruction

As noted above, shared reading may not provide instruction in vocabulary that is sufficiently intensive to address the learning needs of at-risk learners. The ‘opportunistic’ selection of words for instruction, insufficient repetition of words to ensure in-depth learning, and the fact that words from different storybooks rarely provide a coherent framework for children to understand words well enough to make inductive inferences have been pointed out as deficiencies of the approach. Although teachers can modify shared reading to make it more effective as a vehicle for supporting vocabulary development (e.g. by including direct explanation of words, by using repeated readings, by deploying dialogic techniques

to engage children in more actively discussing stories and taking part in follow-up enrichment activities), typical modifications may not provide the intensity required by at-risk learners. Hence, Neuman (2011) advocates supplementing shared reading with explicit vocabulary instruction for at-risk children. Such instruction is intended to accelerate vocabulary learning so that disadvantaged children can begin to approach the levels of vocabulary enjoyed by their more able peers (see Chapter 5).

Neuman, Newman and Dwyer (2011) demonstrated the effectiveness of a programme that taught vocabulary to disadvantaged children aged 3 and 4 years. The programme, which involved a year-long intervention, included categorisation of words according to their taxonomic properties. Neuman et al. interpreted the outcomes as indicating that learning words within taxonomic categories may act as a bootstrap for self-learning and inference generation.

Engaging children in shared reading

Shared reading – a parent reading a book to a child, or a teacher reading a book to a class of preschool or infant years children – is often recommended as a way of promoting language and other skills related to early literacy development. In this section, recent meta-analyses on the effects of shared reading on children's language development are reviewed, and implications for parents implementing shared reading at home, and teachers implementing shared reading in preschool and early primary school settings are considered.

In a meta-analysis which examined the effects of parent-child dialogic storybook readings on oral language development (mainly expressive vocabulary), Mol, Bus, de Jong, and Smeets (2008) found moderate effects on overall oral language (expressive and receptive vocabulary combined) for children in the group aged 2-3 years (0.59) but not for children in the group aged 4-5 years (0.14).

Further, they reported that two groups did not appear to benefit from the intervention: children at risk for language and literacy impairments and kindergarten students. Mol et al. interpreted these outcomes as suggesting that parents did not challenge older children during dialogic reading, and that at-risk children may not have been in a position to make inferences (and similar requests) beyond their present abilities.

The US National Early Literacy Panel (NELP) also used meta-analysis to examine the effects of shared reading programmes on children's language and early literacy skills. To be included in the NELP analysis, studies had to use a group design (randomised control design) or quasi-experimental design, and the outcomes had to have appeared in a refereed journal. Nineteen studies qualified, with most lasting between one and six months in duration, and involving a substantive change in learning (for example, engaging the child in actively reading a book rather than passively listening). A few studies involved computerised story books. Most of the shared reading intervention studies measured the impact of the interventions on oral language skills (16 studies). Fewer studies examined the impact on phonological awareness (PA), general cognitive ability, alphabet knowledge (AK), print knowledge, reading readiness, or writing.

Shared-reading interventions were found to have a moderate effect on measures of oral language and print knowledge. Shared reading interventions appear to have no impact on young children's phonological awareness skills or their alphabetic knowledge, though NELP acknowledge that there were too few studies identified to provide reliable effect size estimates for these outcomes. The effect size for oral language outcomes was 0.73. This means that, on average, children who received a shared-reading intervention had a mean score that was 0.7 of a standard deviation higher than children who had not received such instruction.

NELP (2008) also reported that more complex measures of oral language (e.g. grammar, the ability to define words, listening comprehension, and combinations of these measures) were better predictors of later reading achievement than were simple measures of vocabulary (e.g. labelling objects). Nevertheless, effect sizes arising from shared reading intervention were greater for basic vocabulary than for higher-level oral language measures. NELP also reported that:

- Shared reading measures were equally effective with younger (preschool or pre-kindergarten) and older (kindergarten) children.
- Shared reading was no less effective for children at risk of literacy difficulties, compared with children not at risk.
- One form of shared reading (dialogic reading ¹) had a larger effect size than more conventional shared reading, but the difference was not statistically significant.
- Although a larger effect size was obtained for shared reading interventions in which books were provided to children (compared to interventions in which books were not provided), the difference in effect sizes was not statistically significant.
- Effect sizes were not statistically significant for children with low SES versus those with higher-SES, indicating that shared reading is effective both groups.

A third meta-analysis on the effects of 31 shared reading programmes was conducted by Mol, Bus and de Jong (2009) ². They examined the

1 According to NELP (2008), in dialogic reading (DR), the adult reader asks the child or children questions about the story or the pictures in the book and provides feedback to the child or children in the form of repetitions, expansions, and modelling of answers. In DR, the adult tries to facilitate the child's active role in telling the story rather than foster passive listening

2 This followed the earlier meta-analysis in which Mol et al. (2008) looked at the effects of dialogic book-reading provided by parents on children oral language.

extent to which interactive storybook reading, delivered by educators (both researchers and teachers) who had received relevant training, stimulated two pillars of learning to read: vocabulary and print knowledge. According to Mol et al., the nature of a text, the quality of the reading style, and number of times a book is re-read might all be expected to contribute to young children's vocabulary development. Further, although interactive reading (as they defined it) did not specifically focus on supporting the development of print knowledge, interactive reading was found to support this. They reported the following outcomes:

- Interactive reading had a moderate effect on children's oral language skills, explaining 6% of the variance. While interactive reading was especially effective in improving expressive vocabulary, the effect size for expressive vocabulary did not differ significantly from that for receptive vocabulary.
- Interactive reading had more modest effects on three aspects of print knowledge – alphabetic knowledge, phonological sensitivity and orthographic awareness, explaining 4-5% of the variance in each outcome, with older children benefiting more than younger children.
- Experimenters/researchers were more effective than teachers in promoting general oral language proficiency and expressive vocabulary through interactive reading.
- Interactive reading categorised as dialogic³ was, on average, less effective in developing receptive vocabulary, expressive vocabulary, or composite oral language than generic interactive reading; however, researchers were more effective than teachers in eliciting

³ Mol et al. defined dialogic reading as occurring before, during or after reading storybooks and comprising: (i) use of evocative techniques that encourage the child to talk about printed materials; (ii) informative feedback that highlights the differences between what the child had said and what he or she might have said; and (iii) an adaptive adult who is sensitive to the child's developing abilities.

language gains through dialogic reading, suggesting that teacher preparation may be a significant factor in the effectiveness of dialogic reading.

- Interactive reading that was followed up with class activities such as play, art and drama was no more effective in promoting oral language than interactive reading without these follow-up activities.
- High-fidelity interactive reading programmes (those that provided evidence of adhering to the programme) were more effective in developing oral language than programmes that lacked information on fidelity.
- Interventions of shorter duration (less than 16 weeks) were as effective as those of longer duration in improving children's oral language and alphabet knowledge, but were less effective in improving phonological sensitivity.
- Teachers (not researchers) teaching children in whole-class groups achieved stronger language gains than teachers teaching children in small groups, perhaps reflecting a stronger focus on story meaning and vocabulary in large group settings.

The outcomes of the meta-analyses suggest that shared/interactive reading can vary in its effects. In particular, it seems that teacher preparation is a crucial element, particularly for dialogic reading. In addressing this, Mol et al. suggest that teachers should receive several opportunities for feedback and positive reinforcement via 'coaching' (what they term 'social components' of the intervention) in addition to training in more technical aspects of interactive reading, such as the theory behind the intervention. The meta-analysis by Mol et al. (2008) suggests that parents, especially those of at-risk children, may also need additional support to implement dialogic reading effectively.

Developing a sense of discourse structure

This section looks at research on developing children's narrative and non-narrative discourse.

Developing a sense of narrative

The development of a sense of narrative in young children is a key learning experience in early childhood (see Chapter 3). A sense of narrative is important in terms of supporting children's understanding of stories, whether presented orally, or, at a later stage, in print. A sense of narrative also contributes to the quality of children's written stories.

Children's early use of narrative discourse is a powerful predictor of future literacy skills because texts presented for comprehension in academic settings typically require children to interpret complex messages without the support of a conversational partner or shared knowledge with an audience. Schick and Melzi (2010) portray narrative understanding as the 'quintessential emergent literacy skill' as sharing coherent, fully developed stories lays the groundwork for future literacy development and achievement.

Bruner (1986) defined narratives as forms of oral discourse that characterise and facilitate culturally determined ways of communicating lived or imagined events to others. According to Schick & Melzi (2010), narratives are 'a way in which individuals represent and make sense of past experiences, structure and evaluate those in the present, as well as plan and anticipate those in the future' (p. 293). Owens (2012) points out that 'Oral narratives or stories are an uninterrupted stream of language modified by the speaker to capture and hold the listener's interest. Unlike a conversation, the narrator maintains a social monologue throughout, producing language relevant to the overall narrative while presupposing the information needed by the listener' (p. 245).

Labov and Waletzky (1967/1997) identified two key functions of narratives:

- a referential function through the recapitulation of the events experienced
- an evaluative function, through the narrator's subjective interpretation of the experience.

Mandler and Johnson (1977) documented the basic structural elements used by children in narratives, while Stein and Glenn (1979) showed how these elements are organised to create a cohesive story. These bodies of work have contributed to understanding how children develop narrative discourse, and are relevant for reading and writing as well as oral language.

In the ethnographic work of Brice Heath (1983/1996), oral storytelling about personal experiences emerged as a form of discourse used frequently within, around or by children across cultural groups. However, the narrative practices of communities differed with regard to the frequency with which stories were shared with children, the role adults and children played in the creation of stories, and the socialisation functions that narratives played. In many mainstream communities, children were encouraged to share narratives, while in others children were exposed to multi-party interactions as listeners and observers. Hence, children from diverse communities were socialised to include different types of information in their personal narratives. Whereas in some white working-class communities, children were socialised to adhere to literal truth when sharing stories about personal experiences, in some African American communities embellishing one's experiences when sharing a personal narrative was acceptable. Heath's study highlights how purposes and practices of narrative differ in diverse sociocultural communities and how narrative patterns expected and fostered in the classroom may

differ from those used in the homes of some children.

According to Hudson and Shapiro (1991), in order to share and construct a story effectively, children need to rely on a combination of skills from various domains including memory, language and social knowledge. In turn, early narratives lay the foundation for various academic and non-academic aspects of school-related skills.

Importance of early narrative

Early narrative is correlated with, and predictive of, a wide range of essential literacy skills, including increased vocabulary, print knowledge, decoding, story comprehension (Dickinson & Smith, 1994; Snow, Tabor & Dickinson, 2001), morphological and syntactic skills (Sénéchal, Pagan, Lever & Ouellette, 2008) and various writing skills (Griffin, Hemphill, Camp & Wolf, 2004). Early narrative development has also been linked to socio-emotional development, including the creation and maintenance of interpersonal bonds, as well as socio-cognitive skills such as emotional recognition, perspective-taking, and awareness of the human mind and behaviour (Schick & Melzi, 2010). There is also evidence that early narrative skills are related to children's future recall and planning skills (Jack, MacDonald, Reese & Hayne, 2009).

Stadler and Cuming Ward (2005) describe why narration is an important early skill, stating that narratives require more complex language than everyday conversations because children must use explicit vocabulary, be extremely clear with pronouns, and have command of temporal connectives such as 'when' or 'so', enabling children to become higher-level language users before they become readers. They also point out that narratives assist children in moving 'from the sharing function of conversations to the teaching function of written language by imparting lessons based on one's experiences' (p. 73). According to Westby (1991), narrative form facilitates the use

of language to monitor and reflect on, reason about, plan, and predict experiences.

Sharing narratives at school

Narratives shared in classrooms are typically shorter than those shared at home (Dickinson, 1991), while young children are also exposed to more diverse narrative forms and settings in classroom interactions than at home. Over the course of a school day, children may interact collaboratively with both teachers and peers. Sharing narratives about personal experience may occur in activities such as circle time, morning message, or news. Teachers can structure children's narratives by asking questions, and providing information to 'clarify and extend' children's talk (Michaels, 1991). While teachers may try to provide scaffolding to support children's construction of narratives, they may lack knowledge about children's experiences outside of school. Hence, according to Cazden (2001), teachers may be unable to provide the necessary prompts to facilitate elaboration of content. Teachers' ability to scaffold children's narratives may also be constrained by teachers' unfamiliarity with children's narrative styles (Cazden, 2001; Heath, 1983). Hence, teachers may expect, and be more likely to scaffold, narratives that follow a predictable pattern (e.g. topic-centred, with a defined beginning, middle and end). Although teachers may not be familiar with the narrative structures of children in different cultures, it is important for teachers to encourage children to share narratives with them (Schick & Melzi, 2010).

Most studies of teacher-child interactions in classroom literacy environments have focused on book-reading interactions, where understanding of narrative text is often the focus. Talk between teachers and their preschool children (3-5 years) around storybooks is correlated with children's vocabulary and story comprehension

skills (Dickinson, 2001). In contrast to parent book-reading, classroom book-reading has a stronger instructional purpose than a conversational one (the more typical situation at home). Similarly, whereas book-reading at home may often occur on a one-to-one basis, in school settings, it is usually conducted with a group or whole class, so that it may be more difficult to tailor the activity to children's individual needs (Hindman et al., 2008).

Studies show that teachers differ in the style they adopt when sharing books with their classes. Dimensions along which they differ include the degree to which they engage students in pre-reading and post-reading conversations, the number and types of questions asked, and the degree to which the story is enacted (Dickinson, 2001). Teachers have been described as adopting the following styles in their interactions with children around storybook reading:

- A *didactic-interactional* style, which does not engage in pre- and post-reading interactions, but may focus instead on the written text. Although child engagement may be high, the focus is on basic recall questions that are posed after each section of the text, while teachers may also encourage children to chant familiar sections of the text.
- A *performance-orientated* style, where teachers are dramatic and expressive as they read aloud, but where conversation may not be encouraged about the text, even if there is some pre- and post-reading discussion. However, these teachers engage their students in extensive discussion both before and after book-reading, as they discuss the plot in great detail, and link the events to the children's personal experiences.
- A *co-constructive style*, which focuses on the story itself. Teachers adopting this style do not focus much on pre- or post-reading talk, but instead co-construct the story with the child, stopping

frequently during the reading to engage the class in analytical and evaluative talk about the story (e.g. exploring characters' motivations and emotions, analysing the sequence of events) and to draw connections between the plot and the children's personal experiences.

Children whose teachers implemented a co-constructive style had more advanced language and literacy skills both at the end of kindergarten (junior infants) and at the end of fourth grade (Dickinson, 2001). This finding underlines the importance of teachers engaging cognitively with children during book-sharing interactions, and scaffolding their inferential thinking. However, little information is available on how teachers build on culturally-preferred narrative styles of children from diverse backgrounds (Schick & Melzi, 2010).

Children in preschool and in primary school may also share narratives with one another. For example, free play is conducive to the sharing of fantasy narratives (Dickinson, 2001). An approach to studying the quality of children's independent narratives is high-point analysis (Peterson & McCabe, 1983). This describes the "classic" narrative as a series of clauses – linked temporally or causally – that build up to a high point (or climax) and ultimately come to a resolution. Good narratives are viewed as including both referential and evaluative features such as orienting information that contextualizes the events that move the story forward, descriptive detail, and subjective information.

Relatively little research is available on children's interactions during story-telling that does not involve adults. According to Schick and Melzi (2010), the sharing of narratives with one's peers can support children's development of the diverse pragmatic and discursive skills essential to storytelling – skills which may not be as readily facilitated in interactions with adults. Hence, young children should be

provided with opportunities to share stories with one another as well as with the carer/teacher.

Developing a knowledge of other discourse structures

Given the crucial importance of discourse structure for developing academic knowledge, it is important to engage children with forms of discourse structure other than narrative. We have already noted the importance of developing explanatory discourse, which can arise quite naturally from narrative discourse (for example, in the course of constructing understanding of a narrative, children can be encouraged to provide explanations for character actions and other story events). In Chapter 8, which addresses the use of oral language across the curriculum, we look at approaches to teaching informational discourse structures.

Using the morning news to develop language

Wasik & Hindman (2011) note that the morning message can take many different forms, but typically consists of one or two sentences publically constructed by the teacher, by the children, or through interactions with the teacher and children. It is usually presented in a large group at the morning meeting or circle time. The morning message generally communicates information about something that will occur in the classroom later that day, or about a topic related to the curriculum, or recent learning experiences of the classroom that have personal relevance for the children.

There are two critical components of morning message delivery:

1. The message should contain information that has personal relevance for the child in order to capture attention and foster understanding of the content of the message, (Graves, 1994; Wells, 2009).

2. The message provides opportunities for children to actively participate in the construction of print, thinking carefully and explicitly about letters, sounds and conventions.

There is limited research on the effects of the morning message.

However, the following can be inferred, based on the related research:

- Exposing children to print at an early age is helpful in many aspects of learning to read (National Early Literacy Panel, 2008; Snow et al., 1998). Although most children will not encounter instruction in decoding or sounding out new words until kindergarten or first grade, they can begin to develop foundational knowledge in preschool that will later help them to take advantage of this instruction. Such foundational knowledge includes the alphabetic principle (the knowledge that letters and ultimately spoken words represent sounds); concepts of print including directionality of reading and writing and the purposes of punctuation; alphabet knowledge, such as the names and shapes of letters; and sound awareness (the ability to recognise and manipulate the sounds in words). Together these skill sets pave the way for children to learn about concepts of print, word learning and decoding which contribute to reading developing in the early years.
- Although many children require instruction to master these elements, it is important that instruction is delivered through engaging, interactive and age-appropriate playful tasks around meaningful texts (Neuman, 1999). Thus, the morning message (and other similar contexts such as storybook reading) should be developmentally appropriate.

It is preferable for teachers to construct the morning message in front of children rather than simply presenting them with a pre-written message. Children can observe what the teacher does as she/he

thinks about what the message should say, chooses and constructs letters, and places punctuation marks in appropriate places. Teachers should engage in message construction, allowing children to suggest letters and words. In this way, teachers can model print construction for children, and help them model these concepts for one another, thus starting to build children's identities as readers and writers.

SUMMARY AND IMPLICATIONS

From a social-interactionist perspective, the pragmatic use of language, its communicative function, is seen as the driving force of language learning for the child, and the motivation for the child's acquisition of the structural components of vocabulary and grammar (Tomasello, 2003). Related to this, the adult's role is seen as rooted in the desire to facilitate the child's communicative intent and to develop the child's communicative competence. Recent research focusing specifically on developing language and literacy skills in children at-risk for reasons of socio-economic disadvantage, emphasises teacher-child dialogue as the essential teaching and learning context, and the nature and quality of teacher interactional style as the critical factor in predicting children's outcomes (Justice, Mashburn, Hamre & Pianta, 2008; Henry & Pianta, 2011).

Given the importance of teacher-child dialogue in developing language, researchers have sought to classify and evaluate adults' interaction styles. Adults who follow the child's attentional lead – those who label, describe, or comment upon objects, actions or events to which the child is currently attending – are generally facilitative of children's language development, compared with adults who have more directive responding styles, and seek to control children's communicative behaviour and to change their focus of attention. However, early intervention research suggests that directives may be a necessary part of teachers' repertoires of supportive strategies, constituting an adaptive response to children who

themselves are less responsive and who display less differentiated cues to adults during interactions.

An enabling teaching style is also one in which the teacher can initiate the topic or prompt the child/children to achieve joint attention. A feature of an enabling style is that the teacher's talk is adjusted to match the comprehension levels of the child/children. This style can be linked directly to developing the listener-speaker skills component of the curriculum: initiating or responding to a topic; listening and attending to a topic; turn-taking; and contributing in accordance with the listener's needs.

An important pre-requisite for achieving mutual attention and intention is that the children must be interested in and motivated to attend to the topic. Another condition is that, as meaning on any particular topic is co-constructed between the teacher and child/children, the children's contributions are valued and the dialogue builds through the turn-taking contributions of the participants.

Along with particular kinds of interactive style, specific features of adult talk have been identified as facilitative of children's language development. Adult talk or communicative behaviour in the form of imitation, prompts, repetitions, recasts and expansions of children's utterances and the provision of multiple models of vocabulary use and of verb forms in use, for example modelling the use of the passive and active voice, has been shown to support children's acquisition of vocabulary, grammatical structures and verb complexity. Milieu Teaching and Responsive Interaction techniques rely on adult-child dialogue. They are described as naturalistic language intervention procedures through which specific teaching episodes, employing specific talk strategies, can be used in response to children's initiations and can be embedded in the on-going stream of interactions in the early childhood setting.

Findings from the REPEY research project in England indicate that, in the most effective settings, teachers maintained a balance between child-initiated and adult-initiated activities. Whether activities were child or adult initiated, the findings clearly indicate that a defining factor in children's cognitive outcomes was the quality of the adult intervention in extending the child's engagement with, and thinking about, any particular activity. Such work is grounded in Vygotsky's (1978) theory of teaching and learning as a social-constructivist activity.

In addition to promoting dialogue, caregivers and teachers should work towards developing monologue, through activities such as retelling stories, answering open-ended questions, giving explanations, describing, recalling, reporting events and processes and defining words (Snow, 1989).

A number of implications can be derived from research on developing young children's oral language. First, children need frequent encounters with vocabulary and other elements of language before they acquire a deep understanding of word meanings. Further, when words appear in context, children can also gain information about parts of speech and other aspects of grammar. Third, children should be supported in learning words within taxonomic categories (e.g. a fox is an animal). Children in disadvantaged circumstances may need additional intensive vocabulary instruction, including instruction in tier 2 words (those that provide more refined labels for concepts that are already familiar). For all children, vocabulary should also be taught in the context of content-lessons (e.g. science, mathematics), where there is a strong focus on developing conceptual knowledge as well.

Research on dialogic reading involving parents and young children shows reasonably strong effects on oral language (mainly receptive

vocabulary) for children in the 2-3 years range, but less powerful effects for older children aged 4-5 years. This might be interpreted as indicating that parents need support in maximising gains for older children, as well as children who are at risk for language and literacy difficulties. Research involving preschool and infant school children provides mixed results, with one large-scale meta-analysis showing strong effects of shared reading (and dialogic reading in particular) on oral language development, for both low- and high-SES children, and another showing moderate effects for shared reading, and weaker effects for dialogic reading. Significantly, experimenters/researchers were more effective than teachers in general in raising vocabulary knowledge levels in Mol et al.'s (2009) meta-analysis, indicating that extensive teacher preparation may be required if teachers are to significantly raise children's oral language proficiency through dialogic and other forms of interactive reading. Mol et al.'s work also raises questions about the effectiveness of activities that may follow interactive reading such as play, art and drama, and how best these activities can be structured to build on ideas, vocabulary, and sentence structures encountered during interactive reading.

Proficiency in narrative discourse is viewed as an important outcome of early learning programmes, in that such proficiency can impact positively on a range of related outcomes, including social and emotional development and later reading and writing development. Development of narrative skill, whether in the context of recounting personal experiences or stories listened to, provides children with an opportunity to engage in monologue, while using and reflecting on language. This represents a move away from conversational language towards decontextualised language. Teachers who adopt a co-constructive interactional style with children (similar to the enabling style described earlier), where they frequently stop during the reading to engage the class in analytical and evaluative talk about the story, have been shown to be more effective in developing

children's language and literacy skills. Development of explanatory and informational discourse knowledge is also important in the early years, and can be accomplished both in English classes and in other curriculum areas.

A key principle in developing children's early language (and literacy) skills is meaningfulness. Thus, the content of instruction should be meaningful and interesting. For this reason, activities such as the morning news, which is often based on children's personal experiences, can be used to promote language skills, as well as some early reading skills.

CHAPTER 5:
CONTEXTS FOR
LANGUAGE LEARNING

What strategies does research highlight as being particularly effective in supporting children’s oral language development in different language-learning contexts, including children from socio-economically disadvantaged backgrounds, children whose first language is not the medium of instruction, and children experiencing language delay/difficulties?

This chapter considers three broad themes – language and disadvantage, learning English as a second language, and working with children with language delay and impairment.

LANGUAGE AND DISADVANTAGE

The link between a child’s language variety and his/her educational achievement has been the subject of much research in the decades since the 1960s. High rates of underachievement among ‘working class’ children, in particular in relation to literacy development, have been, and continue to be, a matter of serious concern for educators (Clegg & Ginsborg, 2007). The current consensus in relation to the language of these children is that it is different – not inferior, not deficient, not deprived and not restricted (e.g. Feagans & Farran, 1982; McGinness, 1982; Schleppegrell, 2004; Snow et al., 1991; Tizard et al., 1988; Tough, 1982; Vernon-Feagans, 1996; Wells, 1985a, b; Wolfram et al., 1999).

While there is evidence that socio-economic disadvantage can result in differences in children’s spoken language, it is apparent also that these differences may impact on children’s educational success, and may in fact ‘be a major factor in the *tail of underachievement* that is currently the cause of so much concern’ (Locke, 2007, p. 217). The concept of ‘academic’ language, also identified in the literature as ‘literate’ language style or ‘decontextualised’ language, is of significance in exploring issues of language for children in disadvantaged contexts.

This section begins with an outline of the concept of academic language and its importance in the school context. The specific nature of the language of children in disadvantaged contexts is considered after that. Finally, this section examines the connection between SES, familiarity with academic language, and success in school.

Academic language

Cummins introduced a distinction between Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP) (Cummins 1979; Cummins 1980). This distinction led to the introduction of a construct of academic English, a form of oral and written language used throughout schools and classrooms for purposes of management, learning, and assessment (Bailey & Huang, 2011). Conceptions of academic language vary widely (Bunch, 2009) from the binary contrast of Cummins' distinction, through a focus on language as it functions in the school context by teachers and children for the purposes of imparting and acquiring new information (Chamot & O'Malley, 1994), to a definition of academic English as a particular language register that consists of a specific 'constellation of lexical and grammatical features' used in the context of school (Schleppegrell, 2001, p. 432). Language use has also been construed as communication along a continuum, from a dialogue between participants who are intimately associated, through formal group discussions, which while interactive involve a high degree of autonomous processing, to the most formal style of interactive communication such as giving or receiving a lecture (Lloyd et al., 1998). More recent conceptualisations (Bailey & Heritage, 2008) characterise children's language by contexts of use – the social out-of-school context and the academic context of school comprising curriculum content language (discipline-specific language) and 'school-navigational language for...within-school contexts such as classroom management' (Bailey & Huang, 2011, p. 350).

Consensus within the literature would suggest that the linguistic features of academic language are broadly defined in terms of ‘word usage’ (literate language features) and ‘reasoning’ (type of talk) (Curenton et al., 2008, p.164). Literate language features are evident at a **word** level between everyday vocabulary and specialist lexis (Schleppegrell, 2004). Specialist lexis or academic vocabulary is categorised as general academic vocabulary (e.g. *synthesise, explain, construct*), context-specific academic vocabulary – multiple-meaning everyday vocabulary used to convey less-familiar meanings (e.g. *by* in mathematics meaning to *divide*), and specialised academic vocabulary comprising discipline-specific terminology (e.g. *thermal, multiplication*) (Bailey & Huang, 2011). Literate language features are also evident at **sentence** level where more grammatically sophisticated structures are used to convey precise, explicit relationships in academic texts. Grammatical devices which increase the specificity of oral language include the use of, for example, adverbs, conjunctions, elaborated noun phrases, and mental/linguistic verbs (Greenhalgh & Strong, 2001). Adverbs (simple and compound – e.g. *almost, now, often, quickly, right there*) convey concepts of time, place and manner more precisely; coordinating conjunctions (e.g. *and, or, but*) and correlating conjunctions (*both, either, if, then*) provide information about connectivity, while subordinating conjunctions (e.g. *because, since, until, when, after, so, as*) contribute to the organisation of information temporally and causally; mental and linguistic verbs (e.g. *think, know, believe*) inform in relation to speech acts and cognitive states; elaborated noun phrases, where nouns are modified by determiners such as articles, possessives, demonstratives, and quantifiers and/or adjectives contribute to the explicitness of oral reference (Curenton et al. 2008; Curenton & Justice, 2004). ‘Type of talk’ considers talk at the **discourse** level and focuses, for example, on the degree of abstractness (van Kleeck et al. 1997) of talk, the purpose or function of talk, such as explaining, defining, informing, arguing, displaying

new knowledge, following a prescribed format (e.g. narrative, expository) where coherence is maintained across multiple utterances (Bailey & Huang 2011; Curennton et al., 2008).

Academic language and school

In the school context, there is an emphasis on ‘transactional’ communication, referring to communication for the purpose of exchange of information, where the onus is on the individual both to articulate and receive meaning effectively (Lloyd et al., 1998). Mastery of such a style of language requires familiarity with academic English and has been found to be a significant precursor to success in school, since ‘school is an environment that emphasizes flexibility in decontextualised discourse’ (Curennton & Justice, 2004, p. 241).

A range of different language tasks typical of school interaction have been explored, including, for example, sharing time narratives – the talk used during *news time* – (Christie, 1985; Michaels & Collins, 1984), narrative recounts – children recounting *stories of personal events* – (Heath, 1983), descriptions (Schleppegrell, 1998), and definitions (Snow, 1990) among others. Reviewing the findings of this research clarifies that school-based language tasks share many common features which typically occur in the language of school tasks but are less likely to occur in more informal uses of language.

The academic style of language expected in the classroom context is one which involves:

- *interpersonal stance*: characterised in academic language by being detached and authoritative in the style of language used
- *information load*: characterised by conciseness and density of language

- *syntactic organisation of information*: characterised by the use of embedded clauses
- *organising of information* so that information is presented coherently and logically
- *lexicon* characterised by vocabulary choice which is diverse, precise and formal (Snow & Uccelli, 2009, p.118-121).

Impact of SES on language

Individual effects on children's language development of components of socio-economic status, such as education level (in particular maternal level of education), parental occupational status, and levels of income, are not clear, but the effects on language development of SES as a compound variable comprising these differing components is robust and substantial in the literature (Duncan & Brooks-Gunn, 2000; Hoff, 2006b; Locke et al., 2002; Ross & Roberts, 1999).

Pre-school children in poverty have repeatedly been found to score at lower oral language levels than their counterparts outside poverty (Snow et al. 2001; Tomblin et al., 1997; Whitehurst & Fischel, 2000). There is an abundance of research which subscribes to the view that the language of children from non-mainstream contexts (variously referred to in the literature as poverty children, children from *low-income* backgrounds, *working-class* children, *impoverished* children, *minority* children, *marginalised* children) is different from that of their middle-class peers (Benzies et al., 2011; Demie & Lewis, 2011; Lloyd et al. 1998; Nelson et al., 2011; Locke et al., 2002), with boys particularly at risk in this regard (Morisset et al., 1995; Locke et al., 2002). Children from low socio-economic families face heightened risks of underachievement in literacy and language related tasks in school (e.g. Rescorla & Alley, 2001) and have been found to be more likely to be slow in the development of oral language skills (e.g. Juel et al. 1986; Lonigan & Whitehurst 1998; Whitehurst 1996), while

children with poor oral language skills have been found to respond with less success to reading interventions (Al Otaiba & Fuchs, 2006). Children reared in poverty from an early stage in life are more likely to achieve poorly in school as compared with those who experience economic disadvantage later in life (Duncan & Brooks-Gunn, 2000). Also, children experiencing chronic—as distinct from transitory—disadvantage have poorer performances on measures of language skills at school entry (NICHD Early Childcare Research Network, 2005). There are consistent findings in the literature that children who come from homes where parents have higher levels of education and higher income levels have more advanced language skills than other children (e.g. Mantzicopoulos, 1997; Snow et al., 1998; Duncan & Brooks-Gunn, 2000).

Nature of language differences by socio-economic status

Differences are evident across all domains of language, the most reliable observed differences emerging in relation to **vocabulary**, with reduced vocabulary knowledge being identified as a particularly significant obstacle to accessing information in the classroom context (Bowers & Vasilyeva, 2010; Carlo et al., 2004). SES-related differences in the size of children's vocabularies have been repeatedly reported (Arriaga et al., 1998; Dollaghan et al. 1999; Fish & Pinkerman 2003; Hoff, 2003a; Hoff-Ginsberg 1998; Pan et al. 2005). A much-cited longitudinal study (Hart & Risley, 1995) yielded detailed data of the precise nature of vocabulary differences, revealing substantial variation in the observed levels of language development across a range of socio-economic groups. By 3 years of age, children in the study from professional families had produced in the range of 1,100 words, children from working-class families had produced around 750 words, while children from welfare families had produced approximately 600 words. Not only did the study highlight the smaller vocabulary size of some children, but it also found that

vocabulary growth varied by social class, the children from welfare families adding words to their vocabulary more slowly than other children. In addition, the study uncovered significant correlations between vocabulary size at age 3 and measures of receptive and expressive language and reading comprehension at ages 9 and 10, converging with other findings which found that language skills in the pre-school years are significantly related to later oral language and literacy skills (Johnson et al., 1999; Records et al., 1992; Snow et al., 2007; Stothard et al., 1998). These differences emerged despite the fact that families in each of the contexts studied engaged in the fundamental task of child-rearing in similar ways: playing, talking to and disciplining children in nurturing, loving environments (Hart & Risley, 2003).

Differences in **grammatical development** of children by social background have been reported in the literature also. While striking commonalities exist across children in the course and sequence of syntactic development, individual variability based on genetic predispositions to language (Pinker, 1994), and the quality and nature of linguistic input (Huttenlocher et al., 2002) are evident. Studies exploring the existence of an association between SES and syntactic growth have produced different results, some finding evidence of a link (Dollaghan et al., 1999; Huttenlocher et al., 2002), and others finding no evidence of such a link (Noble et al., 2005), possibly due to the limited sample size or range of diversity studied, or as a consequence of the indicators or measures of syntactic growth used (Vasilyeva et al., 2008). A study attempting to address these issues (Vasilyeva et al., 2008), found no systematic variation by SES in the age at which children (between twenty-two months and forty-two months of age) began to produce simple sentences, or in the proportion of simple sentences, declaratives, imperatives, and questions correctly produced, and this despite the finding that the total number of sentences produced at each age varied as a function

of SES (p. 93). On the contrary, however, findings from the study led to the conclusion that there were significant differences across different socio-economic groups in the acquisition and use of complex syntactic structures. Children from the higher SES groups produced complex sentences at an earlier age and had a significantly higher frequency of complex sentences in their speech than children from the low SES group, replicating earlier findings (Arriaga et al., 1998). In addition to frequency of complex sentences, diversity of complex sentences used was found to vary by SES (Vasilyeva et al., 2008) such that children from higher SES groups used a wider range of complex utterances earlier than children from the low SES group who persisted in using a smaller range of complex sentences for longer (p. 94). Differences in the relative frequency of complex structures in the language of older children as a function of SES have also been found (Huttenlocher et al., 2002; Snow, 1999). Children in a low-income sample were found to have an average MLU (mean length of utterance) at age 3 and 9 months which would be typical of children over a year younger according to norms based on a middle-class sample, while at age 5 and 6 months the children from the low-income sample had an average MLU of middle-class children aged three and one month (Snow 1999).

The domain of **communicative style** and language use appears to be particularly susceptible to variation by SES (Hoff, 2006b). It has been found that the communicative purposes to which language is put vary by social class: children with less educated parents use language less frequently for example, to analyse and reflect, to reason and justify, to predict and consider alternatives (Tough, 1982). However, the most significant difference with regard to communicative style of language for the purposes of success in the school context appears to be connected to facility with 'academic' or 'literate' language style, manifested through the use of decontextualised language (Corson, 1983; Bailey & Huang, 2011). Of particular importance here is the

distinction between interactional and transactional language style. Transactional language is used in the exchange of information and is consequently important for success in school. In transactional language use, the onus is much more on the individual to both articulate meaning clearly and to make sense of information provided through language (Lloyd et al., 1998). Research findings consistently indicate that children from low SES backgrounds experience difficulty with discourse-related tasks such as giving explanations, re-telling stories, oral narratives and formal definitions (Dickinson & Snow, 1987; Peterson 1994; Purcell-Gates & Dahl 1991; Walker et al., 1994; Wells, 1985b; Curen-ton & Justice, 2004). All of these language tasks involve decontextualised language use, a language style not encountered frequently in low SES homes (Hart & Risley, 1992; Heath, 1982; DeTemple & Beals, 1991).

Nature of language model

While learner characteristics such as motivation, extraversion, and language aptitude contribute to variability in language development, the role of environmental factors has been the focus of consideration in many studies of child language development (Bowers & Vasilyeva, 2011). Although findings reiterated by Wells (2006) point to better experiences of interaction at home than in school, research findings also highlight variation in the frequency and nature of some patterns of parent-child interactions in the home. In terms of general conversation in the pre-school context, Hart (2000) identifies three conditions which increase the power of such interactions so that children's language development is maximised – attention, amount and partnership (p. 31). The frequency with which such conditions are met was found to vary substantially in the pre-school interactions of children. Optimum conditions for language learning in the home identified by Hart (2000) involve:

- caregivers paying **attention** to children's talk, i.e. *listening* to children
- increasing the **amount** of interaction the child is involved in at home, i.e. *speaking* to children and giving children multiple opportunities to speak
- engaging children meaningfully in the 'social dance of conversation' i.e. **engaging** with the children as real, *meaningful partners* in the conversation (ibid., p. 30).

This means that what each partner says is governed by what the other said, and requires partners to listen, maintain the topic and elaborate to sustain the conversation. Children need to experience conditions frequently where they are heard when they speak, are exposed to rich and varied models of talk, and are engaged as real partners in conversation as distinct from just turn-takers in an interaction.

Much research emphasises the importance of input, specifically the amount of caregiver language (Goodman et al., 2008) and particularly in relation to vocabulary acquisition. A review of relevant literature (Hoff et al., 2002) reports that there is consistent evidence across cultures that, compared with mothers in lower socio-economic settings, mothers in higher socio-economic settings:

- talk more to their children
- encourage children to talk more
- provide children with more opportunity to use language
- use a wider range of vocabulary when talking to their children
- use richer vocabulary in their interactions with children, in particular increasing children's exposure to rare words

- use a supportive conversational style with their children, helping children to attend to language and make connections
- ask more questions
- give more contingent replies to the utterances of their children
- interact more for the purpose of eliciting conversation
- require their children to use more complex and lexically rich language
- produce fewer prohibitions
- issue fewer directives
- give more affirmative feedback (Riley et al., 2004; Weigel et al., 2007).

Other research has identified that home discourse patterns have been found to vary in relation to the contexts in which talk occurs (Hoff, 2006b), which in turn affects the degree of exposure to decontextualised talk the children encounter. This is apparent in terms of the amount of 'non-immediate' talk (De Temple, 2001, p. 39) evident between parent and child, particularly during storybook reading sessions. This type of talk refers to information that is 'not immediately visible in the illustrations or in the text' (ibid.) and tends to involve longer utterances and more complex language. A higher proportion of non-immediate talk was found to be positively associated with levels of both receptive and expressive vocabulary, use of subordinates, and story comprehension (Riley et al. 2004). This is a form of talk which contributes to children's language development and is particularly important as a precursor to the development of literacy skills. Similarly, Katz (2001) found variation in patterns of parent-child talk during play activities. Parents varied considerably in

the amount of pretend talk they engaged in with their children. Pretend talk is also a form of non-immediate talk which involves extended, complex discourse and is related to language and literacy development in the pre-school years. Wide variation in types of mealtime talk was reported by Beals (2001) and this variability has been found to predict later vocabulary development (Dickinson & Tabors 2001; Weizman & Snow 2001). The study focused on the opportunity provided by mealtime for exposure to and participation in narratives, a form of oral language strongly connected to later language and literacy development (see Chapter 4). The frequency with which families use storybook reading, pretend play and mealtime contexts to expose children to new words was examined by Tabors, Beals and Weizman (2001). Exposure to new words was found to correlate positively to later measures of language knowledge and in this study it was found that families varied in terms of the degree to which such contexts were exploited to develop new word knowledge. Where parents did avail frequently of opportunities in the home to engage in extended discourse, focusing on referring to beyond the immediate context, setting up narrative exchanges and extending vocabulary knowledge, children were found to perform better on language and literacy measures (Morgan & Goldstein, 2004; Marvin & Wright, 1997).

The nature and extent of children's experience of interaction in the preschool environment, also referred to as communicative opportunity (Hoff, 2006b) appears to impact on the language acquisition of children. Communicative opportunities involving mutual engagement of a type where mothers are more responsive, frequently produce contingent replies, which are expansions or recasts of children's utterances, are positive predictors of children's language development (Hoff, 2006b, p. 73). It is identified in the literature that many components important for successful language development are less evident in homes of children in poverty, for

example, these children experience fewer language challenges, fewer interactive adult-child exchanges, lower adult sensitivity to topics of interest to the child, and a reduced number of scaffolding strategies used by the adult to facilitate successful child participation in the interaction (Nelson et al., 2011 p. 166).

SES, academic language and school

Social class is strongly associated with achievement in school (Demie & Lewis, 2011). Among the acknowledged contributory factors associated with educational success is the language skills of children, and in particular children's familiarity with academic language (Demie & Lewis, 2010). Given that there are particular expectations in relation to language use in the school context which challenge all school-going children, it appears that some children enter the school context more prepared for those challenges than others (e.g. Cazden, 1972; Heath, 1983; Philips, 1972; Scollon & Scollon, 1981; Schleppegrell, 2001; 2004; Vernon-Feagans, 1996; Lloyd et al., 1998; Watson-Gegeo & Boggs, 1977; Wolfram et al., 1999). This level of preparedness may be a function of their prior language experience: 'some children's ways of making meaning with language enable them to readily respond to the school's expectations, but the ways of using language of other students do not' (Schleppegrell, 2004, p. 21). For some children, the spoken language experienced in the home may not necessarily be the formal language style of school (e.g. Curen-ton et al., 2004; Demie & Lewis, 2011; Schleppegrell, 2001, 2004; Spolsky, 1998; Vernon-Feagans, 1996; Wolfram et al., 1999). A mismatch occurs for these children when attempting to access the education system, sometimes explained in terms of 'the concept of discontinuity' (Edwards, 1997; INTO, 1994; Mac Ruairc, 1997) where 'the culture of the school, predicated on middle-class language style and behavioural norms, makes it appear an inhospitable place' (INTO, 1994, p.29). This has been described by Corson as a 'semantic

barrier', theorising the existence of a 'lexical bar' which 'hinders the users of some social dialects from access to knowledge categories of the school curriculum' (Corson, 1983, p.213). Research findings demonstrate clear differences by SES in relation to children's use of literate language features in the school context (Corson, 1983; Cregan 2007; Cregan, 2010). Cregan's 2007/2010 studies highlight many specific examples of SES differences in literate language use, as well as demonstrating the impact of teacher support and intervention on the development of facility with this style of language among children.

Language and disadvantage: what schools can do

It is suggested that the growth in variability of receptive and expressive vocabulary as children age signals the increasing influence of external factors on language development (Fenson et al., 1994). The prominent sources of external variation are identified as home and early childcare environments (Nelson et al., 2011; Weigel et al., 2007). The significance of facility with oral language in the pre-school years for later development of literacy skills, among others, has led to calls for the improvement of children's early language skills, particularly for children in disadvantaged contexts (Landry et al., 2006). However, studies of early childcare and pre-school environments repeatedly report that opportunities for oral language development are not often seized in these environments (Bond & Wasik, 2009; Howes et al., 2008; Nelson et al., 2011) which are often dominated by directive teacher talk (Dockrell et al., 2010). This is explained in part by lack of teacher knowledge. Teachers readily acknowledge the importance of oral language, in particular for children whose language variety is not that of the institution of the school or care environment and/or whose language skills on school entry are not as well-developed as those of other children (Cregan, 2007; Locke et al., 2002). However, teachers struggle with how best

to respond to this need (Cregan, 2010) and report pressure from external agencies to prioritise literacy development even in contexts where children present with difficulties in oral language (Locke et al., 2002; Wilde & Sage, 2007).

Studies focusing on features of early childcare settings for optimum language development have found that they are characterised by lower teacher-child ratios (Burchinal et al., 1996), have teachers with higher levels of education (Burchinal et al., 1996), teachers who are more experienced, have strong oral language skills and who regularly model those language skills (Bowers & Vasilyeva, 2010; Dockrell et al., 2010; Huttenlocher et al., 2002; Weigel et al., 2005). In pre-school classrooms, teachers' use of rare words is associated with enhanced receptive and expressive language skills (Bowers & Vasilyeva, 2010), and a lower rate of teacher talk to child talk during play, with teacher talk focused on extending children's contributions being found to facilitate child language development (Dickinson & Tabors, 2001). Interactive patterns which involve more caregiver-child interactions that are supportive and verbally stimulating, where adults frequently ask questions and respond positively to children (NICHD, 2000) and use interactive strategies which expand children's oral responses through prompts, open-ended questions, expansions and recasts have been found to have an impact on language development in pre-school contexts (Dockrell et al., 2010). Crucially, the quality of language exposure in the preschool environment has been found to be differentially more important for children from disadvantaged backgrounds (Burchinal et al., 2000).

It has been argued that large gains in language ability may be accrued with 'relatively small shifts in the details of ongoing conversational exchange and social-emotional engagement' (Nelson et al., 2011, p. 166). Important teacher knowledge for oral language development in early childhood education settings includes:

- knowledge of how spoken language is developed
- ability to assess the linguistic development of young children
- capacity to promote spoken language as needed.

This needs to be supported by teachers who are motivated to develop oral language skills and facilitated to provide opportunities for such development (Locke et al., 2002). Intervention studies which have targeted teacher support in early years settings serving disadvantaged contexts have reported an impact on children's language skills (Riley et al., 2004) using approaches such as language enrichment groups (Collins & Dennis, 2009), conversation stations (Bond & Wasik, 2009), narrative thinking and communicative competence, communication opportunity group scheme (COGS) (Wilde & Sage, 2007), talking time (vocabulary development and inference activities; narrative activities) (Dockrell et al. 2010), and shared reading (Zevenbergen, 2003). Features of interventions found to impact most successfully on language gains include quality of instruction, as a function of the expertise of teachers deriving from professional development (Dockrell et al., 2010), multiple exposures to language forms (Huttenlocher et al., 2002), implementation of intentional explicit activities targeted at the specific language needs of the children (Mashburn et al., 2010), using high intensity intervention (Riley et al., 2004; Nelson et al., 2011), with a high frequency of implementation of language activities (Dockrell et al., 2010; Mashburn et al., 2010).

Research suggests that poverty impacts on children psychologically (Bradley & Corwyn, 2002). However, it is important to temper findings in relation to the language needs of children in disadvantaged contexts with findings which stress that even though some children's language skills may be different to those of others, SES-related differences in children's language use are not about

whether children are *capable* of complex language use, but about the *frequency* with which they do so (Hoff, 2006b), and that this is not indicative of reduced cognitive abilities (Locke et al., 2002). A tendency by some teachers to articulate a deficit view of children based on their language style, labelling alternative language styles as *restricted* or *incorrect* or *limited* and judging children's cognitive capacities as reduced based on their language use in school (Cregan, 2007; Haig & Oliver, 2003) must be resisted. It is argued that the construct of academic language must be viewed as another linguistic register, no more complex or more difficult to acquire than any other register (Rolstad, 2005), and one which all students may need to develop for success in the school context.

The consequences for children from disadvantaged backgrounds who underachieve in the school context due to differences in spoken language competence are significant and potentially life-changing. This issue urgently needs the attention of curriculum developers and policy-makers. Despite the fact that research highlights the importance of oral language skills for learning, accessing all that school has to offer, and the critical importance of oral language in the development of literacy, focus and funding continue to prioritise the development of written language skills among children, without giving adequate recognition to the fundamental pre-requisite role of enhanced spoken language skills in academic achievement. Pressurising teachers and children into literacy without first tackling the issues of spoken language competence results in literacy strategies which fail to have an impact where they are needed most, among children in disadvantaged communities (Locke, 2007).

Paralleling reform at policy-making and curriculum development levels must be reform in policy implementation at school level (Cregan, 2010). This requires awareness and belief that change is possible, and a commitment to drive real change in classrooms in

disadvantaged contexts, through improved teacher knowledge of the content and pedagogy of language teaching (oral and written).

According to Locke (2007):

‘... we need an educational or curriculum model where spoken language is promoted for all children through normal classroom teaching and activities and the normal school curriculum. We need to be able to identify the spoken language skills that are most important for progress in school, and especially – since literacy is currently the measure of educational success – for progress in literacy. We need to establish how these skills can best be taught in classroom settings. And we need to train teachers both in what to teach and how to teach it’ (p. 220).

Almost 30 years ago, Corson (1983) advocated the need for recognition that ‘the development of oracy in language is the knowledge and skill area of fundamental importance in education’ (Corson, 1983, p. 10). His proposals for curriculum change remain pertinent:

- Preschool initiation of children into widespread use of the representational function of language (i.e. using language to represent in the present something absent); providing sustained conversation opportunities between children and the widest variety of adults; and a regular use of the hypothetical rather than just the expository mode in teaching styles.
- Infant and lower-primary curricula aimed at enlarging the stock of distinctions available to children that can be later linked overtly to words; making ‘talk’ the chief content item on the curriculum.
- A concentration in upper primary and lower secondary modified

on these aspects of oral language, allowing vocabulary to become a motivated and well-regarded feature of children's performance-level lexicons; oral language across the curriculum (pp.10-11).

SECOND LANGUAGE LEARNERS

All EAL children face the dual challenge of learning English while simultaneously learning through English. This inevitably places huge demands on children (Cummins, 2000; Gibbons, 2002) as well as on their teachers (Hammond, 2008) often resulting in lower than appropriate levels of educational achievement for these children (Thompson & de Bortoli, 2006).

For EAL children immersed in the English language in mainstream classrooms, a powerful instructional approach involves content-based language teaching (Lyster & Ballinger, 2011), an approach adopted also in the *gaelscoil* movement in Ireland. Implementing a pedagogy which has as its focus a meaning and relevance to the wider curriculum is advocated in the new guidelines for teaching EAL within mainstream classrooms in the UK and Northern Ireland. While this is widely recognised as an effective method of L2 acquisition, it poses significant challenges for teachers and demands high levels of teacher knowledge to be implemented effectively. This approach requires teachers to switch between a focus on language on the one hand and a concern for the development of content knowledge among the children on the other (Bigelow & Ranney, 2010). In order to recognise in the first instance and then meet the needs of EAL children in their classrooms, teachers need significant levels of knowledge about language (KAL):

- **knowledge about language (KAL)** – including, for example, an understanding of the phonological and alphabetic systems of their own and other languages and an extensive and explicit understanding of English grammar and an understanding of how

systems of grammars differ between languages; how language use varies according to context

- **knowledge about language learning** – including knowledge of first and second language development, and an understanding of cross-cultural relationships and how cultures and languages can be used as rich learning resources; how language is understood, interpreted and created in different situations
- **knowledge of relevant language teaching methodologies** – including EAL methodologies and literacy teaching methodologies
- **awareness of the linguistic demands of various curricular areas** (Hammond 2008; Bigelow & Ranney 2010; Murakami 2008).

While such knowledge is required of all teachers, it is argued that teachers in classrooms with EAL pupils must have a level of linguistic and cultural knowledge as well as sensitivity over and above that required by other teachers (Hammond, 2008).

Important aspects of teaching strategies and approaches evident in the literature in relation to effectively scaffolding EAL pupils in primary classrooms include a focus on interaction, input, and the use of dialogic teaching.

Shintani (2011) argues in favour of an emphasis on input-based instruction (focusing on comprehension of input in order to produce output) for young language learners in relation to vocabulary instruction. Lyster and Saito (2010) consider the importance of ‘input enhancement’ (p.276) through intonational stress and gestures so that the learner notices the formal properties of the target forms of language. Sepherinia et al (2011) review research on the use of recasts for EAL students – the most frequent method of correction and the

form most conducive to L2 acquisition. They conclude that a significant aspect of recasts involves their saliency – their noticeability by learners which is affected by:

- length of recast
- stress on erroneous language
- number of corrections
- forms – phonological/lexical forms are more noticed than morpho-syntactic forms
- proficiency of learners – developmental readiness, and language proficiency.

Equally important is the concept of ‘interactional feedback’ (Lyster & Saito, 2010, p. 276) where the response focuses on both form and meaning in a context where the student is eager to communicate and is scaffolded by the teacher in the process of communication. Haneda and Wells (2008) argue in favour of the use of dialogic teaching as an appropriate methodology for EAL students on the basis that dialogic interaction in English with L1 peers and teachers extends students’ language experiences since ‘knowledge is most effectively constructed through dialogue arising from jointly undertaken inquiry’ (p. 114). Arguing that interaction is at the heart of communicative competence, involving learners receiving input and producing output, Kalantari (2009) identifies strategies to create effective classroom interaction for EAL students as:

- *questioning techniques* – where students both formulate and answer question, particularly referential as distinct from display questions
- *modification* – where students are supported to negotiate meaning by restructuring an interaction when a communication problem

arises without interrupting and without using the mother tongue

- *co-operative learning* – opportunities for student–student interaction where EAL pupils experience meaningful input and produce output in a supportive environment (p. 426).

Cortazzi and Lixian (2007) provide guidelines for teaching EAL pupils in mainstream classrooms as summarised by Cortazzi & Lixian 2007 as:

- repetition should be balanced by variance in words and phrases that pupils hear
- simplification of words should be balanced by complexity to ensure pupils are progressing
- pupils should be encouraged to take risks to increase confidence in language use
- verbal forms should be complemented with the use of visual support.

CHILDREN WITH LANGUAGE DELAYS AND IMPAIRMENT

As noted in Chapter 3, there can be considerable variation in children’s development of communication and language, with some children affected both by cognitive and language difficulties. This section considers the effects of interventions on children with language delay and impairment. It builds on the work of Chapter 3, which situated delay and impairment on a continuum of language development. In that chapter, it was pointed out that there may be considerable variation in language skills among children with particular language-related syndromes, and children described as having language delay and impairment, making it imperative for teachers to consider language difficulties in terms of children’s individual characteristics as learners.

The literature identifies the critical importance of early intervention in language and communication for young children with developmental disabilities and those at risk for reasons of socio-economic disadvantage (Kaiser & Trent, 2007; Kaiser, Roberts & McLeod, 2011; Kaiser & Roberts, 2011). Kaiser and Trent (2007) suggest that for children with mild general learning disabilities and those at risk from socio-economic disadvantage, early intervention to support language development can ameliorate children's at risk status and may be the critical factor in contributing to a more usual developmental trajectory for cognitive, social and academic skills.

Naturalistic approaches to intervention

Contemporary research on best practice in teaching language and communication skills to young children with a range of disabilities is focused on what is described in the literature as naturalistic interventions using a repertoire of evidenced-based strategies (McBride & Schwartz, 2003; Rogers, 2006; Kaiser & Trent, 2007; Horn & Banerjee, 2009; Kaiser & Roberts, 2011). Naturalistic interventions are situated within the early years curriculum framework, they occur in the natural teaching environment of the early years preschool or school setting and are embedded in the usual teaching and learning activities across the schoolday. Across the literature, there is general agreement on the characteristics of the approach. The following summary is drawn from a range of literature:

- Explicit teaching of target objectives is embedded in natural classroom activities and teaching episodes are distributed throughout the day.
- Teaching is matched to the child's topic of interest in contexts which are highly motivating for the child, is child-initiated and follows the child's lead or is adult-initiated based on the child's object/topic of attention. Where the topic is chosen by the adult, the adult attends to, and follows, the direction of the child's response.

- Adult-child interaction is the context for teaching and learning and adult contingent responsiveness is critical to the process.
- Teaching is focused on identified individual goals.
- Interventions are implemented by the class teacher who has the maximum contact with the child, across the school day.
- Teaching strategies are drawn from both behavioural learning principles and social-interactionist theory and include: prompting, prompting for imitation, reinforcement, time delay, shaping, fading (behavioural), prompting without imitation, modeling, questioning, recasts and expansions, topic supporting and topic elaborating strategies (social-interactionist).
- Teaching strategies are chosen, adapted and differentiated to provide for a maximally responsive environment and to achieve an appropriate match with the child's individual characteristics as a learner (McBride & Schwartz, 2003; Hancock & Kaiser, 2006; Kaiser & Trent, 2007; Horn & Banerjee, 2009; Özen & Ergenekon, 2011).

Incidental and milieu teaching

The term naturalistic intervention serves as a global concept to describe a range of approaches which share the characteristics outlined above. These approaches have been developing in the research literature since the 1980s and have their antecedents in the work of Hart and Risley, with children at risk for socio-economic disadvantage, dating from the late 1960s (Hart & Risley, 1968). In their study published in 1968, Hart & Risley introduced a natural teaching approach which they described as incidental teaching. Rogers (2006) describes this work as derived from and a major advance on, the prevailing models of language intervention which were rooted in behavioural learning theories and laboratory studies

of operant learning. Incidental teaching maintained core strategies from behaviourism such as prompting, shaping behaviour and imitation but it used these strategies in less didactic ways. Hart and Risley (1968) showed the possibility of exploiting the effective use of behavioural techniques in a novel paradigm, one which acknowledged the essentially social nature of language. In the study, children acquired aspects of language content and structure, in child initiated episodes of talk, where there was a pragmatic requirement to use the target structures. In a context where the environment was structured so that children were required to initiate a communication about an object, the adult prompted the word(s)/phrase(s)/sentence(s) following the initiation but before giving the object. Acquisition of the object was sufficiently motivating and rewarding and the communication was rooted in reciprocal, social pragmatic behaviour. In this context, the children showed what is described as a greatly increased rate of descriptive speech. A critical feature of the study was that these gains were maintained and generalised (Hart & Risley, 1968).

The incidental teaching approach has been developed and expanded upon and has been incorporated within a range of naturalistic approaches which have been reported in the research literature in recent years. Variations which are prominent in the literature include prelinguistic milieu teaching (PMT), milieu teaching (MT) and enhanced milieu teaching (EMT) (Hancock & Kaiser, 2006; Kaiser & Trent, 2007). Approaches described as responsive interaction (RI) and pivotal response training (PRT) are also reported (Kaiser & Trent, 2007).

Kaiser and Trent (2007) report empirical evidence for the effectiveness of these naturalistic approaches for children with a range of disabilities. In a review of 13 studies using combined forms of MT and EMT, they report positive outcomes, on standardised measures,

for children across an age range of 11 to 60 months. Participants in these studies had a wide range of developmental disabilities and communication impairments and included children with severe intellectual disability, Down syndrome, cerebral palsy, Williams syndrome, autism, specific speech and language impairment and children described as having significant physical disabilities. Positive outcomes for children included: increase in total number of turns and in spontaneous turn-taking, increase in use of target words both prompted and unprompted, demonstrated increases in mean length of utterance and complexity of utterance as well as diversity of vocabulary. Results of research on PMT show children with a range of disabilities making gains in key aspects of early communicative behaviours including an accelerated use of child-initiated requests and comments and increase in imitations and lexical density (Kaiser & Trent, 2007).

The literature is clear in emphasising that the interventions outlined draw explicitly from both behavioural and social-interactionist principles. They incorporate the evidence-based strategies of the behaviourist paradigm within a social-interactionist framework to provide hybrid approaches for best practice (Rogers, 2006; Hancock & Kaiser, 2006; Kaiser & Trent, 2007). They are presented as evidence-based interventions which take account of the developmental profile and learning characteristics of the individual child and of the social interactive nature of language acquisition and development. The responsive nature of the social-interactive approach which emphasizes reciprocity, following the child's lead, and sensitive modelling of increasingly complex forms along a continuum of development, is complemented by the behavioural focus on tightly structured strategy use for prompting and practice. The aim is to provide for a comprehensive approach to intervention, one which enables not just acquisition but mastery and fluency with generalisation to spontaneous use.

The literature shows continued use and development of forms of naturalistic approaches (Özen & Ergenekon, 2011) and the continued use of tightly structured behavioural approaches merged within social interactive models (Landa, Holman, O'Neill & Stuart, 2011). In a study in the Irish context, McGough (2008) explored the use of a differentiated range of teacher talk strategies to develop communication and language skills, in children aged 3-5 years, in an inclusive, school-based, intervention setting. In this study, the children were considered to be at risk for reasons of socio-economic disadvantage. There was wide variation in children's abilities and needs and the participants included one child with serious language delay and one child at risk for specific language impairment. Findings show a range of strategy use in whole group, small group and one-to-one contexts with more- and less-structured adaptation in an attempt to provide maximum support and maximum challenge to children at varying points along a continuum of learning. The findings show how, for all of the participants, the strategy use supports acquisition of vocabulary and sentence structure while developing understanding and use of expository talk, construction of narrative and use of explanation.

The developmental pragmatics approach

The developmental pragmatics approach to intervention is broadly compatible with those outlined above. It has been developed within the field of autism research and intervention and draws from developmental theory and the social-interactionist model of acquisition in seeking to understand the specific social-communicative difficulties experienced by children with autism (Rogers, 2006). This approach is underpinned by the understanding that the development of intersubjectivity, as demonstrated by joint-attention, intentional communication and social referencing in the nine to twelve month period, is the cornerstone of the child's entry

into language. The development of these social-pragmatic aspects of language, including sharing affect and social orienting, is a central focus and the work is based on structuring the environment to motivate child initiations and following the child's lead. The SCERTS (Prizant, Wetherby & Rydell, 2000) model of intervention; SC (social communication), ER (emotional regulation), TS (transactional support), is a well-articulated model within this approach.

The developmental pragmatics approach shares many of the strategies of milieu teaching and again represents what Rogers describes as a *convergence between developmentalists and behaviourists* (Rogers, 2006, p. 158). However, it leans more strictly towards a developmental approach in that it places strong emphasis on teaching non-verbal forms of communication as the route to verbal communication. It also includes an emphasis on the use of alternative and augmentative symbol systems as alternatives to speech. A particular point of crossover between developmental and behavioural approaches is seen in the use of the Picture Exchange Communication System (PECS) (Bondy & Frost, 1994). Here physical prompting/shaping techniques are used to teach children to hand picture icons to adults to initiate requests. This approach is *solidly behavioural* (Rogers, 2006, p.159) but is accommodated within the broader developmental approach.

Responsive interaction

Responsive interaction (RI) is a naturalistic, play-based intervention strategy used to promote communication and interaction in young children with developmental disabilities. It is characterised by adult contingent response and following the child's lead. The primary features are non-verbal mirroring and verbal responding (Kaiser & Delaney, 1996) and focus on developing reciprocal interactions between adult and child. Responsive interaction is rooted in a social-interactionist/developmentalist approach to communication and

language development and is firmly drawn from observations of typical parent-child interactions (Kaiser & Trent, 2007).

Mirroring is a strategy used to support turn-taking. It is defined as contingent imitation of non-verbal behaviour. It requires the interactive partner to attend closely to the child and enables the partner to make relevant comments and contingent responses. Through verbal responding, the partner is contingently responsive, maps language to the child's activity, models appropriate responses and provides opportunities for the child to initiate and respond in verbal turn-taking routines (Yoder, Kaiser, Goldstein, Alpert, Moussetis, Kaczmarek & Fischer, 1995).

Responsive interaction is compatible with an approach described by Ware (2003) as Responsive Environments and with one described by Nind and Hewett (1994) as Intensive Interaction. Ware defines responsive environments as those in which people get responses to their actions, get the opportunity to respond to the actions of others and have opportunities to take the lead in actions (Ware, 2005, p. 5). Both the responsive environments and intensive interaction approaches are based in typical adult-child interactions and have been developed in work with children with severe, profound and multiple learning disabilities. Ware reports a study with children with profound and multiple learning difficulties where a multiple baseline design was used to demonstrate that when staff changed to more responsive styles of interaction, children began to develop more sophisticated communication behaviours (Ware, 1994).

Augmentative and alternative communication

Current literature identifies the use of augmentative and alternative forms of communication (AAC) as critical early intervention techniques for young children with significant communication and language difficulties (Cress & Marvin, 2003; Ronski & Sevcik 2005;

Fosset & Mirenda, 2007). The literature stresses the need for such interventions in the first year of life from the point when the child's earliest communication behaviours are difficult to interpret (Cress & Marvin, 2003; Ronski & Sevcik, 2005). Research is now focusing on key issues relating to the use of AAC with children in the 0-3 age group who are experiencing delay in early communication and with older children who are operating at this level developmentally (Reichle, Beukelman & Light, 2002; Snell et al., 2010). Augmentative and alternative communication techniques have also been implemented successfully with children in the 3-8 years age group (Cress, 2003; Ronski, Sevcik & Forrest, 2001).

Fossett and Mirenda (2007) identify two primary types of augmentative and alternative communication (AAC) techniques: unaided and aided. Unaided AAC techniques consist of nonverbal means of natural communication including gestures and facial expressions as well as manual signs. Aided techniques require external supports such as communication boards with symbols (pictures, line drawings, words) or a computer which generates speech for the child user (described as speech generation devices, SGDs). Within the literature, there is an emphasis on the multimodal nature of AAC and on the need to make the range of techniques available to children, permitting the use of every mode possible to communicate messages and ideas (Cress & Marvin, 2003; Ronski & Sevcik, 2005). Cress & Marvin describe AAC as a progression of communication skills from early behaviours to symbolic and technological skills. Intervention can include enhancing non-symbolic skills such as gestures and eye gaze as well as vocal and symbolic modes (Cress & Marvin, 2003).

Ronski & Sevcik (2005) outline the different roles AAC can have in early intervention depending on the abilities and needs of the individual child. The techniques can be used: to augment existing natural speech; to provide a primary output mode for

communication; to provide an input and output mode for language and to support language development (p. 178). They quote the example of a 24-month-old child with cerebral palsy and quadriplegia whose comprehension is developing typically but whose attempts at speech are unintelligible because of severe dysarthria. For this child, an AAC system would act as a primary communication output mode in her interactions with adults and other children across a variety of settings. In recent research, Ronski et al. (2010) have shown that teaching toddlers to use speech generating devices during interactions with parents results in more use of AAC communication and in development of spoken words.

Intervention to develop early alternative communication skills in children with developmental disabilities focuses on enhancing children's informal means of communication such as facial expression, gesture, and vocalisations and on expanding their repertoire to include symbolic forms such as the use of pictures for requesting and commenting (Fossett & Mirenda, 2007). Research shows that children who were already able to communicate effectively using gestures or vocalisations found it easier to learn symbol use than children without intentional presymbolic communication skills (Rowland & Schweigert, 2000).

Research is also investigating the use of micro switches as a means of enabling entry to communication and social interaction in children with profound and multiple learning disabilities. The main focus in this research to date has been on the use of switches to teach choice-making both as a discrete skill and as an early step in functional communication (Fossett & Mirenda, 2007) but research is also exploring the potential use of switches for wider communicative purposes (Singh et al., 2003; Lancioni, Singh, O'Reilly & Olivia, 2003) and for stimulating engagement in children with profound levels of learning disability. In a study of identical twins with multiple

and profound learning disabilities (PMLD), conducted by Ware, Thorpe and Mehigan, (2003), children made progress towards developing contingency awareness (the knowledge that one's behaviour can affect the behaviour of another and an early step in developing intentional communication) when they were prompted frequently and consistently to operate a switch connected to a reinforcer. In this instance, the rationale was that the children should have frequent experience of the link between the action and the consequence.

In a recent review of research on simultaneous communication, Dunst, Meter and Hamby (2011) analysed a range of studies which combined sign with oral language to support speech and language production in pre-school-age children with a range of disabilities including autism, Down syndrome, intellectual and developmental disabilities, social-emotional disorders and physical disabilities. In this analysis, results showed that regardless of type of sign language, simultaneous communication facilitated the children's production of speech and oral language.

The literature stresses the need for a revised understanding of the role of AAC in intervention for young children with communication and language difficulties. It identifies the use of AAC in the early years as one of the most exciting areas of communication intervention and calls for further research on developing teaching approaches for AAC (Kaiser & Roberts, 2011). The literature also identifies a range of practices and misconceptions about the early use of AAC which result in the exclusion of young children from interventions. Clear directions for future practice are outlined. The following is a summary of the major recommendations:

- All available modes of AAC should be used to maximize communication throughout the early childhood years rather than

postponing the use of AAC until a consistent delay has been measured over time.

- AAC is a means of enhancing and complementing all forms of communication and its use should not be perceived as ‘giving up’ on use of speech.
- The development of symbolic and technical skills should be seen as progression along a continuum which includes all children who need communication support.
- The technological developments in AAC devices have made a broad range of options available to young children with a range of cognitive abilities and impairments including children with severe intellectual impairments. These options range from simple technologies like single switches to complex systems permitting access to language and literacy skills.
- There is no evidence suggesting that children need to be a particular chronological age to optimally benefit from AAC techniques.

(Summary drawn from Cress & Marvin, 2003 & Ronski & Seveck, 2005).

Language acquisition and development for children who are deaf and hard of hearing

The literature identifies language acquisition as the central difficulty facing most children who are deaf and hard of hearing (DHH) (Marschark & Spencer, 2009). A recent review of international evidence on best practice and outcomes in the education of DHH children was commissioned by the National Council for Special Education (NCSE) and conducted by Marschark & Spencer (2009). Following from this review, an NCSE policy advice paper has been

published (NCSE, 2011). The review outlines the current state of understanding in terms of choice and implementation of methods and supports for language acquisition and development in this population of children. A brief summary of the findings and recommendations is presented here:

- While issues of language have been hotly debated, there is no evidence that one language modality or another is universally superior for DHH children nor does language acquisition in one modality interfere with another.
- It is not possible to predict which children will benefit most from spoken or signed language.
- In the context of early intervention, during the first two to three years of life, children can be exposed to alternative modes of communication and their strengths and needs assessed.
- A programme of cochlear implantation is recommended.
- Most deaf children with cochlear implants function more like hard-of-hearing children than hearing children and many, if not most, require sign language at some point in their lives.
- A programme of provision of Irish Sign Language (ISL) to all DHH children and their families is highly recommended.
- Parental support has been found to be perhaps the best predictor of language and literacy development in DHH children.
- Evidence is minimal for the effectiveness of bilingual (spoken and sign language) education on academic achievement in DHH children.
- Available research points to the need for a range of educational settings including separate schools or programmes and inclusive settings.

- Pre-school programmes for DHH children are recommended. These would provide a bridge between early intervention services and school entry and could offer opportunities for children and parents to obtain support for hearing-related needs, assistive listening devices, sign language and special educational interventions.

(Summary drawn from Marschark & Spencer, 2009).

Intensity in communication and language teaching and learning

The literature on communication and language intervention recognises the advances in research which have identified the kinds of teaching approaches outlined above (Warren, Fey & Yoder, 2007; Nippold, 2011). However, the literature also identifies the issue of intensity as a key variable in determining the efficacy of these intervention approaches (Warren, Fey & Yoder, 2007; Dockrell & Lindsay, 2008). Warren et al. describe treatment intensity as *a dynamic and multifaceted aspect of intervention* (p. 76). They advise that not only do we need to consider duration of exposure to intervention techniques in terms of numbers of teaching episodes per day, week, and year, we need to pay much closer attention to intensity within each teaching episode. This requires clear specification of target goals matched to individual learner needs with equally careful monitoring of the choice and use of strategies which support the achievement of those goals (Warren et al., 2007).

In a discussion on intervention for children with specific speech and language difficulties (SSLD), Dockrell & Lindsay (2008) identify intensity in teaching and learning processes as a central aspect of provision. They make the point that modification of teaching approaches to increase intensity can support learning for children with a range of learning needs and place intervention techniques for

children with SSLD within this general intervention paradigm. They outline a three-tier approach to intervention with increasing levels of intensity in each tier equated with more tightly structured teaching in small group and one-to-one contexts and the use of criterion-referenced tools for monitoring progress. Teaching needs to be clearly focused on target skills, evidence-based, and systematic, explicit and intense. Dockrell & Lindsay stress the need for collaboration between general class teachers and specialist teachers and the importance of keeping the focus on the process of learning rather than the location.

This point is made also in a recent article by Nippold (2011) where she stresses the need for collaboration between classroom teachers and special education teachers in language intervention and includes individual and small group 'pull out' sessions among approaches for effective practice (p. 393). In the study by McGough (2008) quoted in an earlier section, a significant finding was that for the children with serious language difficulties, whole and small group contexts did not provide a maximally responsive environment and amount and quality of talk improved substantially when episodes of talk were structured as one-to-one interactions with the adult.

CONCLUSION

This chapter considered differences in the language of children living in socio-economically disadvantaged circumstances, and the impact of such differences on their achievement in a range of areas. Drawing on the concept of decontextualised or academic language in an effort to understand differences and address them in school contexts, it was noted that recent conceptualisations of decontextualised language refer to the context of language use – social out-of-school contexts, and academic contexts in school involving curriculum content language and school navigational language. Differences in language performance between socio-economically disadvantaged and non-

disadvantaged children encompass vocabulary size, grammatical development, and communicative style. For example, disadvantaged children as a group tend to experience difficulty with discourse-related tasks such as giving explanations, re-telling stories, and giving oral narratives and formal definitions. Some observed differences may be associated with the language input children receive at home or in early care settings, where higher-SES mothers talk more to their children, provide more opportunities to use language, and use a wider range of vocabulary when talking to their children. The nature of the language used in storybook reading can also differ across social groups. A consequence of these differences is that disadvantaged children may be less well prepared for the language-related challenges of school.

Not surprisingly, language differences, such as those described above, have led to calls to improve early language skills of disadvantaged children. Nevertheless, studies of oral language development in pre-school and early years settings suggest that discourse is dominated by teacher talk, while teachers may struggle with how best to respond to children's language needs. Nevertheless, researchers (e.g. Dickinson & Tabors, 2001) have identified features of pre-school and infant classrooms that are associated with effective language development, including use of rare words, lower rates of teacher talk to child talk during free play, and a focus of teacher talk on extending children's contributions. Interactive strategies, which expand children's oral responses through prompts, open-ended questions, expansions and recasts have also been found to be effective. Moreover, according to Nelson et al. (2011), gains in language ability can be achieved with relatively small shifts in the details of conversational exchange and social-emotional engagement in pre-school classes. Prerequisites for effective early language teaching include care-giver/teacher knowledge of how spoken language is developed, the ability to assess the linguistic development of children,

and the capacity to promote spoken language as needed. Strategies such as use of language enrichment groups, talking time, and shared reading have also been shown to be more or less effective in developing children's language skills, with level of intensity being an important variable.

A key factor in understanding language differences between more- and less-disadvantaged children concerns the frequency with which complex language is used, rather than the children's underlying capability. Another critical issue is the pressure brought to bear on schools and teachers to prioritise written language, when children's oral language needs may be considerable. Hence, specific guidance in this matter may need to be provided to teachers.

Another group of children who may struggle in school settings is children learning English as an additional language. One approach that has been identified as being useful in this context is content-based language teaching. This entails maintaining a focus on both language and content during teaching, and, while potentially effective, it requires high levels of knowledge about language among teachers. Other strategies that have been shown to be effective include input enhancement (Lyster & Saito, 2010), recasts and interactional feedback.

Finally, research on children with language delays and impairment points to the importance of early intervention. A range of interventions consistent with the view of language as a developmental continuum, with different children on different points along the continuum, was outlined. Naturalistic approaches to intervention are embedded in natural classroom activities, and may involve prompting, reinforcement, time-delay, shaping, fading, prompting without imitation, modelling, questioning, recasts and expansions. These are based on target objectives, and can include

prelinguistic milieu teaching, milieu teaching, enhanced milieu teaching, responsive interaction, and pivotal responsive interaction. They draw on both behavioural and social-interactionist perspectives. The responsive nature of the social-interactive approach which emphasises reciprocity, following the child's lead, and sensitive modelling of increasingly complex forms along a continuum of development, is complemented by the behavioural focus on tightly structured strategy-use for prompting and practice.

The Developmental Pragmatics approach is presented as an approach that may meet the needs of some children with autism. The development of social-pragmatic aspects of language, including sharing affect and social orienting, is a central focus and the work is based on structuring the environment to motivate child initiations and following the child's lead. It places an emphasis on teaching non-verbal forms of communication as a route to non-verbal communication.

Other approaches considered include Responsive Interaction (a naturalistic, play-based intervention, used to promote communication and interaction in young children with developmental disabilities) and Augmentative and Alternative Communication (ACC) techniques (a suite of multimodal techniques suitable for working with young children who have significant communication and language difficulties arising from autism, Down syndrome, intellectual and developmental disabilities, social-emotional disorders and physical disabilities). The literature indicates that ACC should be used to maximise communication throughout the early childhood years, rather than waiting until a consistent delay has been measured over time.

For children who are deaf or hard of hearing (DHH), readers are referred to a recent policy document by the National Council for

Special Education. The document, which draws on a best-evidence review, stresses that there is no evidence to support the view that one language modality or another is universally superior for DHH children, nor is it possible to predict which children will benefit most from spoken or signed language.

CHAPTER 6:
LINKS BETWEEN
ORAL LANGUAGE,
READING AND
WRITING

How can teachers ensure that children's oral language development supports their literacy development?

The focus of this chapter is on links between oral language, reading and writing. An understanding of the links between oral language and reading and writing can provide insights into how to support children in becoming better readers and writers, particularly those who struggle with aspects of oral language in the early years.

Lawrence and Snow (2011) identified a number of different relationships between oral language and reading, each with a theoretical orientation and each with instructional implications. These can be divided into two broad categories: a literacy skills perspective, where oral language is viewed as a skill or set of skills to be acquired, and a Vygotskian or scaffolding perspective, where oral language (discourse) is viewed as an essential way to move from modelling to application in the 'gradual release of responsibility' model of reading comprehension instruction (Pearson & Fielding, 1991). In other words, comprehension skills are acquired by using oral language. Characteristics of the two perspectives are outlined here.

Literacy skills perspective – oral language as a skill

1. Skill in oral language is a developmental precursor to reading acquisition, implying that supporting oral language skills in early childhood will lead directly to better literacy performance (precursor perspective).
2. Skill in oral language is a prerequisite to reading with comprehension, as specified for example by the 'simple view of reading' (Gough & Tunmer, 1986; Rose, 2006), implying that supporting oral language skills in early and later childhood contributes to later comprehension skills (component skill perspective).

Skill in oral language is crucial to participating in instructional interactions that lead to effective learning of vocabulary and comprehension skills (background knowledge, understanding of argument structure, support for aspects of a situation model and/or enhanced motivation as a precursor to and support for reading). This aspect of oral language is thought to be especially important in the years before the child can read independently, or when children are reading especially challenging texts (scaffolding of component skills perspective).

Vygotskian (scaffolding) perspective – oral discourse as a context for practicing, appropriating and learning reading comprehension skills

3. Participation in oral discourse, taught and practiced in pedagogical approaches such as Questioning the Author (QtA) or Reciprocal Teaching (see below), is a mechanism for learning to experience and internalise responses to a text, that will eventually lead to greater comprehension skill (scaffolding of comprehension processes).
4. Participation in oral discourse, in programmes like Collaborative Reasoning (described below), is a mechanism for practicing the perspective-taking and reasoning skills crucial to comprehension and writing (appropriate perspective).
5. Learning through modelling and practice to produce oral discourse of a sophisticated type (academic language) is, in addition to being a route to better literacy skills, itself a goal of education closely related to literacy, and a marker of full literacy development (autonomous goal perspective).

Hence, there are several reasons why educators might wish to deploy oral language as a means to support reading (and writing) development.

A key related term found in proposals to promote oral language in the service of reading (and writing) is oral discourse. Lawrence and Snow (2011) define oral discourse as ‘extended oral productions, whether monologic or multi-party, centred around a topic, activity or goal’ (p. 323). Oral discourse development involves ‘acquiring the skills uniquely required for participation in oral discourse, i.e. setting aside the acquisition of grammar, vocabulary and pragmatic skills needed for casual conversation, but including the grammar, vocabulary and pragmatic skills needed for lengthier, topic-focused interactions, or for certain genres of monologue (definitions, explanations) even if relatively brief’ (p. 323).

LANGUAGE SKILLS THAT PREDICT PERFORMANCE ON READING TASKS

In this section, we consider links between oral language and two broad aspects of reading: those relating to the development of phonological and word reading skills (the so-called ‘inside-out’ or constrained reading skills) and those related to the development of reading comprehension (‘outside-in’ or unconstrained skills).

Snow, Burns and Griffin (1998) reviewed a broad range of cognitive, linguistic and physical factors associated with reading (and, therefore, reading difficulties) in the early years. They identified weaknesses in oral language (receptive and expressive vocabulary, syntax), phonological awareness (PA, also viewed as a dimension of oral language), and alphabet knowledge (AK) as prime targets of intervention to prevent the occurrence of significant reading problems. According to Snow and her colleagues:

Spoken language and reading have much in common. If the printed words can be efficiently recognized, comprehension of connected text depends heavily on the reader’s oral language abilities, particularly with

regard to understanding the meanings of words that have been identified and the syntactic and semantic relationships among them. (p. 108)

In a similar vein, Lonigan and Whitehurst (1998) identified skills in the domains of oral language, print and letter knowledge, and phonological processing as encompassing aspects of emergent (early) literacy that are related to later conventional forms of reading and writing. Dickinson and Tabors (2002) found the scores that kindergarteners achieved on language measures (receptive vocabulary, narrative production, and emergent literacy) were highly predictive of their scores on reading comprehension and receptive vocabulary in fourth and seventh grades. According to Muter, Hulme, Snowling and Stevenson (2004):

Whereas word recognition seems critically dependent on phonological processes (particularly phonemic sensitivity and letter knowledge), reading comprehension appears to be dependent on higher-level language skills (vocabulary knowledge and grammatical skills (p. 675).

Skills like letter name knowledge, phonological/phonemic awareness, and concepts of print are important for a relatively short time during reading acquisition. By fourth class, only children with significant reading difficulties or special educational needs will continue to require support in these areas. On the other hand, oral language remains an important foundation for reading (and learning more generally) well beyond the initial stages of reading development. If children come to reading with a strong oral language base, they can build further on that base, establishing a reciprocal relationship between oral language and reading (i.e. oral language will contribute to development in reading, which, in turn, will contribute to development in oral language).

Paris (2005) provides a useful framework for assessing the role of oral language and other skills in reading acquisition. He identifies two categories of skills related to reading:

- *Constrained skills* – skills such as early print concepts¹, letter name knowledge, phonemic awareness and oral reading fluency are constrained to small sets of knowledge that are mastered in relatively brief periods of development. They develop from nonexistent to high or ceiling levels during childhood. Constrained skills influence a narrow range of skills (e.g. letter name knowledge or early print concepts influence decoding grapheme-phoneme relations).
- *Unconstrained skills* – skills such as knowledge of vocabulary and syntax are unconstrained by the knowledge to be acquired or by the duration of learning. Developmental trajectories are more uneven than for constrained skills. Unconstrained skills influence a broad range of areas (e.g. vocabulary development is related to linguistic, cognitive and communicative proficiency in wide-ranging ways).

Table 6.1 contains partial lists of constrained and unconstrained skills related to reading.

Constrained Skills	Unconstrained Skills
Letter name knowledge	Oral language – vocabulary
Concepts of print	Phonological memory
Phonemic awareness	Rapid naming
Oral reading fluency	Reading comprehension
Spelling	Writing (composition)

¹ Paris (2005) defines concepts of print as concepts about word boundaries, sentences, punctuation marks, directionality of reading, and other features of text orthography.

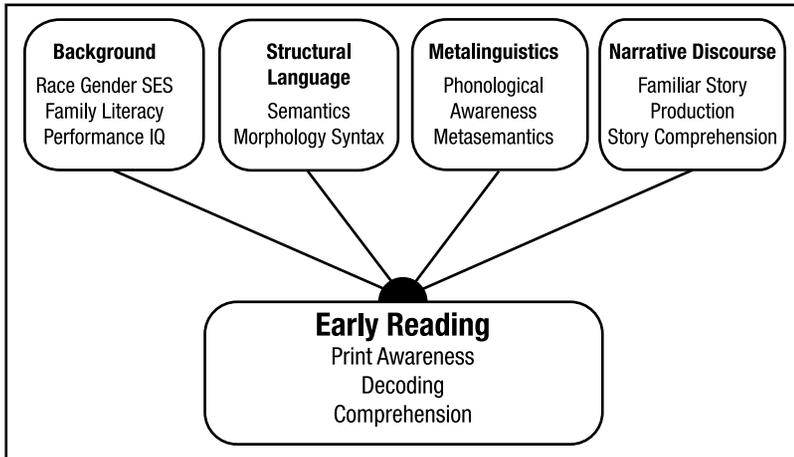
A number of recent studies provide insights in the nature of the relationship between oral language and reading. Roth, Speece and Cooper (2002) examined relationships between oral language (receptive and expressive) and early reading acquisition by conducting a longitudinal study of normally-developing children as they progressed from kindergarten (senior infants) to grade 2 (second class). The framework underpinning the study is shown in figure 6.1. Roth et al. reported that:

- phonological awareness measured in kindergarten predicted real word and pseudo-word reading in first and second grades
- however, phonological awareness in kindergarten did not predict reading comprehension in first and second grades
- two aspects of vocabulary knowledge (oral definitions² and word retrieval³) and print awareness were most predictive of first and second grade reading comprehension
- the contribution of metalinguistic skills, as measured by comprehension and production of lexically ambiguous oral sentences, contributed to first grade word reading to the same extent as phonological awareness
- narrative discourse, as measured by the ability to retell a familiar story and comprehend stories, was not related to reading comprehension performance in first or second grades.

2 Roth et al. describe this task as involving the use of decontextualised language since it entails removing oneself from language and talking about the world beyond the 'here and now'.

3 Word retrieval was measured by asking children to name individually presented pictures of familiar objects.

Figure 6.1 – Conceptual model of background factors, oral language domains, and early reading



Source: Roth et al. (2002), p. 260.

These outcomes indicate that vocabulary knowledge is important for reading development as skilled reading begins to emerge. However, Gambrell (2004) noted that word retrieval includes both phonological and semantic components, and hence represents a confluence of semantic and phonological knowledge. She also noted that another meaning component, metalinguistic awareness, which can be viewed as an aspect of oral language, contributed to word reading in first grade. Roth et al. hypothesised that narrative discourse would begin to have a stronger association with reading comprehension as children mastered word reading and began to read connected text for meaning (i.e. reading comprehension in first and second grades is largely driven by word-level processes such as word identification and understanding of individual word meanings, and it is not until later that narrative (oral language) skill becomes more important for proficient readers).

Storch and Whitehurst (2002) conducted a longitudinal study of children from kindergarten to fourth grade. They found a moderate indirect effect of language on fourth-grade reading comprehension.

The effect was a combination of the relationship between oral language to code-related skills and code-related skills to later reading. They concluded that their model ‘demonstrates that the relationship between oral language and reading skill in the early stages of reading development is mediated by code-related skills, such as phonological processing and print concepts’ (p. 943).

A third study, by the US National Early Literacy Panel (NELP, 2008), sought to identify skills and abilities of young children measured in kindergarten (senior infants) or earlier that linked to outcomes in reading, writing and spelling (conventional literacy skills) in kindergarten or later. Meta-analysis was used to combine outcomes across studies. The following were the main results when decoding was the outcome of interest:

- Conventional literacy skills measured in kindergarten or earlier – decoding non-words (average of zero-order correlations, 0.72), formal spelling (0.60)⁴ and invented spelling (0.58) – were the strongest predictors of later performance on decoding.
- Variables typically associated with early literacy development, including alphabet knowledge (0.50), phonological awareness (0.40), ability to write or write one’s own name (0.49) and rapid naming of letters or digits (0.40) had strong to moderate relationships with decoding, while concepts of print (0.34), oral language (0.33), and rapid naming of objects or colours (0.32) had only moderate relationships.
- Variables that had weak relationships with decoding included print awareness (0.29), environmental print (0.28), phonological short-term memory (0.26), and measures involving visual skills (0.22-0.25).

4 Reference to formal tests of reading or spelling in kindergarten should not be taken to imply that such measures are being endorsed as age-appropriate

When reading comprehension was the main outcome of interest, it was found that:

- Measures of reading readiness (a mixture of skills) (0.59) and concepts of print (0.54) administered in kindergarten or earlier were the strongest predictors of concurrent or later reading comprehension.
- Variables that had moderate to strong relationships with reading comprehension included alphabet knowledge (0.48), print awareness (0.48), phonological awareness (0.44) and decoding non-words (0.41). There were moderate relationships with reading comprehension for decoding words (0.40), phonological short-term memory (0.39), oral language (0.33), and writing words or writing own name (0.33).

When the panel looked at studies that reported multivariate results for predictor variables and conventions of print measures, they found that in some studies oral language continued to be a significant predictor of decoding and reading comprehension when age and socio-economic status were controlled for, but that, in other studies, oral language was not a significant predictor when alphabet knowledge and phonological awareness were controlled.

The moderate effects of oral language in NELP may reflect the fact that most of the studies selected for analysis were not longitudinal. In critiquing the outcomes, Dickinson, Golinkoff and Hirsch-Pasek (2010) argued that:

- NELP failed to describe the pervasive effects of language which often fosters reading through indirect mechanisms – language has impacts on a range of abilities that underpin multiple aspects of early reading.

- the narrow developmental framework (0–6 years) that NELP was asked to analyse does not reflect the duration of the language effect (which extends well beyond beginning reading).
- NELP highlights rapidly developing code-based factors, potentially reducing the attention that practitioners will give to more slowly-developing linguistic and background knowledge (something that would undermine the early and long-term reading abilities of the children most in need of educational supports – those from low-income homes, and those who speak languages other than the language of instruction at home).
- NELP overlooked studies that point to the potential effects of language in the early years on children’s self-regulatory abilities (i.e. their ability to monitor and regulate their learning) (Dickinson, McCabe & Essex, 2006).

Hence, it would seem that oral language can have a pervasive effect on reading literacy development, though effects of oral language on comprehension may not become apparent until after basic decoding skills have been acquired.

ROLE OF ORAL LANGUAGE IN DEVELOPING READING COMPREHENSION

Exposure to extended discourse at home and in preschool or kindergarten years has been identified as a key predictor of later literacy success. Tabors et al. (2001) devised an extended discourse measure made up of engaging in pretend talk during toy-play, discussing information that went beyond that present in text or pictures during book-reading, and participation in narratives and explanations during dinner table conversations. This measure (using data collected at age 3) was a good predictor of oral language and emergent literacy skills in kindergarten. Similarly, extended discourse

in children's preschool classrooms (age 4), defined as frequency of engagement in cognitively challenging talk during group activities such as book-reading and morning circle (news) time, also predicted kindergarten performance.

Several studies have shown that the quality of book reading interactions during the preschool years predicts vocabulary outcomes (e.g. van Kleeck, 2003), and that these, in turn, predict later reading outcomes (Sénéchal, Ouellette and Rodney, 2006). A number of studies have related book reading directly to vocabulary, if the talk is explicitly structured as dialogic, i.e. if there are rich opportunities for children to respond to open-ended questions (e.g. Hargrave & Sénéchal, 2000). Lawrence and Snow (2011) note that the ultimate goal of dialogic reading, learning to retell a story autonomously, constitutes direct instruction in comprehension of written texts, delivered to children at an age before they read those texts. Resnick and Snow (2009) provide detailed examples of oral language activities for children aged 3-8 years that are designed to support aspects of reading development. The examples are based on a standards framework (see Chapter 7).

The relationship between oral language and reading can also be considered in terms of how oral language is implicated in the use of instructional strategies designed to enhance reading comprehension (the Vygotskian perspective discussed earlier). In a study that looked at ways of improving reading comprehension in kindergarten (senior infants) to third grade, Shanahan et al. (2010) identified five clusters of strategies for which there were varying levels of research support:

- Teach students how to use reading comprehension strategies ('strong' evidence).
- Teach students to identify and use the text's organisational structure to comprehend, learn and remember content ('moderate' evidence).

- Guide students through focused, high-quality discussion on the meaning of text ('minimal' evidence).
- Select texts purposefully to support comprehension development ('minimal' evidence).
- Establish an engaging and motivating context in which to teach reading comprehension ('moderate' evidence).

Despite the relatively disappointing research evidence for discussion (i.e. oral language) as an approach to developing text comprehension, Shanahan et al. recommended that

teachers lead their students through focused, high-quality discussions in order to help them develop a deeper understanding of what they read. Such discussions among students or between the students and the teacher go beyond simply asking and answering surface-level questions to a more thoughtful exploration of the text. Through this type of exploration, students learn how to argue for or against points raised in the discussion, resolve ambiguities in the text, and draw conclusions or inferences about the text. (p. 24).

Indeed, Shanahan et al. go further by providing specific recommendations for using dialogue to teach oral language, including the following:

- Structure the discussion to complement the text, the instructional purpose, and the readers' abilities and grade levels.
- Develop discussion questions that require pupils to think deeply about the text.
- Ask follow-up questions to encourage and facilitate discussion.

- Have pupils lead structured small-group discussions.

The lack of research support for discussion for children up to third grade in part reflects a lack of relevant studies involving children this young. It may also arise from a difficulty in separating out the effects of dialogue from the effects of strategy usage in studies that seek to implement both (studies designed to improve reading comprehension usually don't measure effects on oral language as well). Finally, as noted earlier in relation to the NELP study, reading comprehension up to third grade may not involve higher-level thinking, as children struggle to learn and apply decoding skills. On the other hand, several studies have focused on the value of discussion as a means of developing the reading comprehension skills of older children (see, for example, Wilkinson and Hye Son's (2011) review of dialogic approaches to teaching reading comprehension, and Almasi and Garas-York's (2008) research synthesis on comprehension and discussion of text).

An example of a discussion-based reading comprehension technique designed for older students that has been modified for use with younger children is Reciprocal Teaching (Pilonieta & Medina, 2002). Pilonieta and Medina show how the components of Reciprocal Teaching – predicting, clarifying, question generation, and summarisation – can be employed collaboratively by younger children to jointly construct understanding of text with strong teacher support for children when the strategy is initially introduced, and a gradual reduction in support as they become more proficient and begin to apply the strategies to new content and texts. The designation of specific roles to children (the prediction-maker, the questioner, the summariser) and the use of cue cards ensures that children are active participants are important scaffolds. Some of these approaches are embedded in the *Bridges of Understanding* programme developed by the Curriculum Development Unit at Mary

Immaculate College, Limerick. According to Shanahan et al. (2010), comprehension instruction that involves multiple strategies (such as Reciprocal Teaching, and Transactional Strategy Instruction) are equally effective (though not necessarily more effective) as single-strategy instruction in promoting reading comprehension.

Consistent with NELP, Lawrence and Snow (2011) identified a number of oral language development activities that could be used to promote reading comprehension including:

- establishing a purpose for reading
- activating relevant background knowledge
- posing open-ended questions that require deep processing
- responding to student initiatives
- promoting peer interaction.

Lawrence and Snow contrasted these strategies with more routine IRE (initiation – response – evaluation) models which tend to suppress oral language discourse rather than enhance it. They suggested the following lesson frameworks to promote the type of collaborative discussion that facilitates the effects of oral language on comprehension:

- *Reciprocal Teaching* (described above)
- *Collaborative Reasoning* (Reznitskaya et al., 2001, 2008) – a Vygotskian approach that is based on the premise that participation in argument and discussion promotes critical thinking skills, particularly an understanding of the argument schemes that are critical in reading and writing. Collaborative reasoning occurs in peer groups guided by teachers who might prompt students to state their positions clearly, challenge them

with counter-arguments, sum up good arguments, and model good reasoning processes. In evaluation studies based on this model, essays written by students engaging in collaborative reasoning contained more supporting reasons, more anticipatory counter-arguments, more rebuttals, and more arguments than those in a standard teaching condition.

- *Questioning the Author (QtA)* (Beck & McKeown, 2006; Beck, McKeown & Hamilton, 2007) – entails the teacher querying rather than questioning, and requires pupils to provide elaborate responses in their own language and engage with other pupils to determine and co-create meaning. Prompts, which can be asked after each section in a text, include: *What is the author trying to tell you? Why is the author telling you that? Does the author say it clearly? How could the author have said things more clearly? What would you say instead?*

Teachers also provide a range of ‘talk moves’ that help students sustain conversations and model tools for students to do the same. Work in classrooms indicates that introducing QtA can lead to a reduction in information retrieval questions asked by teachers and a significant increase in pupil talk. Beck and McKeown also reported a large increase in the numbers of pupils whose responses gave evidence in their own words of having created a complete situation model of the text (one of the aims of reading comprehension instruction).

- *Accountable Talk* (Wolf, Crosson & Resnick, 2006) requires evidence of participation, linking ideas (from both students and teachers), and asking for and modelling rigorous thinking. In one study involving 21 elementary and middle-school lessons, discourse was evaluated in terms of whether it was accountable to the learning community (participants listen and build their own contributions in response to others), accountable to accurate

knowledge (talk based on facts, written texts and other public information), and accountable to standards of reasoning (talk that emphasises logical connections and the drawing of reasonable conclusions) (Michaels, O'Connor & Resnick, 2008). The outcomes showed that pupil discussion made a significant contribution to academic rigor. Accountable talk has also been used in mathematics lessons and has raised the test scores of low-income students (Chapin, O'Connor & Anderson, 2003). These outcomes can be interpreted as indicating that teachers may need support in using 'talk moves' to support classroom discussion. This includes teacher responses that extend discussion (*Does anyone else want to add to that? Who can say this in their own words? She was probably trying to say... I agree with what Alan said...*).

- **Word generation** (WG) (Snow, Lawrence & White, 2009) focuses on helping students develop vocabulary and academic language skills by ensuring repeated exposure to frequently occurring academic words across various academic disciplines. Although academic vocabulary is the target of instruction, a wide range of literacy and classroom discussion activities and protocols are used which provide opportunities for classroom discussion and for hearing and using new words in engaging contexts. Each week's words are presented in a paragraph that sets up a controversial topic or theme e.g. immigration, school uniforms. The treatment predicted word-learning for pupils, although word-learning gains were small. Word-learning in turn was associated with improved results on state standardised assessments of reading and language arts. According to Snow et al., improvement was not simply a function of the number of words read, but also reflected the level of pupil participation and involvement in class discussions, daily discussion and rigorous debate.

Lawrence and Snow (2011) identified other teaching practices for which there is limited research evidence (and hence, additional research is warranted). These were:

- *Literature circles* which provide opportunities to discuss books, emphasise rich pupil discourse and provide a range of tools for teachers to think about how to help students maintain academic discussion (see the earlier section on teaching reading comprehension).
- *Book clubs* which do not prescribe specific strategies, but give rise to huge variation in how they are conducted. According to Marshall (2006), non-struggling readers benefit from this approach to a greater extent than weaker readers.

Lawrence and Snow conclude by identifying four teacher behaviours associated with effective classroom discussion:

- i. *Modelling* – teachers who model how they handle the reading challenges they meet by ‘thinking aloud’ can help students understand what skilled readers do as they are reading, and thus provide explicit guidance to students on how to do the same.
- ii. *Direct explanation* – teachers name specific strategies and talk about when they should be employed. This can improve students’ use of strategies over the modeling of the strategy alone.
- iii. *Marking* – the teacher responds to a student question or comment in a way that highlights specific aspects of the text. Turning back is a similar move, in which the teacher turns the conversation back to the student by asking ‘What does the author say about this?’
- iv. *Verifying and clarifying students’ understandings* – the teacher re-voices a student comment (or asks another student to do so),

in some cases reformulating meaning, and asks the student if that was what was intended.

LANGUAGE IMPAIRMENT AND READING COMPREHENSION

A third important strand of research in understanding relationships between oral language and reading is that which focuses on the reading performance of children with language impairment.

Catts (1997) identified six language-related indicators that may signal that children are at risk of later problems in learning to read:

- limited speech-sound awareness
- problems in word retrieval
- limited verbal memory
- limitations in speech production and/or perception
- difficulties with oral language comprehension
- limited oral language production (related to difficulties with syntax, productivity, narration and/or perception).

These indicators are linked to two broad language-based predictors of reading outcomes noted earlier: general language abilities, including vocabulary and syntactic knowledge, and phonological awareness. Snowling (2005) argues that when children have difficulty in learning vocabulary and constructing meaning from syntactic structure, they are likely to have both persistent language difficulties and reading problems. According to Kaiser, Roberts and McLeod (2011), the timing and extent of developmental disruptions that affect primary acquisition of oral language will be reflected in difficulties in learning to read, with mild disruptions in language development (e.g. productive language delays in typical late talkers) having modest

effects on reading, and persistent oral language difficulties having a strong negative impact on reading. Several reviews of the literature on reading acquisition (e.g. Snow, Burns & Griffin, 1998; NRP, 2000; NELP, 2008) attest to the importance of phonological awareness in general, and phonemic awareness in particular, in children's early reading.

Kaiser, Roberts and McLeod (2011) make the following points about language impairment and reading:

- Language is a complex system that depends on many different developmental processes including general cognitive processes such as short-term memory, language-related cognitive abilities, perceptual and auditory processes, and motor abilities for speech production.
- Acquisition of both oral language and reading is affected by children's global development of skills for learning the phonological, lexical and morpho-syntactic systems.
- Links between early language impairment and problems in learning to read are complex and robust.
- Children with language delays vary greatly in the source of their impairments, and these variations have implications for the nature and severity of subsequent difficulties in learning to read.
- Early intervention and assessment of children's response to language intervention are essential to preventing persistent language delays that may affect reading.

Children with language impairment who are at risk of reading difficulties can be grouped into the following broad categories:

- *Children with developmental disabilities* (global developmental delay), including: those with motor impairment (e.g. cerebral palsy and

severe oral dyspraxia); Down syndrome (where early language acquisition is similar to typical children around 24 months, but where later development follows a pattern of significant receptive and productive delays, with relatively later delays in complex syntax than in vocabulary development); children with autism spectrum disorder (who have difficulty interacting socially with others and therefore face limited opportunities for language development); children with hearing and other cognitive impairments (where the extent of the delay varies with age of identification of hearing loss and adequacy of early intervention to improve hearing, and ensure access to speech and language input); and children with undetected mild hearing loss (where there may be effects on both oral language and reading).

- *Children with language delays and typical cognition* (specific language disabilities) including: children for whom the emergence of language is late at 24 months (though most recover, a minority show persistent delays, which may reappear in the early school years, and impact negatively on reading development); children with concurrent delays in receptive and expressive language (a majority of these children show persistent patterns of language impairment); and children with expressive and receptive delays and mild cognitive delay.
- *Children with language delays and behaviour problems* – among children with identified language impairment, rates of prevalence of behaviour problems have been reported to range from 30–60% (Kaiser et al., 2011), with increased behaviour problems often associated with lower social/pragmatic skills. However, it seems that poor social competence rather than behaviour problems may be the critical correlate of low expressive language development (Horwitz et al., 2003).

- *Children from socio-economically disadvantaged backgrounds* – as noted earlier, children from socio-economically disadvantaged backgrounds are at increased risk for delays in vocabulary acquisition, and this may also impact on general language skills (Hoff, 2006). This in turn increases the risk of later reading difficulties. The amount of book reading, exposure to text, and teaching about sounds and words differs between disadvantaged children and children growing up in more favourable circumstances.

LINKS BETWEEN ORAL LANGUAGE AND WRITING

Many of the recommendations for enhancing reading through the development of oral language discourse are also applicable to writing. For example, we can conceptualise writing as comprising lower-order (constrained) skills such as spelling, on the one hand, and higher-order (unconstrained) skills such as knowledge of text genres and sensitivity to author and audience on the other. As with word-reading, oral language contributes to the development of the phonological processes underpinning spelling. Indeed, spelling often appears alongside oral reading as a measure of early literacy skill. But, for most children, spelling improves quite rapidly in the early years of schooling. On the other hand, children's understanding of text genres (e.g., narrative, argumentation) takes time to evolve, and can be supported by the types of discussion or discourse that occur around texts that pupils have read. There may also be value in providing explicit instruction in how to structure writing (e.g. Lewis & Wray, 1995; 1998). Lewis and Wray show how writing frames can support children's writing development not just in English classes but across the full curriculum.

A large body of research has documented the connection between reading and writing (Pearson, 1990; Fitzgerald & Shanahan 2000) and the strategic processes underlying both activities. The cognitive

operations for reading and writing draw on similar sources of knowledge (Clay, 1991; Rumelhart, 1994). As children read, they search, monitor, and self-correct using meaning (semantics), structure (syntax) and grapho-phonetic information (sound-letter-word patterns) (De Ford, 1994). As they write, they use their oral language, their knowledge of the conventions of print, and graphophonic information (Anderson & Briggs, 2011). The explicit language used by teachers can help children to make connections between reading and writing. Table 6.2 illustrates the common ground between reading and writing and suggests the strategic processing involved in both reading and writing.

Table 6.2: Processes common to reading and writing

Strategic processing	Child as writer	Child as reader
Searching for meaning	Generates ideas with audience in mind	Uses print to construct meaning
Monitoring for meaning	Checks 'Does the message make sense?'	Checks 'Does this word/phrase make sense?'
Attending to structure	Groups words together in phrases to express message	Anticipates the order of words based on knowledge of book language and oral language
Monitoring for structure	Checks the order of the words supporting the intended message	Re reads (out loud or holds message in mind) 'Does this sound right?'
	Writing (composition)	
Searching for grapho-phonetic information	Uses knowledge of how letters, words, print works to record message	Seeks out grapho-phonetic info from print in relation to meaning and structure
Monitoring for graphophonic information	Checks, detects and proofreads for discrepancies between intention and input	Checks that the print represents the message
Self-correcting	Detects and corrects	Detects and corrects

Adapted from Anderson & Briggs, (2011)

Finally, the creative potential of writing should not be overlooked, and opportunities should be sought to engage children in creative thinking, both before and during writing activities (Cremin et al., 2006).

CONCLUSION

We examined links between oral language and literacy, and, in particular, ways in which oral language can support literacy development and vice versa. A distinction was made between oral language as a skill upon which future success in reading (and writing) is based, and oral language as a context for learning and practising reading skills. The former view highlights the links between oral language and later phonological processing and reading comprehension. The latter stresses the important role of the teacher in promoting high levels of cognitive interaction, including fostering children's engagement in extended oral language discourse and scaffolding children as they deploy strategies and engage in perspective-taking and reasoning.

The literature indicates that, whereas early oral language is highly predictive of constrained skills such as letter-name knowledge, concepts of print, phonemic awareness and oral reading fluency in the junior classes in primary school, its effects on unconstrained skills such as vocabulary knowledge, phonological memory and reading comprehension is less clear. Indeed, it may not be until fourth class or later that the real effects of work on vocabulary knowledge (particularly academic vocabulary) and knowledge of discourse (e.g. narrative discourse) impact on reading comprehension. This may be because the texts that younger readers encounter in their early reading depend more on decoding knowledge and understanding of individual word meanings than on higher-level oral language skills. Nevertheless, the evidence supports the teaching of oral language and reading comprehension from pre-school onwards, so that children can begin to bridge the gap between basic reading texts encountered in early reading instruction, and the more complex texts that they encounter from third or fourth class onwards, not only in English classes, but across the curriculum.

The research literature has identified a number of approaches to teaching reading comprehension that draw heavily on oral language, including discussion. For example, instructional activities that teach children how to use reading comprehension strategies and instruction on strategies that involve identifying the organisational structure of texts have been shown to have high or moderate impact on reading comprehension. It is not clear how these strategies impact on oral language since it is generally not possible to separate out the effects of the strategy from the effects of language usage on development (most studies of reading comprehension have reading comprehension rather than oral language as their outcome).

Despite the fact that some studies involving early learners have shown disappointing effects for discussion-based strategies on children's reading comprehension, researchers (e.g., Shanahan et al., 2010; Lawrence & Snow, 2011) strongly recommend the use of comprehension strategies that place a strong emphasis on oral language usage. These strategies, which target young children, include: structuring post-reading discussion questions so that they require children to think deeply, asking follow-up questions that facilitate discussion, and having children lead discussion groups. Lawrence and Snow identify specific reading strategies such as reciprocal teaching, collaborative reasoning, questioning the author and accountable talk that are designed to foster pupil engagement in discussing texts. Features of effective instruction include modelling by the teacher, direct explanation of reading comprehension strategies, marking (where the teacher responds to a student question or answer by highlighting a particular aspect of the text), and verifying and clarifying students' understandings. Children should also reflect on their use of reading comprehension strategies, so they can better understand when it is appropriate to use them (metacognitive knowledge).

The research on language impairment confirms that two clusters of oral language abilities, phonological awareness on the one hand, and general language abilities (e.g. vocabulary knowledge, syntactic knowledge) on the other are predictive of later reading ability. Moreover, when delays in language development occur, they are likely to impact on literacy performance. For example, children with Down syndrome develop oral language in the normal way until around 24 months, and then experience significant receptive and productive delays. Children with autism may not benefit from the levels of social interaction that sustain language development. Children with concurrent receptive and expressive delays may also experience severe language impairment. Early intervention is strongly recommended for these and other at-risk groups so effects on reading development can be minimised.

Young children's writing (composition) development can also be supported by engaging them in language-based activities. For example, instruction in identifying the structure of text genres (which is sometimes embedded in reading instruction) can also form a part of the preparation of writing. Similarly, children can describe and explain their own written texts in the same way as they explain texts they have read. Reading and writing share several key cognitive processes, and it is important to promote an awareness of these in young children.

CHAPTER 7:
ASSESSMENT OF
LANGUAGE AND
PLANNING FOR
INSTRUCTION

What practical advice does the literature offer on assessing and planning for progression in children's oral language development (with reference, where relevant to stages in language acquisition):
a. at teacher/classroom level?
b. at school level?

Aistear (NCCA, 2009a) defines assessment as 'an ongoing process of collecting, documenting, reflecting on and using information to develop rich portraits of children as learners, in order to support and enhance their future learning' (p. 30). To us, this seems a good working definition of assessment, and one that could underpin the assessment of oral language in preschool and classroom settings.

Assessment of oral language is particularly challenging, whether it occurs in the context of classroom work or programme evaluation. Some years ago, one of us (Cregan, 1998) noted that, compared with reading and writing. . .

Growth and development in terms of oral language is very difficult to see. . . Though not impossible, it is a remarkably slow, difficult, painstaking and cumbersome process to assess a child's oral language development, and to determine the level of competence reached. This makes it remarkably difficult to see what has been achieved and to plan for future development (p. 5).

Part of this difficulty arises from the non-linear growth of oral language after the initial stages of acquisition (0-5 years). Children may return repeatedly to an aspect or stage of competence that had been achieved earlier, to experiment with language or to reinforce their skills. Hence, it may not always be obvious that growth has occurred. Other challenges include:

- The ephemeral nature of talk, that requires teachers to observe and listen closely to the processes of learning as they happen. In contrast, writing is more permanent and can be scrutinised at any time.
- The combination of speaking and listening – sometimes both may be present; at other times, one might dominate the other.
- The range of factors that can impact on performance, including
 - the type of task that has been set to stimulate the use of talk
 - the nature of the audience and the listener (e.g. participating in a group situation, conferencing with the teacher on a one-to-one basis, or reporting to the class as a member of a group)
 - the child’s interest in and ownership of the task
 - the child’s previous experience in using speaking and listening under similar circumstances
 - the child’s gender and that of other group members
 - the composition of the group within which the child is functioning (for example, the levels of proficiency of other children in the group).

As noted in Chapter 1, some attention has already been given to the assessment of oral language in the context of *Assessment in the Primary School Curriculum: Guidelines for Schools* (NCCA, 2007), and in the context of *Aistear*, the curriculum framework for early childhood. In *Assessment in the Primary School Curriculum*, the NCCA put forward specific strategies that could be used to assess children’s oral language including skillful use of questioning (by teachers and children) targeted child observation (linked to specific curriculum objectives) and shadow studies (where children are tracked through the different

stages of a language-based activity). Examples were provided to demonstrate how teachers could record the outcomes of assessment from these activities for later use. The examples illustrated how teachers could draw inferences about young children's language development (including possible language delay) in both structured situations (teacher-child conferences) and unstructured ones (getting dressed to go home). In discussing *Aistear* in Chapter 1, it was noted that the communication strand laid out specific aims (e.g. children will use non-verbal skills; children will use language) and learning goals (e.g. interact with other children and adults by listening, discussing and taking turns; using language for giving and receiving information). It was also noted that *Aistear* described five approaches to assessment that could be used in the context of assessing oral language (self-assessment, conversations, observation, setting tasks and testing). A question which arises in relation to the *Aistear* framework, which is targeted at children from 0-6, is whether it might be usefully extended to age 8, or higher. The relevance of the *Aistear* model across language learning more generally should also be considered.

Many reviews of assessment now make a distinction between formative assessment (assessment for learning), where assessment information mainly feeds into instructional decision-making, and summative assessment (assessment of learning) that involves generating an overall summation of a child's performance at the end of a programme of study or the end of the school year (e.g., NCCA, 2007). The distinction may not be very useful for classroom-based assessment of oral language, where most assessment is formative in nature (i.e. teachers and sometimes children gather assessment information in real language contexts and use this as a basis for future learning). Such information is generally based on language in action, or on children's use of language in authentic classroom contexts.

This chapter is divided into seven sections. First, general principles for assessing young children are considered; second, aspects of oral language that should be assessed are identified and presented in the context of a specific framework for oral language; third, alternative frameworks of oral language are considered; fourth, the role of parents in providing assessment information on language development is considered; fifth, a range of tools that can be used to assess language in classroom contexts is examined; sixth, approaches to assessing children with specific speech and language disorders are considered; and seventh, the assessment of children for whom English is an additional language is discussed.

GENERAL PRINCIPLES OF AND APPROACHES TO ASSESSING YOUNG CHILDREN

In 1998, the US National Education Goals Panel (NEGP) devised a set of principles for assessing young children (0-6 years). According to the panel, assessments should:

- bring about benefits for children (i.e. informs children's learning)
- be tailored to a specific purpose and be reliable, valid, and fair for that purpose
- bring about and reflect policies that acknowledge that as the age of the child increases, reliability and validity of the assessment increases
- be age-appropriate in both content and methodology of data collection
- be linguistically appropriate, recognising that to some extent, all assessments measure language
- value parents as an important source of assessment information, as well as an audience for assessment results (p. 6).

NEGP recognised that the purpose of assessments is to support learning, identify special needs, evaluate programmes, monitor trends, and serve high-stakes accountability requirements. It noted that the same assessment tools should not be used for multiple purposes (e.g. classroom assessment, accountability purposes).

The general approach to assessment of oral language for children from 3–8 years is performance assessment. Performance assessment refers to assessment that involves either the observation of behaviour in the real world or a simulation of real life (Weigle, 2002). Performance assessment involves making decisions by checking performance against criteria, rather than comparing a child's performance to the average performance of children in the same age range.

We can identify a number of principles of performance assessment:

- Children are active participants rather than passive subjects. Teachers can obtain information on children's ability to use language in communicative ways.
- Children engage in language-usage tasks where they have the opportunity to show their ability to use language, exchange meaning according to their own purpose, and in spontaneous ways.
- Processes as well as products are evaluated.
- Multiple indicators and sources of information are collected over time.
- Assessment results are used to plan instruction and improve classroom practice.
- The assessment process is collaborative among parents, teachers, children and other professionals as needed (Jalongo, 2000, p 287).

In addition to performance assessments, it will be important from time to time to administer norm-referenced tests of oral language. These standardised tests make use of elicited language behaviour to draw inferences about performance. They play an important role if the goal is to determine the normalcy of a child's language learning. While a large range of tests is available, they vary widely in quality and focus.

Whether teachers use performance-based assessments or standardised tests to assess aspects of language, it is important to ask the following questions:

- To what extent are results reliable?
- To what extent is there construct validity?
- To what extent is the assessment task authentic?
- To what extent is the language task interactive?
- To what extent is the assessment task practical?
- To what extent is the impact of the assessment positive?

Finally, Snow and Oh (2011) remind us that, in assessing young children, it is important to ask who is being assessed. This signifies the importance of taking the age of children into account as well as the extent of any disabilities they may have, and whether or not the language of the home is also the language of instruction.

ASPECTS OF ORAL LANGUAGE THAT SHOULD BE ASSESSED

This section considers those aspects of oral language that should be assessed in children aged 3-8 years. It is based on content presented earlier in this report. Although, in practice, different aspects of language will be assessed in combination, the various elements of oral

language that could become the focus of assessment are presented here.

In Chapter 1, we reviewed the structure of the current Primary School English Curriculum, and noted that the (now) strands for oral language were: receptiveness to language, competence and confidence in using language, developing cognitive abilities through language and emotional and imaginative development through language. We noted that reviews of the curriculum implementation suggested that some teachers may have had difficulty understanding this framework, even though the (now) strands are replicated across reading and writing as well as oral language.

We believe that the framework introduced in Chapter 3 (and replicated in figure 7.1, with some additions) provides a possible framework for assessing oral language. It covers three broad aspects – listener-speaker skills (which incorporate aspects of pragmatics), language use (including language functions) and language content and structure (expanded to include discourse structure and phonology).

The framework might also be applicable to reading and writing with some modifications (table 7.1). For example, listener-speaker skills could be reconfigured to encompass reader-author relationships, language use could be reconfigured as purposes of reading and the list of processes could be expanded to include higher-order reading skills (infer, interpret and integrate, examine and evaluate), while content and structure might be modified to include phonological processes. Similarly, for writing, listener-speaker skills could become writer-reader skills, language use could become uses of (purposes for) writing and the phonology component of content and structure could incorporate spelling (see Appendix 7, Figures A7.1 and A7.2).

Figure 7.1: Components of the language system as a framework for assessment

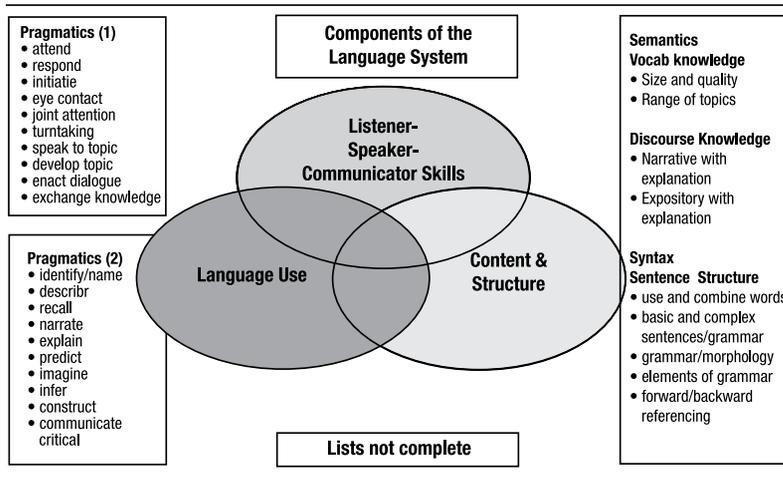


Table 7.1: Parallel components for assessment of oral language, reading and writing

Oral language	Reading	Writing
Language Uses	Reading Processes	Writing Processes
Content and Structure	Content and Structure	Content and Structure
Listener-Speaker Skills	Reader-Author Skills	Writer-Reader Skills

In figure 7.1, meta-language skills are included as an element of the content and structure of oral language. At the preschool level, Owens (2012) describes them as including: checking whether the listener has understood, and, if not, repair or try again; commenting explicitly on own utterances and those of others; and correcting errors. At school-going age, they are described as including: predicting the consequences of using particular forms (e.g. inflections, words, phrases, sentences), and reflecting on an utterance independently of its use (e.g. providing a definition of a word; constructing puns, riddles or other forms of humour, and explaining why some sentences are possible and how to interpret them). These are consistent with the two broad dimensions of metalinguistic knowledge identified by Bialystok and Ryan (1985) in their influential article on the subject – analysed knowledge and control of processing.

It is a matter of debate as to whether explicit learning outcomes should be developed for each assessment component (listener-speaker relationships, language uses and content & structure) and for each subcomponent (e.g. narrative content structure, grammar, morphology). As noted in Chapter 3, there is considerable variation among children in how quickly and how extensively these different elements develop. Nevertheless, textbooks on oral language development (e.g. Owens, 2012) often provide detailed lists of what is to be expected at each age level, even after children emerge from the critical 0-3 years age range. In the next section, we review how assessment of oral language is viewed in *Aistear* and in assessment frameworks built in other countries.

Snow and Oh (2011) point out that, while some aspects of language related to literacy (e.g. phonemic awareness) have been well-catered for in terms of the development of assessment tools, other areas, such as academic language and emergent book-reading, have not. Snow and Oh express this with reference to inside-out skills designed to support children's understanding of the alphabetic principle (the link between letters and their sounds), and outside-in skills (e.g. concepts of literacy, language skills needed to tap complex learning domains), which are more difficult to assess, and the scoring rubrics to assess them may be less reliable. However they conclude that:

Oral language needs to be included in any credible assessment focusing on literacy for young (or older) children, and furthermore that attention to the difference between 'academic' and 'everyday' language is crucial in a fully-informative early childhood literacy assessment (p. 398).

Finally, they point out that assessment tools used with young children, especially those used to evaluate programmes, should be linked to the curricula that have been taught to them.

OTHER FRAMEWORKS FOR ORAL LANGUAGE ASSESSMENT

While the previous section considered aspects of oral language that should be assessed in the context of a framework for oral language proposed in this report, this section looks at frameworks that have been proposed elsewhere. Such frameworks can include content standards, performance standards or both. Content standards indicate what children should know and should be able to do. For example, a content standard might assert that ‘children should be able to write and speak for a variety of purposes and for diverse audiences, using conventional grammar, usage, sentence structure, punctuation, and spelling’. A performance standard measures how well a child’s work meets the content standard. A performance standard has levels (4, 3, 2, and 1; or advanced, proficient, novice, and basic) and examples of children’s work may be provided for each level. In this respect, performance standards are similar to scoring rubrics.

Aistear

As noted in Chapter 1, the communications component of *Aistear* provides a broad framework for assessing aspects of oral language and communicative competence of children up to age six. While the importance of assessment *of* learning is noted in *Aistear*, there is a clear statement of purpose which identifies assessment *for* learning as the focus of the guidelines. Assessment is seen as an ongoing process of collecting, documenting, reflecting on and using information to build ‘rich portraits’ of children as learners so as to support future learning (*Aistear, Guidelines for Good Practice*, NCCA, 2009a, p.72). The guidelines recognise the fact that for some children, assessment will serve the critical function of helping to identify special educational needs and of informing the kinds of educational intervention required. However, unlike assessment schemes such as the New Standards Project or the Common Core State Standards, *Aistear* specifies goals (aims) rather than learning outcomes (though, of

course, the goals could be reformulated as learning outcomes at some future time). Further, as *Aistear* is currently constructed, there is no recommendation on generating an overall score based on a child's competence in oral language (if such is required).

The New Standards Project

Since the early 1990s, educators in the United States have worked on developing standards for a range of subject areas including oral language, reading and writing in English. The focus of the New Standards Project was to develop standards for the English language arts (and mathematics and science), and to examine ways in which the standards could be assessed using performance tasks, portfolios and projects. The standards are intended to be assessment and performance standards – that is, they could be used as a basis for assessing student performance. Oral language standards (speaking and listening) have been produced for the following class levels:

- Children in pre-kindergarten (equivalent to pre-school and junior infants)
- Children in kindergarten and first (senior infants and first class)
- Children in second and third grade (second and third classes).

Three key standards are replicated at each grade band: habits, kinds of talk and resulting genres, and language use and conventions. Table 7.2 indicates standards that have been developed for each class level, and the subtopics, which illustrate the different aspects of language to be taught and assessed.

Table 7.2: New performance standards for speaking and listening

Standard	Subtopic
Habits	Talking a lot Talking to oneself Conversing at length on a topic Discussing books
Kinds of talk and resulting genres	Narrative Explaining and seeking information Getting things done Producing and responding to performances
Language use and conventions	Rules of interaction Word play, phonological awareness and language awareness Vocabulary and word choice

Source: Resnick & Snow (2009)

Resnick and Snow also provide indicators corresponding to each of these standards (see Appendix 7, Table A7.1), as well as examples of classroom practices (teaching and assessment) corresponding to each indicator. For example, for the indicator, Discussing Books – Pose and answer specific questions about the text – they provide an example of a response to the question, *What is this story about?*, that represented an excellent summary of the story, and would not be expected until the end of first grade. A particular strength of the New Performance Standards is their link to the types of literacy activities in which care-givers and teachers would be expected to engage children anyway. Hence, the approach to assessment underpinning the standards is based on teachers’ observations of children engaging in aspects of language learning in school settings.

The Common Core State Standards – speaking/ listening and language

The Common Core State Standards, a state-led effort from the United States, coordinated by the National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers, are intended to ‘provide a consistent, clear understanding of what students are expected to learn, so teachers and parents know what they need to do to help them. The standards are

designed to be robust and relevant to the real world, reflecting the knowledge and skills that our young people need for success in college and careers' (www.corestandards.org). The standards were developed in collaboration with teachers, school administrators and experts to provide a clear and consistent framework to prepare children for college and the workforce. The standards, which cover kindergarten to twelfth grade, in English language arts (including oral language) and mathematics, 'represent a set of expectations for student knowledge and skills that high school graduates need to master to succeed in college and careers' (ibid.). The standards are intended to prepare children for real-life experience at college and for 21st century careers.

As well as standards for Language Arts – Speaking and Listening (Appendix 7, Table A7.2), there are common core standards for language (Appendix 7, Table A7.3). Table 7.3 illustrates the main knowledge categories associated with each one. Like the 'New Standards' (and indeed, the Primary School English Curriculum), teachers can internalise the main components of the standards (which do not vary from class level to class level), and use these as a basis for selecting lesson content and driving assessment.

The Speaking and Listening standards require students to gain, evaluate and present increasingly complex information, ideas and evidence through listening and speaking, as well as through media. The Speaking and Listening standards include a focus on academic discussion in one-to-one, small-group and whole-class settings that incorporate formal presentations and informal discussion, as children engage in answering questions, building understanding, and solving problems.

The standards represent a framework rather than an assessment tool. Nevertheless, they illustrate how what is effectively a curriculum

(exemplars are provided for each standard) could be used as a basis for establishing an assessment system.

The standards include statements on English language learners (ELL) and students with special education needs. In relation to ELLs, it is stated that ‘Teachers should recognize that it is possible to achieve the standards for reading and literature, writing & research, language development and speaking & listening without manifesting native-like control of conventions and vocabulary’ (<http://www.corestandards.org/assets/application-for-english-learners.pdf>).

Table 7.3: Structure of Common Core Standards for English

Grade Level	Standard	Categories
Kindergarten, First, Second and Third Grades (Separately for each)	Speaking & Listening	Comprehension & Collaboration Presentation of Knowledge & Ideas
Kindergarten, First, Second and Third Grades (Separately for each)	Language	Conventions of Standard English Knowledge of Language (Second grade onwards) Vocabulary Acquisition & Use

The Drumcondra English Profiles – oral language indicators

The Drumcondra English Profiles (Shiel & Murphy, 2000) were devised to support teachers in assessing their pupils in the Primary School English Curriculum. The *Profiles* comprised sets of indicators for oral language, reading and writing at each of eight grade levels (junior infants to sixth class). The following definition underpinned the development of the Profiles:

Curriculum profiles contribute to the development of comprehensive and continuous records of pupil achievement across the curriculum. They are based on the judgements made by teachers about a pupil’s achievement in the context of ongoing classroom

teaching and assessment activities. Within schools, curriculum profiles provide teachers, parents and pupils with meaningful formative and summative assessment information (Shiel & Murphy, 2000, p. viii).

Examples of indicators of oral language on the profiles include:

- Constructs an imaginary story based on a sequence of pictures (junior infants).
- Listens attentively to stories and poems read aloud by the teacher (junior infants).
- Expresses simple personal needs (junior infants).
- Discusses the meaning of new words in stories, poems and songs, paying some attention to context (senior infants).
- Retells stories heard in class, recalling the main characters and events in appropriate sequence (senior infants).
- Identifies a speaker's topic and initiates questions seeking explanations or more information, while demonstrating awareness of class rules on turn-taking (first class).
- Suggests alternative words to describe objects, experiences and events (first class).
- As a member of a group, initiates and sustains a conversation on a specific topic with confidence, recognising the needs of listeners (second class).
- Gives a short description or report of an event, attending to key information and relevant details (second class).
- Listens to stories and poems and identifies and comments on humour (second class).

Full sets of indicators – for junior infants and third class – are presented in Appendix 7, Table A7.4.

The Profiles do not specify particular assessment contexts linked to specific indicators. Instead, it is recommended that teachers draw on information gleaned in a broad range of assessment contexts. The use and synthesis of information from multiple assessment contexts is consistent with the idea of teachers arriving at a ‘holistic’ or ‘best fit’ judgement of a child’s overall achievement, based on relevant assessment information. Relevant contexts are identified as including:

- ongoing teaching and learning activities, during which the teacher makes and records informal observations (e.g. class discussions, conferences with individuals or groups)
- outcomes of informal assessments (e.g., homework, oral reading/spelling errors made by pupils).

Implementation of the *Drumcondra English Profiles* does not require the use of specific assessment tasks, nor have direct links been established between performance on specific tasks and achievement levels on the *Drumcondra English Profiles*, though the manual describes several recording tools that could be used in conjunction with the profiles.

Application of the Profiles results in two broad outcomes – a criterion-referenced outcome, indicating whether or not each indicator has been achieved; and a norm-referenced outcome, indicating a child’s position relative to other children at the same class level (nationally). The former would be expected to feed into planning of instruction for oral language; the latter might be more useful for reporting purposes (e.g. reporting to parents or to other teachers about a child’s language proficiency).

National Curriculum Assessment – England – speaking and listening

The Scale for Language for Communication and Thinking used in the context of early years education in England (Appendix 7, Table A7.5) is broadly similar to the *Drumcondra English Profiles*. The scale seeks to describe developing performance in terms of children's outcomes, in order of increasing difficulty. Thus, children rated as functioning on the first three points (listens and responds, initiates communication with others, displaying greater confidence in more informal contexts, and talks activities through, reflecting on and modifying actions) are deemed to be performing below the early education goals in communication that have been set for early years learners in England. The fourth to eighth points are drawn from the early learning goals. The ninth point represents a level of performance that is in advance of the learning goals. Children are assigned to levels by their caregivers or teachers, based on a best-evidence synthesis (i.e. using all available assessment information).

A somewhat different system is used for children from age 7 onwards. Appendix 7, Table A7.6 gives the national curriculum attainment targets for speaking and listening. The scale is intended to cover the range of performance from 6 years to 16 years. Unlike the reading and writing elements of national curriculum assessment, no external tests linked to the proficiency levels are made available, and hence the levels assigned to children are based on teacher judgements. In general, children at Key Stage 1 (7 years) achieve at levels 1-3.

Implementation of teacher-based language assessment tools

Teachers who use tools for language assessment such as the *Drumcondra English Profiles*, or indeed any of the systems outlined in this section, and described in greater detail in Appendix 7, will need considerable support in the form of exemplars to assist them in

interpreting different levels of performance. Such support would seem particularly important for teachers working with children with low socio-economic status, English language learners and children with possible speech and language disorders so that some level of familiarity can be achieved in relation to the meaning of particular learning outcomes/goals.

Possible implications for assessment of reading and writing

The different approaches to recording assessment outcomes reported here related specifically to oral language (though, in the case of the Common Core State Standards, it was noted that the *Language* component covered aspects of oral language and writing). If a framework for assessing oral language is developed in conjunction with a revised curriculum covering children in the 3-8 years range, it would be important to consider if the assessment framework could be extended to reading and writing. Indeed, most frameworks for assessing oral language include parallel sets of indicators for reading and writing that may be linked to those for oral language and vice versa.

PARENTS AND ASSESSMENT

The *Aistear* framework (NCCA, 2009a, table 12) describes parent involvement in the assessment process as a key feature of effective assessment. There are many aspects of a child's activities at home that can provide parents with good information on their child's language functioning, including the following:

- daily tasks such as making shopping lists and paying bills
- 'reading' the TV guide or rules to a board game
- school-related activity

- language skills used when interacting with younger or older children
- communication with other family members
- ability to recall past events or experiences
- ability to predict outcomes
- use of language during storybook reading
- communication with other children in the community.

According to Snow and Oh (2011), parent involvement is especially important in the context of addressing the needs of culturally diverse students. For example, where children speak a language that is different from the language of school at home, parents can provide valuable information about a child's ability to communicate in their home language. One tool that can be used for this purpose is the *Child Observation Record (COR)* – preschool version (3½–6 years) (www.highscope.org) – where both teacher and parent observations about a child's development in four areas (concepts about print, language comprehension, phonological awareness and the alphabetical principle) are documented and analysed.

TOOLS FOR ASSESSING ORAL LANGUAGE IN CLASSROOM

CONTEXTS

In this section, we outline a number of tools that can be used to assess oral language in early care and classroom settings. These include tools that can be used to record observations of language in use (dynamic assessment) as well as standardised measures of performance. The assessments include anecdotal notes, checklists, rating scales, and scoring rubrics. More formal assessment tools are also described.

Anecdotal notes

Anecdotal notes are short notes made by the teacher about a pupil's achievement. In using anecdotal notes to record information about proficiency in oral language, it is recommended that the teacher record three or four observations about each pupil each month. In planning and presenting an oral language activity (for example, listening to a story, telling news, presenting short reports etc.), it is useful to focus on one or two dimensions of the task that can be assessed, and to observe particularly carefully how pupils perform on those dimensions. For example, if pupils are telling the news, assessment might focus on ability to use descriptive language in presenting an object or describing an event, ability to sustain a conversation about a topic, or use of appropriate non-verbal behaviours such as facial expression or gesture.

Shiel and Murphy (2000) provided the following advice about using anecdotal notes:

- Observe and document specific dimensions of a pupil's engagement in oral language.
- Record comments that individual pupils make about their listening, speaking and thinking processes.
- Note any target indicators that have been achieved.
- Note concerns and issues you want to address with the pupil in the future.
- Maintain objective records that can be shared with other teachers or with parents.

Narratives

Citing work by Carr (2000) in Australia, Dunphy (2008) has proposed that narrative accounts be used as a vehicle for recording

assessment outcomes. According to Dunphy, learning stories are narratives in which the carer/teacher documents a child's development in relation to key dispositions and areas of learning, while also noting the broader socio-cultural context in which learning occurs. She adds that in the learning stories approach, telling the story of children's learning requires 'rich and deep accounts of selected events as they are observed through specific lenses' (p. 26), and cites the themes in the curriculum as such a lens.

Language samples

An informal oral language sample typically allows a teacher to determine the child's functional language skills. The sample can be elicited using a picture, a planned play activity or a story starter. Aspects of a language sample that can be assessed include communicative intent, presuppositions, social register, figurative language, sequencing of events, and story development. Sometimes an informal language sample can provide information that cannot be obtained using formal tests, and hence may allow users to 'fill in the gaps' as they seek to draw up a profile of a child's language skills.

Checklists

Checklists offer a convenient and flexible approach to assessing oral language. Checklists can be developed by teachers to include the particular skills and strategies reflected in their teaching plans, or checklists developed by others can be adapted to fit particular teaching/learning contexts. The teacher's role is to appraise the performance of pupils on the task, and to indicate whether, or to what extent, evidence of achievement of each element in the checklist has been observed. The checklist also provides for the possibility of observing development over time, as provision can be made for recording outcomes on more than one occasion.

Teachers can make an on-the-spot evaluation of whether the pupil achieved a particular skill by recording a simple 'yes/no' (+/-) quite clearly or employ a more sophisticated approach (e.g. by rating performance along a continuum). There is no absolute standard where judging the achievement of skills on a checklist such as this is concerned. Rather, the teacher must identify a standard that is appropriate to the class level of the pupils and apply that standard when making a judgement. Sometimes teachers in a school can work towards an agreed standard by sharing and discussing examples of children's work.

Rating scales

Rating scales are similar in many ways to checklists – a list of indicators is provided (or generated), and the teacher evaluates a pupil's achievement against the indicator. In the case of rating scales, there is the possibility of indicating varying degrees of achievement. For example, a 3 might be awarded if an indicator has been clearly demonstrated by the pupil; a 2 might be assigned if some evidence of achievement has been demonstrated. Finally, a 1 might be assigned if no evidence of achieving the indicator has been demonstrated. Teachers may wish to develop their own scales, or work with other teachers teaching at the same class level as they develop scales.

As part of Early Start, an intervention programme for preschool children (3-4 years) in urban areas with high levels of socio-economic disadvantage, McGough developed a rating scale that asked teachers to rate children's performance on a number of aspects of oral language. Items rated include whether the child:

- can give /keep eye contact
- can initiate conversations with adults
- can initiate conversations with other children

- can wait with interest while adult responds
- has clear articulation
- adopts appropriate manner of speech
- can combine words
- can use full sentence structure
- can use complex sentence structures
- can follow simple instruction
- can give a simple instruction
- can listen attentively while an adult names common items in a picture book, game/magazine, newspaper/poster
- can make a complaint
- can explain a problem.

Scoring rubrics

Scoring rubrics are used to assess performance on language in general (see National Curriculum Assessment levels for oral language) or for specific language tasks such as a retelling of a story that has been read aloud by the teacher. Teachers wishing to assess pupils' retellings using a rubric will need to develop a shared understanding of the meaning of each score description in the rubric. For example, if the focus of a rubric is on how well children retell stories, teachers might assemble examples of children's oral stories at different levels of complexity, and study these, before applying the rubric to all the stories produced by a class or group of classes. This approach allows teachers to develop a shared understanding of the meaning of each score point, and this improves the reliability of teachers' scores. As

children develop in competence, they may be able to develop their own scoring rubrics for simple oral language, reading and writing tasks, enabling them to engage in some structured self-assessment.

Standardised tests of communication and language

A number of tests are available that teachers can use to assess a child's communication and language in a formal sense, particularly where they believe a child may have a speech or language delay or difficulty. Some of the tests referred to here should be administered by specialists. Others can be administered by teachers.

- *The British Picture Vocabulary Scale* (third edition), which is a norm-referenced test of receptive vocabulary, has norms for young people between 3 and 16 years, 11 months. This test can be used to obtain an estimate a child's understanding of word meanings.
- *The Renfrew Language Scales - Action Picture Test* is intended to assess complexity of information content and grammatical usage of children based on short-sentence answers to specified questions. The language is elicited from asking a series of questions relating to pictures. The test is directed at children between 3 years and 6 months, and 8 years and 5 months.
- *The CELF Preschool Clinical Evaluation of Language Functions* can be used to identify, diagnose and perform follow-up evaluations of language difficulties in preschool children. It is intended for children from 3 years of age to 6 years and 11 months. Among the aspects of language that are assessed are: sentence structure, word structure, expressive vocabulary, and concepts and following directions.
- *First Words and First Sentences Language Tests* (Gillham, Boyle & Smith, 1979) are designed for use to assess expressive language delay in the age group 18-36 months; they also give age-norms

for older, severely delayed children. They are calibrated to distinguish between moderate and severe language delay amongst those most at-risk. The test is based on full colour picture books, and administration time is ten minutes.

- *Assessment of Comprehension and Expression 6-11* (Adams, Coke, Crutchley, Hesketh & Reeves, 2001). This test is designed to identify children who have language delay with, or impairments to, their comprehension or expression of language. It assesses language in the following areas: sentence comprehension, inferential comprehension, naming, syntactic formulation, semantic decisions, non-literal comprehension, and narrative. The test has been standardised in Northern Ireland.
- *The Bankson Language Test* assesses three aspects of language: semantic knowledge (body parts, nouns, verbs, categories, functions, prepositions, opposites); morphological/syntactical rules (pronouns, verb usage/verb tense, verb usage (auxiliary, modal, copula), plurals, comparatives/superlatives, negation, questions) and pragmatics (ritualising, informing, controlling, and imagining). Norms are available for children in the 3.0 to 6.11 years range.
- *The Test of Language Development - Primary* (fourth edition.) assesses speaking and listening in children from 4 years to 8 years, 11 months. Subtests include: picture vocabulary (understanding words), relational vocabulary (mediating words), oral vocabulary (defining words), syntactic understanding (understanding sentence meaning), sentence imitation (repeating sentences), morphological completion (understanding sentence formation), word discrimination (noticing sound difference), word analysis (segmenting words), and word articulation (saying words correctly). Total testing time is one hour. The test is administered individually.

ASSESSING CHILDREN WITH LANGUAGE DIFFICULTIES AND DISORDERS

The literature on assessment for children with specific speech and language disorder (SSLD) identifies a range of assessment techniques and discusses these in terms of their appropriateness for the various purposes of assessment. There is a consensus in the literature that standardised tests are the main pillar of clinical diagnosis and on-going assessment in SSLD, with these tests used to assess children's knowledge of syntax, morphosyntax, semantics and phonology. Evidence from standardised tests is usually a requirement in determining a child's eligibility for special services.

While standardised tests are widely used by clinicians working with children with SSLD, the literature continues to caution against reliance on them as measures of individual children's progress within interventions. The issues highlighted include concerns about limitations in specificity, reliability and validity of tests and about the fact that the standardised procedures for administration restrict the range of language skills that can be assessed. For example, standardised measures may not allow for the assessment of language use in context or of language processing. Because standardised tests are designed to show differences among children rather than to provide in-depth evidence of what an individual child knows about specific aspects of language, they are considered inadequate to providing the finely-grained, accurate and comprehensive knowledge necessary to plan for and to monitor individual children's learning (Schwartz, 2009).

In the literature, criterion-referenced approaches are cited as a more effective means of answering questions about children's baseline skills and developing mastery. Rather than having a primary focus on distinguishing between children's performances, criterion-referenced tests focus explicitly on the skill-sets which are integral to communicative competence and so they aid professionals in the

identification of the specific skills and processes that a child needs to develop as well as allowing for on-going monitoring of progress. Criterion-referenced approaches are recommended as a means of establishing pre-intervention abilities and of providing descriptive profiles of children's progress towards mastery of particular language structures or constructs as, for example, in the development of morpho-syntactic abilities (Oetting & Hadley, 2008). Criterion-referenced approaches allow for flexible assessment procedures and a child's language skills can be sampled in a variety of ways, over time and in a range of contexts (Cole, Dale & Thal, 1996). This is generally regarded as one of the positive features of criterion-referenced testing although it can also be regarded as a limitation in that decisions can be seen as relying on subjective judgements of child performance. While there has been a view in the literature that criterion-referenced tests do not lend themselves easily to standardisation (Cole, Dale & Thal, 1996), standardised criterion-referenced tools are available for assessment of aspects of SSLD.

In the assessment literature, the discussion on the limitations of standardised tests is linked to the view that an important purpose of assessment is to yield information about the specific processes of children's learning. In these terms, there has been a growing emphasis in the literature on the need to move beyond an over-reliance on static measures of achievement and towards assessment of children's engagement with, and on-going processing of, language, in naturalistic contexts with evaluation of children's learning patterns and rates of progress, including their progress in generalising learning beyond initial intervention contexts (Dale, Cole & Thal, 1996; Hasson & Botting, 2010). In turn, this emphasis is informed by the view that assessment practices should reflect current understandings of the social nature of language acquisition and development and should include contextually relevant forms of assessment which acknowledge active, social transaction as the context for language

teaching and learning (Cole, Dale & Thal, 1996). The view in the wider language intervention literature is that assessment processes must be an integral part of any programme for teaching and learning. These processes should provide first level information on child outcomes: whether teaching is having a positive impact on the child's impairment, but should also be ecologically valid in that they are tailored to assessing the progress of this individual child and will allow insights into the teaching processes that are supporting or inhibiting his/her progress (Camarata & Nelson, 2006).

Across the literature on assessment for children with SSLD, a range of what have been described as process-based assessments (Hasson & Botting, 2010) can provide useful evidence. These include the use of language samples, from spontaneous to highly structured, including the use of specific probes and elicited forms of response to assess for the use of specific, target structures (Camarata & Nelson, 2006). The literature also identifies observational methods of assessment (Notari-Syverson & Losardo, 1996), the use of narrative (Wetherell, Botting & Conti-Ramsden, 2007) and an emerging emphasis on the development of procedures for the dynamic assessment (DA) of language in children with SSLD (Hasson & Botting, 2010).

Within a broad inclusion framework, it is possible to interpret current approaches to assessment for children with SSLD as represented in the literature, as constituting an alternative or additional system for measuring educational engagement, progress and outcomes. Research on SSLD is conducted within an intervention framework and is grounded in a conceptualisation of provision for children with SSLD as being different from, or additional to, usual curriculum and assessment procedures. That is, SSLD is seen as a specific disability requiring an atypical focus on the teaching and assessment of specific language skills.

ASSESSING CHILDREN FOR WHOM ENGLISH IS AN ADDITIONAL LANGUAGE

Teachers in Ireland who work with children who are new to learning English in school will have some familiarity with the assessment materials developed by the Integrate Ireland Language and Training Centre¹. A strong recommendation emerging from research on assessment is that language minority children should be assessed in their home language as well as English (Snow & Van Hemel, 2008). This arises from concerns that children's existing abilities in their home language, as well as their prior learning experience, may be overlooked. Additionally, it has been shown that bilingual children's vocabulary learning may be spread across two languages, and is often more than the sum of two individual languages as children employ different aspects of their languages in different contexts. Snow and Oh (2011) note that code-switching (i.e. switching languages for portions of a sentence) and language mixing (inserting single items from one language into another) are normal aspects of language learning for young children. Another important issue is the cultural appropriateness of assessment materials used with English language learners.

CONCLUSION

This chapter examined the complexity of assessing oral language and the range of factors that can impact on assessment outcomes. The ephemeral nature of talk was noted, leading to the conclusion that unlike assessment in other domains where more permanent records of performance may be available, it is especially important to keep accurate records of oral language outcomes. It was noted that language development is not linear in young children and performance may vary across tasks and contexts. Hence, development

¹ See http://www.ncca.ie/en/Curriculum_and_Assessment/Inclusion/English_as_an_Additional_Language/IILT_Materials/Primary/

should be observed over time and in different contexts before firm conclusions can be drawn. Nevertheless, it was concluded that care-givers, pre-school and infant teachers can play an important role in identifying possible language difficulties.

Given the importance of performance assessment in assessing young children's language development, key principles of performance assessment were outlined including active involvement of children in communicative situations, the engagement of children in situations where they can use language and exchange meaning according to their purposes in spontaneous ways, the use of multiple indicators and sources of information collected over time, the use of assessment outcomes to plan instruction, and the need for collaboration among parents, teachers, children and other professionals in sourcing and interpreting assessment outcomes.

In identifying which aspects of oral language should be assessed, a framework introduced in Chapter 3, which outlined the components of the language system (listener-speaker relationships, language uses and content and structure) was proposed as a possible framework for specifying the content of oral language assessment in language in the early years. The value of drawing on a framework such as this is that it can lead to consistency between curriculum (instruction) and assessment.

Other assessment frameworks and systems were also examined. These included the assessment framework underpinning *Aistear*, where the Communications component might be a useful way of organising assessment. However, it was noted that whereas *Aistear* specifies learning goals (aims), other frameworks, such as the Common Core State Standards in the US, specify learning outcomes. Another potential difficulty is that *Aistear* does not currently support the generation of an overall indicator of a child's competence in oral language, which teachers may need for reporting purposes. The

Drumcondra English Profiles was examined as an assessment framework designed for this purpose, and strengths and weakness were noted.

The role of parents in providing assessment information was noted – in particular the fact that parents can often provide useful information about children’s language usage in out-of-school settings. This information can be obtained from parents on an informal basis, or by using a structured method, such as the *Child Observation Record*.

Specific tools and recording systems that could be used for classroom assessment of oral language were identified. These included anecdotal notes, learning narratives, rating scales, scoring rubrics, language samples, and standardised tests of oral language. Regardless of the overall assessment framework that is adopted, it would seem important for teachers to be aware of the strengths and limitations of each of these tools, and ways in which they could collaborate in assessing children’s language.

Issues in assessing children with specific speech and language disorders and children for whom English is an additional language were briefly considered. The use of standardised criterion-referenced tools was identified as one fruitful approach to assessment of language among children with disabilities, as such tools can provide both normative and criterion-referenced information. The complexity of assessing children with English as an additional language was noted, and the need to draw on information about a child’s first language, particularly in the area of vocabulary, was highlighted.

CHAPTER 8:
ORAL LANGUAGE
ACROSS THE
CURRICULUM

Frameworks for early learning and curricula for primary schools envisage that children will deal with important content in areas such as science and mathematics in the early years. For example, the learning goals of the Exploring and Thinking component of *Aistear* (NCCA, 2009a) include:

- Learn about the natural environment and its features, materials, animals, and plants, and their own responsibility as carers (Aim 1, Goal 4).
- Develop a sense of time, shape, space and place (1, 5).
- Come to understand concepts such as matching, comparing, ordering, sorting, size, weight, height, length, capacity and money in an enjoyable and meaningful way (1, 6).

In addition to these important concepts, the same component focuses on a number of key processes, including:

- Demonstrate their ability to reason, negotiate and think logically (Aim 2, Goal 4).
- Use their creativity and imagination to think of ways to solve problems (2, 6).
- Make decisions and take responsibility for their own learning (4, 3).
- Develop higher-level thinking skills such as problem-solving, predicting, analysing, questioning and justifying (4, 5).

Similarly, curricula have been set out for children in the junior classes (junior infants to second class) in primary schools, covering areas such as mathematics, science, geography, history, and social, personal and health education. In science (DES/NCCA, 1999c, d), for example, the following content is outlined for children in the infant

classes:

- living things (myself, plants and animals)
- energy and forces (light, sound, heat, magnetism and electricity)
- materials (properties and characteristics of materials, materials and change)
- environmental awareness and care.

Two broad clusters of process skills are also outlined:

- Working scientifically (questioning, observing, predicting, investigating and experimenting, analysing/sorting and classifying, and recording and communicating)
- Designing and making (exploring, planning, making and evaluating).

It is clear that both *Aistear* and the Primary School Curriculum place a strong focus on both content and thinking processes. Since most children up to 6 or 7 years have limited reading skills, much of the content and many of the thinking processes outlined in these frameworks must depend on oral language, even if media such as books or software are also used. This language has often been referred to as subject-orientated language (or, in the case of older children, disciplinary language).

Internationally, there has also been a strong emphasis on teaching subject-area concepts and associated vocabulary to children as young as 3 years of age. In an intervention programme, designed to raise the vocabulary of socially-disadvantaged children 3-4 years, Neuman, Newman and Dwyer (2011) focused their vocabulary development activities on three content areas: health education, living things, and mathematics. The rationale for this was that more traditional

approaches to teaching vocabulary (for example, in the context of shared reading) were deemed not to produce sufficiently strong effects on the vocabulary knowledge of at-risk children.

Another reason to focus on particular subject areas in the context of language development is that they often differ from one another in terms of terminology, discourse and genres – that is, each subject has its own set of signs. Halliday and Martin (1993) noted that grammar is realised in different ways across subjects. Further, language use in particular subjects has developed with the subject itself, as language and text change constantly and in dynamic ways. The following have been identified by Askeland and Maagerø (2010) as components of a subject:

- *Subject-specific terminology* – children can find pleasure in meeting new words, even if they are not fully understood on the first encounter.
- *Taxonomies* – words in a subject field are organised in taxonomies (thus, *daisies*, *buttercups* and *daffodils* can be offered as examples of *flowers*).
- *Nominalisations* (from verbs and adverbs) are a feature of subject discourse (e.g. *the reading of a story*, *the building of a hut*, *the celebration of a birthday*).
- *Causality* is important in subject-area discourse (whether spoken or written). Linguistic realisations of causality include: *because of*, *therefore*, *the reason for*, *consequently*, *hence etc.*
- *Contrasts and alternatives* are a feature of subject-orientated discourse (signalled by terms such as *this but not that*, *the opposite of*, *instead of*, *either this or that*, *an alternative to etc.*).

- *Modality* – the semantic space between ‘yes’ and ‘no’. Modality can be signalled by modal verbs including *can, may, must, will, shall*, and by modal adjuncts and other expressions that realise probability, usality, obligation and inclination (e.g. *perhaps, most likely, possibly, probably, certainly, usually, always, sometimes, supposed to, allowed to and willing to*). Eliciting this terminology from young children can signal to them that all questions cannot be answered with a yes or no.
- *Metaphors* – these can be useful as a teaching tool, concretising something that might be otherwise difficult to understand (e.g. the human body as a machine; a vortex created by spinning tea leaves in a jar to represent the constant storm on Jupiter’s surface). Use of suitable metaphors can enhance children’s understanding of language in cross-curricular areas.

Although Askeland and Maagerø (2010) identify potential complexities in oral and written discourse that is subject-orientated, they argue that such discourse can be developed in the context of playful activities in preschool and kindergarten settings, where a knowledgeable adult knows how to extend children’s use of discourse. Indeed, their taxonomy of dialogue types is useful in thinking about the types of discourse that can occur across the curriculum as a natural extension of children’s play:

- *Associating dialogue*. This involves teachers and children creating associations around a topic. For example, in responding to morning roll, a child might say, *No, I’m in America*, to which the teacher might respond, *Ah, the country of the Statue of Liberty, the White House and New York city*.
- *Philosophical dialogue*. This involves dialogue on topics for which there may be no precise answers (for example, in discussing religion or a work of art). The dialogue of the caregiver will be

peppered with terms such as *possibly, maybe, perhaps* etc. This view is consistent with the ‘philosophy in the classroom’ movement (e.g. Shaw, 2003).

- *Technical dialogue*. This dialogue is related to instructions and construction of different objects. For example, in making (or pretending to make) a cage to catch a rogue animal, caregivers might pose questions that lead children to use terms such as *too long, too big, not thick enough, ladder, bottom, on top, across the middle, at the back, at the front of* and so on.
- *Text-orientated dialogue* – this dialogue can emerge from both oral and printed texts. It is characterised by an exchange of roles (e.g. with the teacher taking the role of narrator, and children adopting roles of different characters). When applied to non-fiction books, it can focus on nominalisations such as frostbite, digestion, construction of an airplane, or water pollution. Text-orientated dialogue can also focus on the use of metaphor to extend conceptual understanding.
- *Metalinguistic dialogue* – this dialogue focuses on dialect differences within a language, and how awareness of dialect differences can develop greater awareness of the nature and development of language.

In the remainder of this chapter, we look at strategies that can be used to develop children’s language in specific curricular areas – science and mathematics.

DEVELOPMENT OF SUBJECT-ORIENTATED KNOWLEDGE IN SCIENCE

Science is constructed by particular routines of language (Halliday & Martin, 1993), and children access scientific ideas through language (Honig, 2010). Hence, children’s success in the domain of science is linked to their fluency with the specialised language of the subject

(Gee, 2004; Lemke, 1990), which controls their ability to communicate scientific ideas to others. Features of scientific discourse (as opposed to play discourse, or narrative discourse) include topic presentations, descriptions of attributes, characteristic events, category comparisons, experimental ideas, results and explanations. As noted earlier, such discourse can include technical language, nominalisation, and general nouns (linked to taxonomies of terms). Information books based on scientific knowledge tend to be written from an authoritative discourse separate from the reader (Christie, 1989), usually in a serious register. Hence, teachers may need to provide children with additional support in using the specialised vocabulary and language structures of science. The promotion of scientific discourse can include:

- Extensive discourse around hands-on activities or experiments (data-level discourse).
- Discussion of theoretical ideas (theoretical discourse).
- Multi-modal engagement with content, e.g. use of scientific language and vocabulary to express ideas in speaking, listening, doing, reading and writing, using print and electronic media (media discourse).

Honing (2010) provides a framework for instructional activities that support vocabulary knowledge and language development in science lessons. Activities supported by the model, in the context of a lesson on seed plants taught to students in second grade (i.e. towards the upper limit of the 3-8 years age range) include:

- *Vocabulary visits* (Blachowicz & Obrochta, 2005). In vocabulary visits, the teacher presented a poster that included multiple images of plants. Children added domain-relevant vocabulary (such as seed and pollen) using sticky notes. The notes were grouped by

theme (semantic links). The chart was revisited several times during the unit, and added to throughout the school year.

- Read-alouds involving information books and KWL. Ogle's (1986) KWL framework was used as a structure to support the development of scientific language. First, children's prior knowledge was documented (the K (know) component of the strategy), as children got an opportunity to hear, see and use scientific terms. Then children identified what they hoped to learn from the text (W). Finally, following the read-aloud by the teacher, children described what they had learned (L), with the teacher grouping ideas by theme on the KWL record chart. In using KWL, the teacher scaffolds the process of reading and understanding informational texts.
- *Hands-on activities.* Children conducted multiple experiments, including placing seeds in plastic bags with wet paper towels and observing seed coats splitting, planting seeds inside clear cups, and planting grass to observe grass going to seed. Children shared their observations aloud, referring to data and specialised vocabulary.
- *Journal writing.* Children recorded journal entries, including data-level language, and theoretical language about ideas from books. Journal writing was always preceded by partner talk and pre-planning for the purpose of providing oral rehearsal of ideas. Upon completion, partners read their reading journals aloud, providing further support with oral language.
- *Partner-reading* of multiple information books. The sharing of topic-related information books further facilitated the use of technical vocabulary. The selection of books for reading by the children themselves was a feature of this activity.

Others (e.g. Lee, 2010) describe how science informational texts can be used to develop key learning strategies. These strategies can be developed when information texts are read aloud by the teacher (i.e. in dialogic reading contexts) or when information texts are shared by children. Examples include:

- *Using and creating schema.* Children can create science knowledge structures (as opposed to generic or general knowledge structures) by linking scientific ideas to their own lives (e.g. in a lesson on photosynthesis, how would your life change if we had no sun? too much sun?).
- *Asking questions.* As well as the KWL strategy referred to earlier, Lee suggests that children focus on one specific question rather than several when reading (or listening to) a complex informational text. This suggestion seems particularly relevant in the context of multimedia texts, where a single key question can help to focus a child's attention across several media.
- *Determining importance.* This is a key discourse-processing skills that needs to be developed across several years. Development can be undertaken when suitable texts that lend themselves to teacher modelling and discussion are available. One strategy is to draw children's attention to key markers in a text (e.g. italicised language, sub-headings, or summary statements) that may suggest importance.

Vosniadou (2009) warns that facilitating conceptual change in science is not easy, and requires careful instructional planning. This is because, in the course of their early development, children may acquire intuitive knowledge about scientific concepts that are sometimes incorrect ('science misconceptions'), and often difficult to change. Another problem identified by Vosniadou is that of inert knowledge. Science knowledge is inert when children (or indeed adults) who

understand particular scientific concepts do not draw on this understanding in everyday contexts. Hence, instruction in science in the early years needs to focus on addressing possible misconceptions and encouraging application of scientific knowledge across a range of contexts.

Although designed for children in the second to fifth grades in the United States, the Seeds of Science/Roots of Reading curriculum (Cervetti, Pearson, Bravo, & Barber, 2006) provides useful suggestions on supporting young children to acquire science concepts in depth while increasing skills in reading, writing and oral discussion in the context of inquiry-based learning. Seeds of Science/Roots of Reading seems to provide a viable model of how to integrate literacy and science instruction into the pursuit of deep understanding of scientific concepts.

DEVELOPMENT OF COMMUNICATIVE SKILLS IN MATHEMATICS

This section addresses two related themes: the use of discussion to teach mathematical problem-solving, and approaches to teaching mathematical vocabulary (the ‘register of mathematics’).

Using discussion to teach mathematical problem-solving

Over the past 20 years, there has been a noticeable shift in curricula, both internationally and nationally, towards engaging children in mathematical thinking. This is evident in the framework for the OECD Programme for International Student Assessment (PISA), where mathematical literacy is described as being ‘concerned with the ability of students to analyse, reason, and communicate ideas effectively as they pose, formulate, solve, and interpret solutions to mathematical problems in a variety of situations’ (OECD, 2009, p. 14). Likewise, the Primary School Mathematics Curriculum (DES/NCCA, 2009c) states that:

An important aim of the mathematics programme is to enable the child to use mathematical language effectively and accurately. This includes the ability to listen, question and discuss as well as to read and record. Expressing mathematical ideas plays an important part in the development of mathematical concepts. One of the causes of failure in mathematics is poor comprehension of the words and phrases used. Some of the language will be encountered only in the mathematics lesson, and children will need many opportunities to use it before it becomes part of their vocabulary. In other cases, everyday words will be used in mathematics but will take on new meanings, which may be confusing for the learner (p. 2).

The emphasis on language is further highlighted by the inclusion of communicating and expressing as a major strand unit in the curriculum. At the infant level, this is defined to include ‘discuss and explain mathematical activities. . . and discuss problems presented concretely, pictorially or orally’ (p. 18). At first and second classes, it also includes ‘listen to and discuss other children’s mathematical descriptions and explanations’ (p. 38). Since the mathematics curriculum is grounded in a social-constructivist view of learning, oral language is viewed as a key tool for developing mathematical understanding and reasoning skills.

Aistear reinforces the importance of language development in the context of early work with number, when it outlines, in the communications strand, some approaches that adults can take in developing toddlers’ and young children’s counting and mathematical language, particularly in the context of non-formal play (NCCA, 2009a).

Despite the emphasis on language development in the curriculum, evidence from national assessments of mathematics point to difficulties

that children in the second, fourth and sixth classes encounter on test items that require reasoning and problem-solving. In the report on the 2004 assessment (Shiel et al., 2006), it was recommended that:

Schools and teachers should place a stronger emphasis on teaching higher-order mathematics skills, including Applying and Problem Solving, to all pupils, by implementing, in a systematic way, the constructivist, discussion-based approaches outlined in the Teacher Guidelines accompanying the PSEC (p. 155).

Similarly, in the report on the 2009 national assessment (Eivers et al., 2010), it was recommended that:

Classroom practice should reflect advances in the teaching of problem-solving. Pupils should spend more time solving substantial problems, analysing and discussing problems with other pupils and their teacher, and acquiring improved understanding of the concepts and skills involved (p. 93.)

There are a number of consequences if we seek to teach mathematics through language. First, proficiency in context-free mathematics (i.e. mathematics which focuses on computation without language) is no longer regarded as sufficient. Second, there is a strong emphasis on discussion, and, in particular, in children explaining their reasoning as they solve problems set in real-life contexts. An implication for assessment of mathematics is that children are expected to solve problems couched in language. Hence, there needs to be a focus on teaching through discussion, as well as on achieving the precise meanings of mathematical terms, in all maths lessons.

Communication and language become the primary means by which mathematics is learned (Lampert & Cobb, 2003). Further, as is evident in the PSMC, communication is an outcome of mathematics instruction (and therefore should be assessed).

The literature makes a distinction between acquisition of mathematics on the one hand and participation in mathematics on the other. Participation implies use of both small-group and whole class discussion, where children are asked to explain their reasoning and justify their answers to meaningful problems. Implications of this approach include:

- Mathematics instruction is embedded in inquiry as children solve problems to discover mathematical relationships and properties. Teachers teach children to talk as they engage in mathematics. (This broadly parallels the use of inquiry-based learning in *Seeds of Science/Roots of Reading* referred to above).
- The mathematics register (the specialised language of mathematics) is taught in the context of discussion, rather than as a separate language.
- As in oral language development more generally, the teacher plays a key role in supporting the development of mathematically-productive discourse, participating in as well as directing small-group and whole-class discussion.
- Attention is given to improvement of social processes such as small-group relationships and mathematical argumentation, as well as to more specific mathematical outcomes (such as finding the correct answer).
- The identification of communication as an outcome in mathematics lessons implies that children will write explanations as well as provide them orally.
- Concrete materials (e.g. blocks) are used with a view to transferring from concrete to iconic (e.g. visually-based) to abstract understanding (Lampert & Cobb, 2003). At each stage, children need to be able to describe what they did and what they

found. Part of this involves children reflecting back on what they've already done with concrete materials (i.e. 'folding back').

- A distinction can be made between calculational discourse (which refers to discussion on calculational processes) and conceptual discourse (in which the reasons for calculating in particular ways become the topic of discussion, i.e. children articulate their task interpretations) (see Hiebert & Wearne, 1993).
- Strategies that are important in teaching language more generally (see Chapter 4) (e.g. restating, reformulating a child's conjecture) are also relevant to teaching mathematical understanding.
- As with language teaching in general, efforts should be made to balance classroom discourse about mathematics with children's out of school discourse practices.

Hiebert and Wearne (1993) conducted a study in which children in second grade were assigned to one of two conditions for teaching place value and multi-digit addition and subtraction. One condition involved constructing relationships between place value and computation strategies, with a strong emphasis on the use of discourse to teach mathematics. The other involved a more conventional, text-based approach to teaching the same topics. Students in the discourse-based setting received fewer problems, and spent more time with each problem, were asked more questions requesting them to describe and explain alternative strategies, talked using longer responses, and showed higher levels of performance and achieved better on end-of-year tests. The authors interpreted the findings with reference to the quality of the nature of the instructional tasks that students were asked to perform, the quality of student discourse, and the ability of students to develop computation procedures themselves in the context of solving problems. According to Hiebert and Wearne, 'the most compelling theoretical argument in

favour of higher-order questions in mathematics is that, if students are challenged to explain the reasons for their responses, or define their positions, they will engage in deeper reflective, integrative thought, than if they are asked to recall facts or rules' (p. 397).

Teaching the language of mathematics

There is some evidence of lack of attention to the development of mathematical language in Irish classrooms. In its evaluation of the implementation of the Primary School Mathematics Curriculum, the inspectorate observed that one in four teachers gave inadequate attention to the development of mathematical language (DES, 2005). In those classes where effective development was observed, 'teachers planned for the teaching of mathematical language, used appropriate terminology, provided opportunities for children to use mathematical language, and referred to mathematical words and symbols' (p. 30).

While the favoured approach to teaching mathematical language is one in which such language is integrated into the discourse of lessons, and children are provided with opportunities to use language in context, some studies have looked at the effects of teaching specific mathematics terminology to young children. For example, Neuman, Newman and Dywer (2011) included mathematical vocabulary in their year-long study of the effects of teaching word knowledge and conceptual development to preschool children (disadvantaged children aged 3-4 years) using taxonomic categorisation and embedded multimedia. In the context of a unit on geometry taught to 3-year-olds, the following concepts were pursued:

- A shape describes how something looks. A geometric shape is a special kind of shape. Geometric shapes have special names.
- Each geometric shape has a different number of sides.

- Some geometric shapes have corners, and some do not.
- Things in our world come in many different geometric shapes.
- Geometric shapes come in a variety of colors and sizes, but they are still the same shape because of the number of sides and corners.

Main and supporting words were taught in connection with these concepts:

- *Main words:* triangle, rectangle, circle, square, pentagon, hexagon, octagon, semicircle, cone, sphere, ice cream cone and house.
- *Supporting words:* squiggle, cloud, three sides, corners, points, lines, connected, sail, four, door, ruler, narrow, wide, curved, round, wheel, equal, pizza box, stop sign, solid, party hat, ball.

The eight-day instructional sequence for each unit included an introductory video-clip which illustrated the target concept (e.g. geometric shapes). This was followed by some phonological awareness activities so that children could successfully differentiate the sounds of new words from words already known. Following this, the instructor posed a series of 'wh' questions designed to enhance understanding of both concepts and target words. This might be followed by the teacher reading about the topic. Instruction on subsequent days involved reviewing targeted words, establishing links across media (e.g. books and video clips), engaging children in journal writing, and leading open-ended discussion about what children had learned. Children participating in the programme demonstrated increased levels of knowledge on unit-specific vocabulary compared with a control group, and also showed improved ability in making inductive inferences about the meanings of novel words.

The study is significant for a number of reasons. First, it shows that it is possible to teach complex subject-specific vocabulary to young children in a semi-structured context, drawing on words and concepts that the children will be expected to encounter in a range of contexts in the future. Second, it seems important to use a range of strategies to teach vocabulary including video viewing, phonological activities, categorisation, discussion and reflection on the material that has been learned. Third, there is evidence that, by engaging in a suite of activities, such as those described by Neuman et al., children begin to develop inferential and generative strategies that enable them to learn vocabulary independently (presumably in much the same way as non-disadvantaged children acquire large meaning vocabularies at an early age).

CONCLUSION

A key plan of the *National Strategy to Improve Literacy and Numeracy 2011-2020* (DES, 2011) is to extend literacy instruction to all curriculum subjects, with the expectation that this will improve overall literacy standards, and support children in acquiring disciplinary knowledge in various subject areas. Part of this entails more effective use of oral language to teach subject-specific knowledge and concepts. The need to identify strategies that can be used to improve oral language is all the more urgent since curricular frameworks for young children (e.g. *Aistear*) are quite specific in identifying important concepts that young children should know. Aspects of language that were identified as being important for young children across subject areas included subject-specific terminology, taxonomies, nominalisations, causality, contrasts and alternatives, modality, and understanding of metaphors (Askeland & Maagerø, 2010). Dialogue types associated with teaching subject matter knowledge to young children included associating dialogue, philosophical dialogue, technical dialogue, text-associated dialogue, and metalinguistic dialogue.

A variety of strategies that can be used to teach language in science classes were identified, including vocabulary visits, read-alouds involving information books, hands-on activities, journal writing and partner-reading of information books. Any or all of these strategies may require teacher to scaffold young children's use of language to develop conceptual knowledge and associated vocabulary and grammatical structures. The potential of inquiry-based learning to support language learning in science was referred to.

The use of language in mathematics lessons was addressed from two perspectives – the use of language and discussion in the context of problem-solving, to enhance children's understanding of problems, and to bolster their ability to discover mathematical procedures in the context of solving problems and communicating their understandings, and the need to teach mathematical vocabulary in creative and systematic ways from an early age. Evidence from the literature (e.g. Lampert & Cobb, 2003; Neuman et al., 2011) was cited in support of both approaches. What appears to be relatively ineffective, especially for at-risk children, is use of textbooks as the main focus of mathematics teaching and learning, in the absence of in-depth mathematical discourse.

GLOSSARY

Academic discourse/language—a form of oral and written language used throughout schools and classrooms for the purposes of management, learning, and assessment (Bailey & Huang, 2011). Characteristics include density of clause structure, verbs about relationships between abstract entities and mental activities, complex nominalisations and nominal groups, declarative mood and modality expressing creativity, and complex vocabulary (Ivanic, 1998, pp. 259–273). The linguistic features of academic discourse are broadly defined in terms of ‘word usage’ (literate language features) and ‘reasoning’ (type of talk) (Curenton et al., 2008, p.164). According to Snow (2010), ‘There is no exact boundary when defining academic language; it falls toward one end of a continuum (defined by formality of tone, complexity of content, and degree of impersonality of stance), with informal, casual, conversational language at the other extreme’ (p. 450).

Contingent responses—those responses which immediately follow the child’s utterance, are semantically contingent to the utterance and are sensitively matched or finely tuned in complexity to the child’s level of communicative functioning (Yoder, Warren, McCathren & Leew, 1998; Hauser-Cram, Warfield, Shonkoff & Krauss, 2001).

Decontextualised language—language which is context-free (Bernstein, 1971), autonomous (Olson, 1977) or disembedded (Donaldson, 1987). It is not rooted in any immediate context of time or situation and does not rely on observation or physical experience (Painter, 1999) but stands as an unambiguous or autonomous representation of meaning (Olson, 1977). Decontextualised language is more cognitively and linguistically complex than conversational language and will be required of children when they enter formal schooling (Snow, 1991). (Also see academic discourse).

Dialogic reading (DR)—a form of interactive shared reading in which an adult reader asks the child or children questions about the story or the pictures in the book and provides feedback in the form of

repetitions, expansions, and modelling of answers. In DR, the adult tries to facilitate the child's active role in telling the story rather than fostering passive listening (NELP, 2008, p. 158). Dialogic reading occurs when adults prompt children with questions, evaluate and expand children's verbalisations, and reward children's efforts to tell the story and label objects in the book (Harris et al., 2011).

Emergent literacy—the beginning behaviors and concepts that ultimately develop into conventional literacy. These include children's early interactions with books, as they become familiar with the parts of a book, with the functions of print, and with the broader purposes of reading. Emergent literacy is often contrasted with reading readiness, which may involve the completion of formal exercises, with a view to preparing children to learn to read.

Emergentist view of language acquisition—this view seeks to explain language acquisition in terms of the interaction between child learning mechanisms and environmental input (Hoff, 2004). It recognises the role of the child's physiological status, cognitive skills and social precocity in language acquisition, and the interactions between these elements and caregiver input. Within this view, the contribution of a knowledgeable adult is considered to be part of the language construction process.

Fast-mapping—the process of learning words based on a single exposure. This process is thought to explain, in part, the prodigious rate of growth in young children's vocabulary (Carey & Bartlett, 1978). Over time, the meaning of the referent broadens as the word is identified in new contexts.

Fine-tuning—in the context of adult/child interactions, fine-tuning of a child's utterance is achieved through the adult adjusting the level of his/her talk to the level of the child's own output and comprehension level.

Genre—types of multi-sentence oral or written text structures that have become conventionalised for particular purposes with expected organisational patterns, as well as language features related to register (see below) (Cazden, 2010). An example is individual sharing time narratives. An oral genre is IRE/F – Teacher Initiation, Student Responses, Teacher Evaluation/Feedback. Other examples include informational, argument, narrative, poetic and multi-genre (Hampton & Resnick, 2009).

Morphology—rules for marking modifications of the meanings of words – e.g. plurality, tense and manner.

Oral Discourse—defined as ‘acquiring the skills uniquely required for participation in oral discourse, i.e. setting aside the acquisition of grammar, vocabulary and pragmatic skills needed for casual conversation, but including the grammar, vocabulary and pragmatic skills needed for lengthier, topic-focused interactions, or for certain genres of monologue (definitions, explanations) even if relatively brief,’ (Lawrence & Snow, 2011 p. 323).

Performance assessment—assessment that involves either the observation of behaviour in the real world or a simulation of real-life activity (McKay, 2006). The concept of performance-based assessment is related to the concept of authentic assessment in that it arose from a realisation of the limitations of multiple-choice tests, and other assessments of complex skills, and the difficulty in making inferences about complex skills from such assessments. (NCTE/IRA, 2009).

Phonology—the implicit rule-based sound-based system of spoken language. Phonology includes the rules governing the structure, distribution and sequencing of speech-sound patterns.

Pragmatics—aspects of language concerned with language use, in a particular socio-communicative context. Pragmatics include an

awareness of the listener's needs in understanding what is being said. Pragmatic language impairment is an impairment in understanding pragmatic aspects of language.

Print awareness—a child's knowledge of letters and words, the ability to identify some letters by name, and knowledge of the way in which words progress through a book.

Print referencing—the inclusion of questions and comments about print during teacher-class book reading. The extent and quality of teachers' talk about print is related to children's print knowledge and letter recognition skills (Justice, Kaderavek, Fan, Sofka, & Hunt, 2009).

Recasts—adult recasts are responses that immediately follow the child's utterance, maintain the child's meaning, and incorporate content words from the child's utterance, while modifying one or more of the constituents (subject, verb, object), or changing the grammatical form of the utterance. The distinguishing feature of the recast is the element of change (Fey & Proctor-Williams, 2000).

Register—refers to the language features with which people speak or write in specific recurring situations (Cazden, 2010). Different subject areas have different language registers. For language arts/English, grammatical terms are needed for discussing the multiple expressive options available to writers. In mathematics, children need the language to communicate about the problem-solving process. Register can be learned through 'immersion in a community of practice' and through direct explicit instruction (Cazden, 2010).

Semantics—meanings expressed by the relations among words: 'the understanding of the meanings of words, individually and in relation to other words, appears to be the key linkage in the development of reading.' (Snowling, 2005). The aspect of language concerned with rules governing the meaning or content of words or grammatical units.

Semiotic systems—symbol systems (signs) that represent concepts: one example of a symbol system is the alphabet. Each symbol represents meaning.

Shared reading—an interactive reading experience that occurs when children join in or share the reading of a big book or other enlarged text while guided and supported by a teacher or other experienced reader. Children observe an expert reading the text with fluency and expression. It is through shared reading that the reading process and reading strategies that readers use are demonstrated. In shared reading, children participate in reading, learn critical concepts of how print works, get the feel of learning and begin to perceive themselves as readers (Fountas & Pinnell, 1996).

Syntax—the organisational rules specifying word order, sentence organisation and word relationships. Syntax specifies which word combinations are acceptable or grammatical, and which are not. The form or structure of a sentence is governed by the rules of syntax. These rules specify word, phrase, and clause order; sentence organisation; and the relationships between words, word classes, and other sentence elements.

Tier 2 words—more sophisticated words for which children already have some conceptual understanding (e.g. to take care of – tend) (Beck, McKeown & Kucan, 2002). These words are generally easier to teach than tier 3 words – the more complex but less-frequent words encountered in content area reading, and are more useful than highly-frequent tier 1 words.

Vocabulary development—the acquisition of vocabulary and the building of an early lexicon, that includes the process of developing and indexing concepts, and the development of specific phonological and lexical-semantic memory. Vocabulary includes words used in speaking (expressive vocabulary) and words understood in listening (receptive vocabulary). As children move into reading, a distinction can be made between oral vocabulary and written vocabulary.

Vocabulary instruction—activities undertaken by the caregiver/teacher designed to strengthen a child's understanding of word meanings. Vocabulary instruction begins with identifying the words that children will need to build meaning and the ideas that those words represent (Neuman, 2011). Vocabulary instruction can include teaching the meanings of specific words and teaching strategies that will enable children to figure out word meanings independently.

Word—a word is a unique, consistent phonological and orthographic form that refers to objects, actions, qualities of objects, and relations among objects and events. Most core vocabulary words represent concepts that can be indexed as specific combinations of unique features that differentiate objects, actions and events (Kaiser, Roberts & McLeod, 2011).

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A P P E N D I C E S

APPENDIX 7

Figure A7.1 - Components of the Reading System

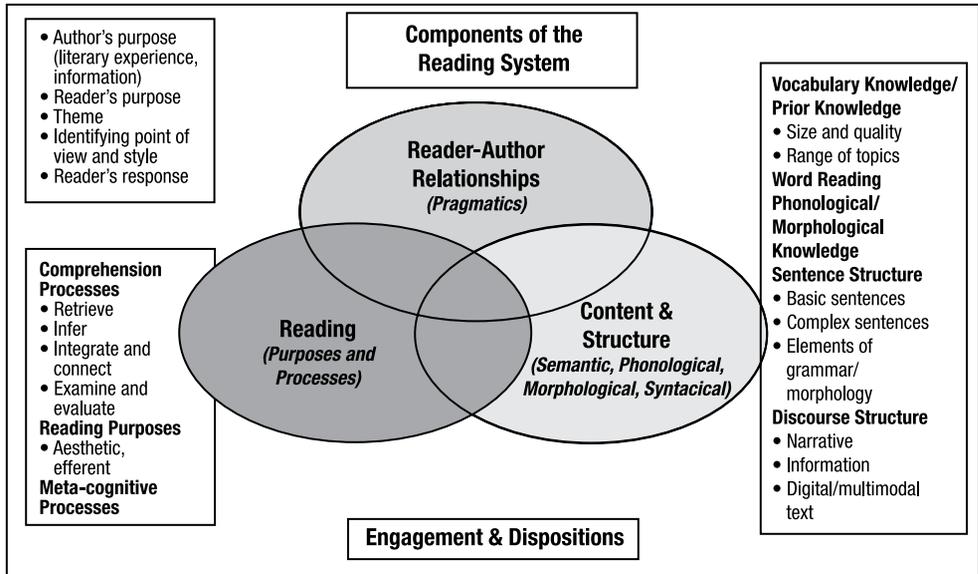


Figure A7.2 - Components of Writing System

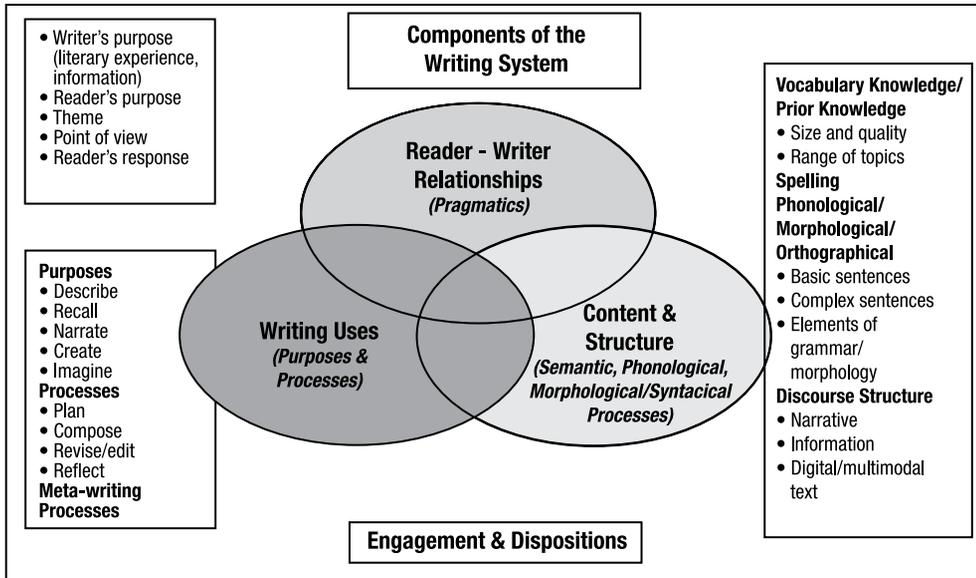


Table A7.1 - New Standards - Language Arts

Source: Resnick & Snow (2009)

Pre-school (including junior infants)

Standard 1: Habits – talking a lot

- Talk for various purposes.
- Engage in play using talk to enact or extend a storyline (e.g. taking on roles, using different voices, problem-solving).
- Playfully manipulate language (including nonsense words, rhymes, silly sounds, repetitious phrases).
- Express ideas, feelings and needs.
- Listen and respond to direct questions.
- Ask questions.
- Talk and listen in small groups (during playtime or mealtime, or more formally, at workshop areas or craft tables).
- Share and talk daily about their own experiences, products or writing (e.g. explaining their pictures, or ‘reading’ their writing attempts).

Standard 1: Habits – talking to oneself

- Begin to make spontaneous and audible corrections to their own behaviour, actions or language (e.g. Hoppy, I mean happy; I said two, I mean three).
- Talk to themselves out loud to make plans, guide behaviour and actions, or monitor thinking.

Standard 1: Habits – conversing at length on a topic

- Initiate and sustain a conversation with comments or questions through at least four exchanges.
- Recognise the topic of the conversation and make topic-relevant responses (e.g. ‘I know Ernie, yeah, on Sesame Street, but I like Bert better’).
- Recognise invitations to converse vs. questions intended to elicit a brief response.

- Listen to others and avoid ‘talking over’.

Standard 1: Discussing books

- Gather around a book and pay attention to the reader and the book.
- Know the front-to-back progression of a book and the left-to-right progression of print.
- Know that words and pictures convey meaning.
- Pose and answer specific questions about the text (for example, word meaning, recounting and recalling, describing, naming (e.g. What did Billy need to fix? His wagon. I have a red wagon too)).
- Recite familiar refrains from books that have been heard several times.
- If asked, use the text to predict what might happen next (e.g. Q. What do you think happens next? A. He’s going to miss the bus).
- Discuss character motivation (e.g. Kitty didn’t go to the party because she was sad).
- Identify a favourite book and say why they like it.

Standard 2: Kinds of talk and resulting genre – narrative

- Give a simple narrative (with adult prompting if necessary), recounting two or more events that are not necessarily in chronological order (for example, ‘Puppy chase me and he lick my knee’).
- Recount knowledge gained through observation, experience or text (for telling more complete and varied stories).
- Orientate the listener by giving some setting information about people, objects and where and when events occurred, (e.g. I had a shot once. With a needed. He (the doctor) gave me a big hole in my arm).
- Describe information and evaluate or reflect on it (e.g. I went down the blue slide, it was fun).
- Include quotations (e.g. He went ‘Get out of here’, and I said, ‘No, I won’t’).

- Mark the end of the story directly or with a coda ('That's what happened').

Standard 2: Kinds of talk and resulting genre – explaining and seeking information

- Seek or provide information by observing, looking at books, or asking teachers, parents or peers.
- Request or provide explanations of their own or others' actions, speech or feelings.
- Explain their own others' intentions and thinking when asked (e.g. Q. 'Why is the milk out?' A. 'For cereal. I want some cereal').
- Give simple, one-sentence explanations, with few supporting details or evidence (e.g. I cut my knee because I fell).
- Request or provide explanations of word meanings (e.g. 'What's 'your highness'?').
- Use all their senses to describe physical characteristics of objects, self and others.
- Describe objects, self, and others in terms of location and position.
- Use gestures and sounds when they don't have descriptive words (e.g. describing an accident scene, 'They took him in that . . . that. . RRRR-RRRR. It was loud').

Standard 2: Kinds of talk and resulting genre – getting things done

- Listen to, comprehend, and carry out directions with three to four simple steps (e.g. 'Go to the cubby, hang up your sweater, and bring your lunch back').
- Give directs to include several sequenced steps.
- Ask for clarification to carry out more complicated directions (e.g. while baking, 'What comes next?').
- Use actions or pictures to augment language (e.g. demonstrating how to cut the paper or open a container).

- Engage in brief conversation (three to four exchanges) to negotiate sharing, planning and problem-solving.

Standard 2: Kinds of talk and resulting genres – producing and responding to performances

- Attend to a performance (e.g. watching and listening to a performance 10 or more minutes long).
- Describe the experience and/or their reaction to the performance (e.g. ‘I was scared’ or ‘I liked the clown. He was funny’).
- Ask questions about things they do not understand (e.g. ‘Why is Tiny Tim so sad’).
- Join in performances as appropriate.
- Draw from a rehearsed repertoire to give a brief performance (e.g. in highly practised forms such as ‘Itsy-Bitsy-Spider’ and ‘I’m a Little Teapot’).
- As performers, look at the audience as appropriate.
- Speak, sing, or act in a loud-enough voice.
- Speak, sing or act out a few sentences.

Standard 3: Language use and conventions – rules of interaction

- Know and be able to describe rules for school interactions (e.g. using ‘inside voices’, taking turns, raising a hand to speak)
- Learn rules for polite interactions (e.g. saying ‘please’ and ‘thank you’)

Standard 3: Language use and conventions – word play, phonological awareness and language play

- Listen for and play with the rhythm of language (e.g. clapping the words in a chant or rhyme).
- Recognise and enjoy rhymes (e.g. nursery rhymes).
- Play with language through songs, alliteration, and word substitutions (e.g. ‘Ring around the Rosie’).
- Play with words and their meanings (e.g. a three-year-old

changing the expected into the unexpected – ‘Doggie, doggie, meow!’).

- Experiment with unconventional use of words.
- Recognise and enjoy metaphorical language.
- In a string of sounds, listen for and identify the first, middle or last sound or word in the string.
- In a string of sounds or words, listen for and identify the missing sound or word.
- Try oral blending of familiar word parts (e.g. If I say ‘hop. . . scotch’, what do I get when it comes together?).
- Build letter recognition (names and shapes only).
- Recognise violation of word order.
- Engage in sentence play.
- Transition from speech to print (e.g. provide the words or labels for a picture, dictate words of a story, or being to use letters and words).

Standard 3: Language use and conventions – vocabulary and word choice

- Add words to familiar knowledge domains.
- Sort relationships among words in knowledge domains.
- Add new domains from subjects and topics they are studying (e.g. in math, shapes like circle and triangle, or in science, reptiles like snake and lizard).
- Learn new words in daily conversation.
- Learn new words daily from what is being explored or read aloud.
- Show a general interest in words and word meanings, asking adults what a word means or offering different definitions.
- Recognise that things may have more than one name (e.g. Fluffy is a cat, the cat is a pet, the pet is an animal).
- Categorise objects or pictures and tell why they go together (e.g. group the following into toys or food categories – ball, skates, grapes, kite, bread, milk).

- Increase vocabulary of verbs, adjectives and adverbs to exercise options in word choice
- Use some abstract words and understand that these words differ from concrete things, places or people.
- Use verbs referring to cognition, communication and emotions

Table A7.2 - Common Core Standards for English Language Arts - Speaking and Listening (Kindergarten to Grade 3)

Source: www.corestandards.org

Kindergarten

Comprehension and Collaboration

- SL.K.1. Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.
- Follow agreed-upon rules for discussions (e.g. listening to others and taking turns speaking about the topics and texts under discussion).
- Continue a conversation through multiple exchanges.
- SL.K.2. Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
- SL.K.3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

Presentation of Knowledge and Ideas

- SL.K.4. Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
- SL.K.5. Add drawings or other visual displays to descriptions as desired to provide additional detail.
- SL.K.6. Speak audibly and express thoughts, feelings, and ideas clearly.

First Grade

Comprehension and Collaboration

- SL.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.
- Follow agreed-upon rules for discussions (e.g. listening to others with care, speaking one at a time about the topics and texts under discussion).
- Build on others' talk in conversations by responding to the comments of others through multiple exchanges.
- Ask questions to clear up any confusion about the topics and texts under discussion.
- SL.1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
- SL.1.3. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.

Presentation of Knowledge and Ideas

- SL.1.4. Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.
- SL.1.5. Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.
- SL.1.6. Produce complete sentences when appropriate to the task and situation.

Second Grade

Comprehension and collaboration

- SL.2.1. Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.

- Follow agreed-upon rules for discussions (e.g. gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
- Build on others' talk in conversations by linking their comments to the remarks of others.
- Ask for clarification and further explanation as needed about the topics and texts under discussion.
- SL.2.2. Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
- SL.2.3. Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.

Presentation of Knowledge and Ideas

- SL.2.4. Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.
- SL.2.5. Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.
- SL.2.6. Produce complete sentences when appropriate to the task and situation in order to provide requested detail or clarification.

Third Grade

Comprehension and Collaboration

- SL.3.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.
- Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.

- Follow agreed-upon rules for discussions (e.g. gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
- Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.
- Explain their own ideas and understanding in light of the discussion.
- SL.3.2. Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- SL.3.3. Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.

Presentation of Knowledge and Ideas

- SL.3.4. Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.
- SL.3.5. Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.
- SL.3.6. Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

Table A7.3 - Common Core Standards for English Language Arts - Language (Kindergarten to Grade 3)

Common Core State Standards for English Language Arts – Language

Kindergarten

Conventions of Standard English

- L.K.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
 - Print many upper- and lowercase letters.
 - Use frequently occurring nouns and verbs.
 - Form regular plural nouns orally by adding /s/ or /es/ (e.g. *dog, dogs; wish, wishes*).
 - Understand and use question words (interrogatives) (e.g. *who, what, where, when, why, how*).
 - Use the most frequently occurring prepositions (e.g. *to, from, in, out, on, off, for, of, by, with*).
 - Produce and expand complete sentences in shared language activities.
- L.K.2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - Capitalize the first word in a sentence and the pronoun I.
 - Recognize and name end punctuation.
 - Write a letter or letters for most consonant and short-vowel sounds (phonemes).
 - Spell simple words phonetically, drawing on knowledge of sound-letter relationships.

Knowledge of Language

- L.K.3. (Begins in grade 2)

Vocabulary Acquisition and Use

- L.K.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten

reading and content.

- Identify new meanings for familiar words and apply them accurately (e.g. knowing *duck* is a bird and learning the verb to *duck*).
- Use the most frequently occurring inflections and affixes (e.g. *-ed, -s, re-, un-, pre-, -ful, -less*) as a clue to the meaning of an unknown word.
- L.K.5. With guidance and support from adults, explore word relationships and nuances in word meanings.
 - Sort common objects into categories (e.g. shapes, foods) to gain a sense of the concepts the categories represent.
 - Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).
 - Identify real-life connections between words and their use (e.g. note places at school that are colorful).
 - Distinguish shades of meaning among verbs describing the same general action (e.g. *walk, march, strut, prance*) by acting out the meanings.
- L.K.6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts.

First grade

Conventions of standard English

- L.1.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
 - Print all upper- and lowercase letters.
 - Use common, proper, and possessive nouns.
 - Use singular and plural nouns with matching verbs in basic sentences (e.g. *He hops; We hop*).
 - Use personal, possessive, and indefinite pronouns (e.g. *I, me, my; they, them, their, anyone, everything*).
 - Use verbs to convey a sense of past, present, and future (e.g. *Yesterday I walked home; Today I walk home; Tomorrow I will walk*

home).

- Use frequently occurring adjectives.
 - Use frequently occurring conjunctions (e.g. *and, but, or, so, because*).
 - Use determiners (e.g. articles, demonstratives).
 - Use frequently occurring prepositions (e.g. *during, beyond, toward*).
 - Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.
- L.1.2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - Capitalize dates and names of people.
 - Use end punctuation for sentences.
 - Use commas in dates and to separate single words in a series.
 - Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words.
 - Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.

Knowledge of Language

- L.1.3. (Begins in grade 2)

Vocabulary Acquisition and Use

- L.1.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 1 reading and content*, choosing flexibly from an array of strategies.
 - Use sentence-level context as a clue to the meaning of a word or phrase.
 - Use frequently occurring affixes as a clue to the meaning of a word.
 - Identify frequently occurring root words (e.g., *look*) and their inflectional forms (e.g. *looks, looked, looking*).

- L.1.5. With guidance and support from adults, demonstrate understanding of figurative language, word relationships and nuances in word meanings.
 - Sort words into categories (e.g. colors, clothing) to gain a sense of the concepts the categories represent.
 - Define words by category and by one or more key attributes (e.g. a *duck* is a bird that swims; a *tiger* is a large cat with stripes).
 - Identify real-life connections between words and their use (e.g. note places at home that are *cozy*).
 - Distinguish shades of meaning among verbs differing in manner (e.g. *look, peek, glance, stare, glare, scowl*) and adjectives differing in intensity (e.g. *large, gigantic*) by defining or choosing them or by acting out the meanings.
- L.1.6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g. *because*).

Second grade

Conventions of Standard English

- L.2.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
 - Use collective nouns (e.g., *group*).
 - Form and use frequently occurring irregular plural nouns (e.g. *feet, children, teeth, mice, fish*).
 - Use reflexive pronouns (e.g. *myself, ourselves*).
 - Form and use the past tense of frequently occurring irregular verbs (e.g. *sat, hid, told*).
 - Use adjectives and adverbs, and choose between them depending on what is to be modified.
 - Produce, expand, and rearrange complete simple and

compound sentences (e.g. *The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy*).

- L.2.2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - Capitalize holidays, product names, and geographic names.
 - Use commas in greetings and closings of letters.
 - Use an apostrophe to form contractions and frequently occurring possessives.
 - Generalize learned spelling patterns when writing words (e.g. *cage—badge; boy—boil*).
 - Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.

Knowledge of Language

- L.2.3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.
 - Compare formal and informal uses of English.

Vocabulary Acquisition and Use

- L.2.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies.
 - Use sentence-level context as a clue to the meaning of a word or phrase.
 - Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., *happy/unhappy, tell/retell*).
 - Use a known root word as a clue to the meaning of an unknown word with the same root (e.g. *addition, additional*).
 - Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g. *birdhouse, lighthouse, housefly; bookshelf, notebook, bookmark*).

- Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.
- L.2.5. Demonstrate understanding of figurative language, word relationships and nuances in word meanings.
 - Identify real-life connections between words and their use (e.g. *describe foods that are spicy or juicy*).
 - Distinguish shades of meaning among closely related verbs (e.g. *toss, throw, hurl*) and closely related adjectives (e.g. *thin, slender, skinny, scrawny*).
- L.2.6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g. *When other kids are happy that makes me happy*).

Third grade

Conventions of Standard English

- L.3.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
 - Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences.
 - Form and use regular and irregular plural nouns.
 - Use abstract nouns (e.g. *childhood*).
 - Form and use regular and irregular verbs.
 - Form and use the simple (e.g. *I walked; I walk; I will walk*) verb tenses.
 - Ensure subject-verb and pronoun-antecedent agreement.
 - Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified.
 - Use coordinating and subordinating conjunctions.
 - Produce simple, compound, and complex sentences.

- L.3.2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - Capitalize appropriate words in titles.
 - Use commas in addresses.
 - Use commas and quotation marks in dialogue.
 - Form and use possessives.
 - Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g. *sitting, smiled, cries, happiness*).
 - Use spelling patterns and generalizations (e.g. *word families, position-based spellings, syllable patterns, ending rules, meaningful word parts*) in writing words.
 - Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.

Knowledge of language

- L.3.3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.
 - Choose words and phrases for effect.
 - Recognize and observe differences between the conventions of spoken and written standard English.

Vocabulary Acquisition and Use

- L.3.4. Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies.
 - Use sentence-level context as a clue to the meaning of a word or phrase.
 - Determine the meaning of the new word formed when a known affix is added to a known word (e.g. *agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat*).
 - Use a known root word as a clue to the meaning of an unknown word with the same root (e.g. *company, companion*).

- Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases.
- L.3.5. Demonstrate understanding of figurative language, word relationships and nuances in word meanings.
 - Distinguish the literal and nonliteral meanings of words and phrases in context (e.g. *take steps*).
 - Identify real-life connections between words and their use (e.g. describe people who are *friendly* or *helpful*).
 - Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g. *knew*, *believed*, *suspected*, *heard*, *wondered*).
- L.3.6. Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships (e.g. *After dinner that night we went looking for them*).

Table A7.4 - Drumcondra English Profiles - Indicators for Oral Language Junior Infants and Third Class

Source: Shiel & Murphy, 2000

Junior Infants

When rating a pupil's achievement, begin at the top of the list (the indicator regarded as being the most difficult) and continue downwards until you reach the highest indicator that has been achieved independently by the pupil, on more than one occasion.

11.	Constructs an imaginative story based on a sequence of pictures (see Note 11).
10.	Predicts future activities and events, with reference to own experiences.
9.	Shows an interest in the meanings of new words in stories and poems by asking Questions.
8.	Demonstrates understanding of stories, songs and rhymes through mime and roleplay.
7.	Identifies repetition and rhyme in stories and poems.
6.	Speaks audibly, clearly and with confidence on most occasions (see Note 6).
5.	Listens attentively to stories and poems read aloud by the teacher.
4.	Recites some rhymes, poems and songs from memory.
3.	Communicates easily with other pupils during seatwork (see Note 3).
2.	Follows simple instructions and directions (see Note 2).
1.	Expresses simple personal needs (see Note 1).

Notes:

- 11 Includes pictures in books, classroom posters, photographs etc.
- 6 Includes pronouncing most familiar words clearly.
- 3 For example, focuses on the task in hand and makes simple requests of other pupils. (Please give the red crayon to Paul).
- 2 Examples: Put the paintbrush in the jar on the top shelf (Visual Arts); Crawl under the first bench and climb over the second (Physical Education).
- 1 Examples: I need a pencil. I want a drink etc.

Third Class

When rating a pupil's achievement, begin at the top of the list (the indicator regarded as being the most difficult) and continue downwards until you reach the highest indicator that has been achieved independently by the pupil, on more than one occasion.

8	Supports a personal view of a poem with reference to content, format and language.
7	Persuades or argues a point of view in real or imaginary situations.
6	Delivers a prepared report to the class on a project topic, using appropriate vocabulary and giving relevant information.
5	Listens to and summarises short stories or informational texts by recalling several important points.
4	Listens to stories and poems and identifies and comments on humour.
3	Conducts a short interview with another pupil or adult to obtain information about a topic.
2	Talks clearly, audibly and with confidence to different audiences in the school environment (individuals, groups, own class).
1	Listens to longer stories and predicts future events and likely outcomes (see Note 1).

Notes:

- 1 Stories may be played on a tape recorder or read aloud by the teacher.

Table A7.5 - England: Early Years Foundation Stage Communication, Language and Literacy Strand - Scale for Language For Communication and Thinking

1. Listens and responds.
2. Initiates communication with others, displaying greater confidence in more informal contexts.
3. Talks activities through, reflecting on and modifying actions.
4. Listens with enjoyment to stories, songs, rhymes and poems, sustains attentive listening and responds with relevant comments, questions or actions.
5. Uses language to imagine and recreate roles and experiences.
6. Interacts with others in a variety of contexts, negotiating plans and activities and taking turns in conversation.
7. Uses talk to organise, sequence and clarify thinking, ideas, feelings and events, exploring the meanings and sounds of new words.
8. Speaks clearly with confidence and control, showing awareness of the listener.
9. Talks and listens confidently and with control, consistently showing awareness of the listener by including relevant detail. Uses language to work out and clarify ideas, showing control of a range of appropriate vocabulary.

Interpretation:

The first three points describe a child who is still progressing towards the achievements described in the early learning goals. Points 4-8 are drawn from the early learning goals themselves. These are presented in approximate order of difficulty, according to evidence from trials. Point 9 in each scale describes a child who has achieved all the points from 1-8 on that scale, has developed further both in breadth and depth, and is working consistently beyond the level of the early learning goals.

Source: UK Department for Children, Schools and Families (2008)

Table A7.6 - England: National Curriculum Attainment Targets - Oral Language (Speaking and Listening)

Level 1

Pupils talk about matters of immediate interest. They listen to others and usually respond appropriately. They convey simple meanings to a range of listeners, speaking audibly, and begin to extend their ideas or accounts by providing some detail.

Level 2

Pupils begin to show confidence in talking and listening, particularly where the topics interest them. On occasions, they show awareness of the needs of the listener by including relevant detail. In developing and explaining their ideas they speak clearly and use a growing vocabulary. They usually listen carefully and respond with increasing appropriateness to what others say. They are beginning to be aware that in some situations a more formal vocabulary and tone of voice are used.

Level 3

Pupils talk and listen confidently in different contexts, exploring and communicating ideas. In discussion, they show understanding of the main points. Through relevant comments and questions, they show they have listened carefully. They begin to adapt what they say to the needs of the listener, varying the use of vocabulary and the level of detail. They are beginning to be aware of standard English and when it is used.

Level 4

Pupils talk and listen with confidence in an increasing range of contexts. Their talk is adapted to the purpose: developing ideas thoughtfully, describing events and conveying their opinions clearly. In discussion, they listen carefully, making contributions and asking

questions that are responsive to others' ideas and views. They use appropriately some of the features of standard English vocabulary and grammar.

Level 5

Pupils talk and listen confidently in a wide range of contexts, including some that are of a formal nature. Their talk engages the interest of the listener as they begin to vary their expression and vocabulary. In discussion, they pay close attention to what others say, ask questions to develop ideas and make contributions that take account of others' views. They begin to use standard English in formal situations.

Level 6

Pupils adapt their talk to the demands of different contexts with increasing confidence. Their talk engages the interest of the listener through the variety of its vocabulary and expression. Pupils take an active part in discussion, showing understanding of ideas and sensitivity to others. They are usually fluent in their use of standard English in formal situations.

Level 7

Pupils are confident in matching their talk to the demands of different contexts. They use vocabulary precisely and organise their talk to communicate clearly. In discussion, pupils make significant contributions, evaluating others' ideas and varying how and when they participate. They show confident use of standard English in situations that require it.

Level 8

Pupils maintain and develop their talk purposefully in a range of contexts. They structure what they say clearly, using apt vocabulary and appropriate intonation and emphasis. They make a range of contributions which show that they have listened perceptively and are sensitive to the development of discussion. They show confident use of standard English in a range of situations, adapting as necessary.

Exceptional performance

Pupils select and use structures, styles and registers appropriately in a range of contexts, varying their vocabulary and expression confidently for a range of purposes. They initiate and sustain discussion through the sensitive use of a variety of contributions. They take a leading role in discussion and listen with concentration and understanding to varied and complex speech. They show assured and fluent use of standard English in a range of situations and for a variety of purposes.

APPENDIX A

This table shows the cross-references between the three research reports.

Oral Language in Early Childhood and Primary Education	Literacy in Early Childhood and Primary Education	Towards an Integrated Language Curriculum in Early Childhood and Primary Education
Chapter 4: Section: Teaching as Dialogue, p. 149	Chapter 2: Section: Constructivist and Socio-Constructivist Models, p. 59	
Chapter 3: Section: The academic language of discourse, p. 94	Chapter 3: Section: Comprehension, p. 88	
Chapter 3: Section: The Intersubjective Mode, p. 76	Chapter 3: Section: Developing Writers, p. 95	
Chapter 1: Section: Language and Children's Virtual Worlds, p. 56	Chapter 3: Section: Digital Literacy, p. 105	Chapter 4: Section: European Language Portfolio, p. 82
Chapter 5: Section: Language and Disadvantage, p. 180	Chapter 4: Section: Storybook Reading and Discussion, p. 120	
Chapter 4: Section: Meaning Vocabulary, p. 153	Chapter 4: Section: Teaching Vocabulary – Early Years, p. 131	
Chapter 5: Section: Language and Disadvantage, p. 180	Chapter 5: Section: Disadvantage and Literacy, p. 190	Chapter 1: Section: Language Learning in Irish Primary Schools, p. 26
Chapter 2: Section: Developmental Disabilities, p. 65.	Chapter 5: Section: Autistic spectrum disorders and literacy, p. 197	
Chapter 5: Section: Second Language Learners, p. 198	Chapter 5: Section: English as an Additional or Second Language, p. 203	
Chapter 7: General principles of and approaches to assessing young children, p. 251	Chapter 6: Section: Principles of literacy assessment in early childhood, p. 221	Chapter 4: Section: Common European Framework of Reference, p. 79
Chapter 7: General principles of and approaches to assessing young children, p. 251	Chapter 6: Section: Towards a Framework for Assessment, p. 256	Chapter 4: Section: Common European Framework of Reference, p. 79

Oral Language in Early Childhood and Primary Education	Literacy in Early Childhood and Primary Education	Towards an Integrated Language Curriculum in Early Childhood and Primary Education
Chapter 7: Section: Aspects of oral language that should be assessed, p. 253	Chapter 6: Section: Oral language, p. 222	
Chapter 7: Section: Tools for assessing oral language in classroom contexts, p. 266	Chapter 6: Section: Range of Assessment Tools Suitable for Assessing Early Literacy Learning, p. 247	Chapter 4: Section: European Language Portfolio, p. 82
Chapter 7: Section: Assessing children for whom English is a Second Language, p. 276	Chapter 6: Section: Assessing the Literacy of EAL Children, p. 264	
Chapter 6: How can teachers ensure that children's oral language development supports their literacy development?	Chapter 7: How can teachers ensure that children's literacy development supports their oral language development?	Chapter 1: Section: Theoretical perspectives and research foundations, p.11
Chapter 8: Section: Development of Subject-Orientated Knowledge in Science, p. 288	Chapter 8: Section: Inquiry-based Models of Literacy, p. 296	
Chapter 8: p. 280	Chapter 8: Section: Creativity and Literacy, p. 299	
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