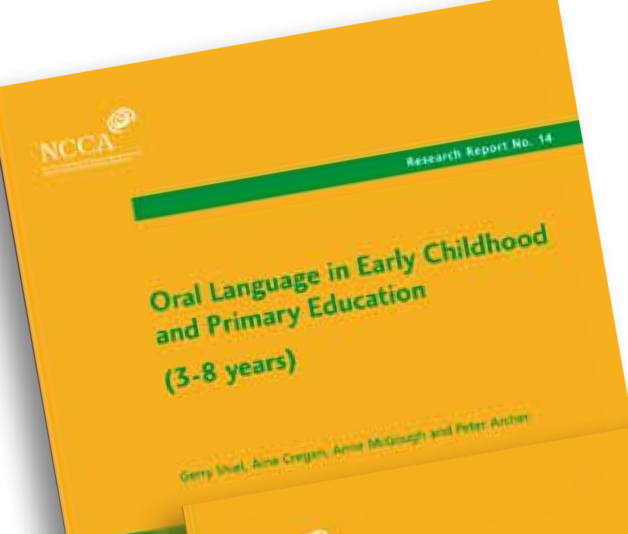
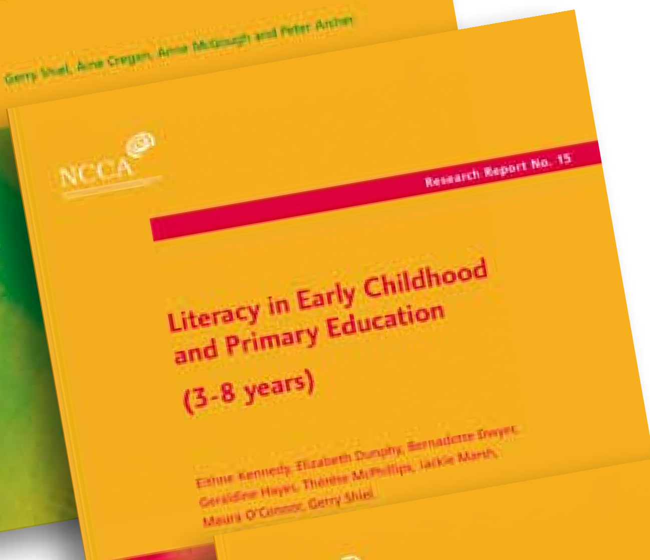
Executive Summaries





NCCA
An Chomhairle Náisiúnta Curaclaim agus Measúnachta
National Council for Curriculum and Assessment

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ISSN 1649-3362

National Council for Curriculum and Assessment

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www.ncca.ie

Preface

There have been important indications of the need and direction for change in the primary school language curriculum in recent years. Curriculum reviews and evaluations; work with school networks; national assessments; and the development of *Aistear: the Early Childhood Curriculum Framework;* all draw attention to the potential and promise of a new language curriculum for English and Gaeilge for primary schools.

Literacy and Numeracy for Learning and Life, Ireland's national strategy to improve literacy and numeracy among children and young people, presents a shared goal for literacy for parents and communities; practitioners and teachers; and leadership at school level. At once, that goal is both simple and complex, to make clear what our young people should achieve and to help all children to realise their potential. The new language curriculum is central to the achievement of this ambition for all primary school children because it provides the bedrock from which learning is shaped.

This booklet contains Executive Summaries of three research reports which the NCCA commissioned to support the new primary language curriculum:

- **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, Thérese 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

The contents of the full reports, which are available at http://www.ncca.ie, serve to enliven and enlighten our understanding and discussion of children's oral language and literacy development in the primary years and the kinds of curriculum and assessment structures and practices needed. In order to broaden access to some key messages from the reports, the authors have also prepared a series of short podcasts (available at http://www.ncca.ie) in which they discuss important ideas in the reports for parents, practitioners and teachers.

The authors are to be commended on these excellent reports which deepen and enrich the context for developing the new primary language curriculum. The NCCA is committed to quality in developing curriculum and assessment which is both evidence-based and informed by practice. These research reports mark the beginning of Council's work to develop the new language curriculum for primary schools.

Brigid McManus

Chairperson, NCCA

Executive Summaries

Oral Language in Early Childhood and Primary Education (3-8 years)
Gerry Shiel, *Educational Research Centre, Dublin*
Áine Cregan, *Mary Immaculate College, Limerick*
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Literacy in Early Childhood and Primary Education (3-8 years)
Eithne Kennedy, *St. Patrick's College, Dublin*
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Geraldine Hayes, *St. Patrick's College, Dublin*
Thérèse McPhillips, *St. Patrick's College, Dublin*
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Towards an Integrated Language Curriculum in Early Childhood and Primary Education (3-12 years)
Pádraig Ó Duibhir, *St Patrick's College, Dublin*
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Research Report No. 14

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

Gerry Shiel, Áine Cregan, Anne McGough and Peter Archer

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

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 (though 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 than 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.

Research Report No. 15

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

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LITERACY IN EARLY CHILDHOOD AND PRIMARY EDUCATION (3-8 YEARS)

Defining literacy

It is important to consider definitions of literacy across the life span of the individual from 'womb to tomb' (Alexander, 1997). Definitions of literacy should encompass the cognitive, affective, socio-cultural, cultural-historical, creative and aesthetic dimensions.

Three important international assessment initiatives, the Programme for International Student Assessment (PISA), the Progress in International Reading Literacy Study (PIRLS) and the Programme for International Assessment of Adult Competencies (PIACC) all emphasise constructivist interactive processes of reading, where readers actively construct meaning from text. They recognise the importance of literacy in empowering the individual to develop reflection, critique and empathy, leading to a sense of self-efficacy, identity and full participation in society. The PIRLS definition also refers to the development of a community of readers within schools, where social interactions around text encourage both the development of habits of mind (Brunner & Tally, 1999) and positive attitudes towards reading within the classroom learning ecology (Brown & Deavers, 1999; Luckin, 2008; Reinking & Bradley, 2000; Zhao & Frank, 2003).

The definition espoused by the Department of Education and Skills (DES) in the *National Strategy to Improve Literacy and Numeracy Among Children and Young People 2011-2020* (DES, 2011), notes that:

> *literacy includes the capacity to read, understand and critically appreciate various forms of communication including spoken language, printed text, broadcast media, and digital media.* (DES, 2011, p. 8)

While the definition is broad, critically, it does recognise the importance of conceptualising literacy to include reading, writing, communication and oral language in both print-based and digitised formats. Given the prevalence of digital media, including the internet, in our daily lives, it is appropriate that this definition encompasses the new literacies framework (Leu et al.,2004) and hence presents a broad conceptualisation of literacy.

The definition in *Aistear: the Early Childhood Curriculum Framework* (National Council for Curriculum and Assessment, (NCCA), 2009) clearly recognises the importance of multiple modes and multiple representations in literacy. It also defines literacy from a semiotic position to include linguistic and non-linguistic forms of communication.

Given that the age range for the review is 3-8 years, the concept of emergent literacy is particularly significant. Historically, emergent literacy reflects a move from a 'readiness' perspective popular in the 1960s and 70s to a developmental perspective. Whitehurst and Lonigan (1998, p. 849) define emergent literacy as 'the skills, knowledge and attitudes that are presumed to be developmental precursors to conventional forms of reading and writing'. In addition, *Aistear* (NCCA, 2009, p. 54) views emergent literacy as developing through 'play and hands-on experience [where] children see and interact with print as they build an awareness of its functions and conventions'. It is also important to take account of the interconnectedness of oral language and reading and writing within the emergent literacy phase. Likewise, Vygotskian theories related to language acquisition, symbolism

and socio-cultural aspects of literacy development are also important to consider.

Theoretical perspectives

An historical overview of a broad range of theoretical perspectives on young children's early literacy development indicates three paradigm shifts – from behaviourist to cognitive to socio-cultural perspectives.

In the case of a number of perspectives we see how the associated theory shaped what are now generally accepted maxims about literacy development. For example, arising from the work of cognitive psychologists there is now widespread acceptance of the idea that *phonological awareness* is a critical aspect of early literacy development. The emphasis placed on reading for meaning is seen to arise from the psycholinguistic perspective. Metacognitive theories emphasise the role of metacognitive processes in reading, writing and spelling while cognitive apprenticeship models have led to the emphasis that is placed on children developing problem-solving skills in literacy-related activity through the assistance of a more knowledgeable other. Socio-cultural theories of literacy are identified as those which emphasise the role that culture plays in the development and practice of literacy, the social nature of learning (including observing how others construct meaning within literacy practices, and in some instances internalising understanding of those processes), and the way in which literacy practice is located within wider social, economic and political contexts. Critical literacy is seen to empower children in understanding how texts may influence and change them as members of society.

Making meaning using various modes is identified as part and parcel of young children's communicative practices. Examples of modes included children's use of gesture and their construction and use of images. The strategic ways in which young children use modes and their purposeful intent in selecting particular modes for particular purposes emphasised how multimodality makes explicit the ways in which power and agency are exercised by children in their meaning-making in relation to texts.

Finally, theoretical perspectives emphasising the key role in literacy learning of children's motivation, engagement and sense of self efficacy are reviewed. Disposition and a sense of being able emerge as crucial components in young children's literacy development.

Stages of literacy development

Research on the acquisition of literacy was examined, with specific reference to the key components including word recognition, vocabulary development, fluency, comprehension and the development of writing and spelling as they relate to processing of print and digital texts.

Early models of the reading process give a unique perspective on reading and emphasise an information processing approach. An interactive model of reading incorporates elements of both bottom-up and top-down approaches and proposes to describe and explain how the perceptual and the cognitive processes in reading interact (Rumelhart, 1994). The stages of word recognition outlined by Frith

(1985) and the phases of reading development outlined by Ehri (1985) are described.

Vocabulary knowledge is a core component in language proficiency as it relates to literacy development. Attention is drawn to individual differences in vocabulary development among young children and research by Neuman (2011) focuses on the need to place vocabulary at the forefront of early literacy.

Reading fluency is dependent on the development of several different skills (Leppänen et al., 2008). Fluency in reading also supports the development of reading comprehension, however the relationship between the two is complex. Influencing factors include skill in word recognition and the orthography of the language in question.

The work of Pressley and other researchers has contributed to the understanding of the importance of reading comprehension. Although this body of research does not specify stage models of development, the reader could be conceptualised as a 'builder' or 'fixer' of meaning (Pearson, 2009), as an 'assembler' drawing on Kintsch's situational model (Kintsch 1998), and as a 'responder' in line with reader-response theory (Rosenblatt, 1978). A wide range of reading strategies can be taught using a gradual release of responsibility model (Pearson & Gallagher, 1983).

The development of writing is outlined, beginning from the early stages of emergent writing involving symbolic drawings arising from play and social interaction to more independent expression. Children

gradually use their developing orthographic knowledge to represent their thoughts and ideas. The importance of using a writing process approach is clearly outlined.

A subsequent section on spelling development can be read in conjunction with the earlier section on word recognition and the phases of development of reading as there is commonality across the phases outlined. Handwriting in general, and cursive writing in particular, is identified as being important in supporting the generation of well-structured written text and also affects fluency of writing.

Children are active users of technology in their everyday lives across a range of media, and this can be described as both creative and active. It also offers potential for children to engage as *'produsers'* (Bruns, 2006) as they create new texts. Chapter Three examines the importance of ensuring continuity between home and school by embedding these developing digital literacies among teachers and children in early years settings and schools (Marsh, 2010c).

Literacy pedagogy

Our consideration of literacy pedagogy begins with a review of meta-analyses of research into effective literacy instruction that have been influential in shaping policy and practice internationally. These studies represent an important body of knowledge on what we know about some of the essential skills and strategies that are pivotal to literacy development. They are however, not without their limitations. The United States National Reading Panel Report (National Institute of

Child Health and Human Development (NICHHD), 2000), for example, has been criticised for its narrow focus and emphasis on experimental or quasi-experimental research only, and its lack of attention to important qualitative research. Furthermore, it did not examine the role of motivation and engagement in literacy, the teaching of writing or the role of parental or family involvement in children's literacy development.

Skills and strategies that are essential to effective literacy teaching in the early years include phonological awareness, phonics (for reading/ spelling), vocabulary, fluency, comprehension and writing (composition). It is important to distinguish between skills which are constrained and unconstrained (Paris, 2005). Once mastered, constrained skills (e.g. phonological awareness, phonics, spelling, grammar, punctuation) contribute little to literacy development across the life span. In contrast, unconstrained skills (e.g. oral language, vocabulary knowledge, comprehension, writing) continue to develop and contribute to enhanced literacy development. It is especially important that unconstrained skills are given attention alongside the constrained skills in the early years' classrooms and that the emphasis is on reading and writing for meaning and communication from the outset so children's language skills and higher-order thinking skills are enhanced in parallel with the basic skills. This is particularly important for children in DEIS schools who, because they often struggle with the basic skills, may receive instruction that is more focused on those skills than on instruction that contextualises skills and provides opportunities for them to develop the more academic style of language utilised in schools.

Skills and strategies are best embedded within a research-based balanced literacy framework that provides opportunities for children to develop the essential skills in contexts that are meaningful, developmentally appropriate and which capitalise on the 'funds of knowledge' (González, Moll & Amanti, 2005) that children bring from home. In reading, these contexts include, teacher read-alouds in a range of genres, make-believe play, shared reading of texts, guided reading, reading workshops and opportunities for independent reading of self-selected texts. In writing, these contexts include opportunities for play, emergent writing, shared and interactive writing and writing workshops. Creating a culture of reading and writing for pleasure and information is important in cultivating a positive disposition to literacy. This can be enhanced through provision of a broad range of reading materials (print and digital) which children can also bring home to share with family, providing opportunities for children to collaborate and engage in high-level discussion about their books and the texts they are creating; all of which promote the social dimension of literacy. A cognitively challenging balanced literacy framework such as this creates opportunities for children to develop their conceptual knowledge, their creativity and their imagination and to reach an understanding of literacy as a tool to be harnessed for fulfilment of personal goals both within and outside school.

Given that there is no one best method for teaching literacy, we highlight a range of strategies with which all teachers should be familiar and we emphasise the depth of expertise required by teachers. We also highlight the need for instruction to be guided by a range of

assessment procedures (formative and summative, see Chapter 6) to enable teachers to differentiate and meet the needs of the children in their classes. The importance of teaching in ways that are motivating and engaging for children, and in ways that provide opportunities for them to experience optimum challenge is highlighted. We also identify the importance of building on success in meeting challenges and creating opportunities for children to develop their agency and sense of self-efficacy. The importance of scaffolding metacognition to the conditional level is also noted. When children have this level of knowledge about strategies they know why a particular strategy is useful and so can call on it when needed as they are engaged in suitably challenging tasks. Using strategies independently to problem-solve builds children's persistence and academic resilience.

Contexts for teaching literacy

Disadvantage and literacy

In a survey of reading standards in disadvantaged schools in Ireland in 2003, almost 30% of students in grades 1, 3 and 6 achieved scores at or below the 10th percentile on a nationally standardised test. Internationally, a number of evidence-based interventions have been proposed to address low levels of literacy among children in disadvantaged circumstances. Some of these have focused on prevention; others have been put in place after formal reading instruction has begun. These interventions present a set of important principles and strategies for teaching literacy including allocation of sufficient time to literacy instruction, implementation of a balanced

literacy framework with emphasis on meaning-based instruction, use of flexible and dynamic grouping of children, development of classroom environments with large numbers of real books matched to stages of development and interest, and use of a metacognitive approach to strategy instruction. Sharing of assessment data between teachers, cohesion between class and support programmes, ongoing links between home and school, and access to customised, on-site professional development are also highlighted.

As children in disadvantaged schools often struggle with basic skills, research indicates they often receive qualitatively different and less motivating instruction to their more privileged peers, including a slower pace of instruction, fewer opportunities to read, write and discuss extended text, a heavier emphasis on basic skills and a greater likelihood of being withdrawn from the classroom (Duke, 2001). An over-emphasis on basic skills is identified as being particularly problematic if it occurs in the absence of meaning-oriented instruction (Knapp, 1995).

Special education needs

Evidence from international studies and insights into effective practices which promote inclusion for all children suggest that the principles of good teaching are essentially the same for all children, including those with special educational needs. However, while teachers may need to make 'normal' adaptations to teaching methods in class teaching for the majority of children, a greater degree of adaptation may be required for those with more significant learning needs (e.g. severe dyslexic difficulties).

Hence, some learners with special needs may require high levels of practice, more examples of a concept, and greater error-free learning to master key skills. Others may benefit from intensive multi-sensory learning opportunities. This work can be supported by the use of a three-tiered approach to assessment, up to and including the specification of learning targets as part of an individual educational plan (IEP).

English as an additional language: EAL

In recent years, there has been a significant increase in the proportion of children in preschool and primary school classrooms for whom English is an additional language. Very often, these children speak in their first language at home, and hence may have insufficient English (or Irish) to fully participate with their peers in class. One approach to ensuring that children develop adequate vocabulary and conceptual knowledge in the early years is to provide instruction in both the language of the home and in the language of instruction at school. However, it is recognised that this is not always possible in instructional or assessment contexts. In such circumstances, there may be no alternative but to work intensively on building EAL children's oral language capacity in the language of instruction, up to the level required for success in literacy and in other areas of the curriculum. This level, called cognitive academic language proficiency or CALP by Cummins (1991, 2000), is different from, and takes longer to develop than, basic interpersonal communication skills (or BICS).

The question of when to introduce formal phonics teaching to EALs has been addressed in the literacy curricula in different jurisdictions. The

Finnish curriculum for L2 learners suggests that the main emphasis in grades 1 and 2 (7-8 years) should be on the comprehension, repetition and application of what one has heard and on practicing oral communication. Reading is used to support oral practice through listening and speaking. Instruction is integrated into content and themes that are within the children's experience. However, it is less clear that EAL learners can make a seamless transition from oral language to reading in the case of more orthographically complex languages such as English.

There are many challenges related to assessing the language and literacy of EAL children. Where a child has only limited competence in the language of instruction, bilingual support in assessment situations is recommended (e.g. Espinosa & Lopez, 2007). There is strong evidence in the literature of a long history of disproportionate representation of students with EAL in special education, especially in the United States (Artiles, 1998; Dunn, 1968; Orfield, Losen & Edley, 2001). This is most pronounced among children with mild and moderate general learning difficulties, and may be due to the use of language-based tests in making diagnoses. It presents a view that large numbers of EAL children have learning disabilities, when in fact they may not. (Echevarria, Vogt & Short, 2008). The use of site-based teams that provide EAL children with supplementary instruction in the mainstream setting has proven effective in reducing the number of referrals and special education placements (Fuchs, Fuchs & Bahr, 1990; Powers, 2001; Ysseldyke & Marston, 1999).

EAL children can be supported in reading texts in English by engaging them intensively in a range of before-, during- and after-reading activities.

Assessment of literacy

Assessment is now regarded as an essential aspect of teaching and learning, in both preschool and primary school settings. Six aspects in the assessment of literacy were considered: the roles of assessment for learning and assessment of learning in assessing early years literacy development; the aspects of early years literacy that should be assessed; the formal and informal assessment tools that can be used to assess literacy; frameworks that can be used to support teachers in conceptualising literacy assessment and summarising outcomes of assessment; the assessment of children for whom English is an additional language; and approaches to using assessment data to inform planning at teacher and school levels.

In considering the role of assessment in early childhood settings, a distinction was made between assessment for learning (formative assessment) and assessment of learning (summative assessment). It was argued that most assessment at preschool and infant levels should be formative and should occur in authentic literacy contexts such as book reading, or early writing. The importance of observation as an assessment tool was emphasised. The involvement of parents in gathering assessment information was also highlighted.

Aspects of literacy that should be assessed in early childhood settings are oral language, concepts about print, dispositions (including motivation and engagement), vocabulary/academic language, alphabetic knowledge, reading fluency, comprehension, spelling and writing. The importance of recording outcomes arising from informal assessments in these aspects of literacy was stressed, and the value of recorded outcomes in planning instruction was noted.

Assessment tools identified as particularly relevant for early education settings include: narrative or story approaches, conversations and conferences with children, children's drawings and their written work, interviews, running records, miscue analysis, oral retelling, comprehension questions, cloze assessment, reading and writing conferences, and writing portfolios.

Parallel assessment frameworks for reading and writing were described, and different approaches to reaching and recording an overall estimate of a child's performance in reading and writing were examined. Specific tools that were considered for this purpose included the United States Common Core State Standards, the Drumcondra English Profiles and the Early Years Profile used in statutory assessment of children aged 5 years in England.

In reviewing literacy assessment of EAL children, the importance of taking the home literacy environment into account was noted. The need to understand how and in what contexts a child uses different languages was also stressed. It was noted that the research literature recommends that, if possible, EAL children should be assessed at the same time in both languages.

The value of sharing school-level data as a feature of effective schools in literacy was noted, as was the value of teachers within and across grade levels collaborating to arrive at a shared understanding of learning standards as they applied scoring rubrics or other assessment tools to children's oral and written work samples.

Oral language and literacy

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 practicing reading skills. The former view highlights the links between oral language and the development of phonological processing and reading comprehension skills. The latter stresses the important role of the carer/ teacher in promoting high levels of cognitive interaction, engaging children in extended oral language discourse and scaffolding them as they deploy reasoning strategies and engage in perspective-taking.

The literature indicates that, whereas early oral language proficiency is highly predictive of acquisition 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 and reading comprehension is less clear. Indeed, it may not be until fourth class or later that the real effects of work on developing vocabulary knowledge (particularly academic vocabulary) and knowledge of discourse (e.g.

narrative discourse) have a significant 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 language skills. Nevertheless, research evidence supports the teaching of oral language and reading comprehension from preschool onwards, so that children can 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, classroom activities emphasising the teaching of reading comprehension strategies have been shown to have a 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 or development. This arises because most studies of reading comprehension examine the effects of strategy instruction on reading comprehension rather than on oral language as well.

Another type of reading comprehension instruction for which there is somewhat limited evidence of effectiveness is discussion-based comprehension strategies – that is, approaches to teaching reading comprehension that depend heavily on discussion among children, including structuring discussion questions so that they require children to think deeply, asking follow-up questions that facilitate discussion,

and having children lead discussion groups. Despite limited evidence from such studies (e.g. Shanahan et al., 2008), mainly due to methodological limitations, most researchers recognise the value of using discussion-based approaches such as Reciprocal Teaching, Collaborative Reasoning, Questioning the Author and Accountable Talk to foster children's engagement in discussing texts. As with instruction in specific comprehension strategies, effective discussion approaches require modelling by the teacher, direct explanation, marking (where the teacher responds to a child's question or answer by highlighting a particular aspect of the text), and verifying and clarifying children's understandings.

Research on reading development 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. When delays in language development occur, they are likely to impact negatively on one or both aspects of language, and hence on reading literacy. Children with Down syndrome develop oral language in the normal way until around 24 months, and may then experience significant receptive and productive delays, which in turn may delay reading. Children with autism may not benefit from the levels of social interaction that sustain language development and hence may struggle to acquire reading skills. Children with concurrent receptive and expressive delays may also experience severe reading 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 that they explain texts they have read.

Literacy across the curriculum

Inquiry-based learning was highlighted as a model that can be deployed to teach literacy across the curriculum. An example of an inquiry-based model is the Seeds of Science/Roots of Reading programme. The programme seeks to capitalise on the development of cognitive processes that are common to both reading and science. These include making predictions, activating prior knowledge, making connections and drawing inferences. Text is used to support investigation. Vocabulary is presented in a multi-modal fashion, with a strong emphasis on conceptual development through discourse.

Concept-Oriented Reading Instruction (CORI) is another inquiry-based model which seeks to teach critical science concepts while also incorporating reading strategy instruction, pupil child's choice, intrinsic motivation, interest and self-efficacy. The CORI model involves hands-on experiences and collaboration between children. For EAL children, content and language-integrated learning has been identified as a useful approach. This essentially combines the teaching of language objectives and content objectives within lessons across

disciplines. In addition, the literature shows that the following broad principles support the development of literacy in children for whom English is a second language: oral language development in the context of social interaction, where interpersonal skills develop; meaningful use of language in a variety of literacy contexts; and engagement in comprehension strategies that build oral language discourse skills

Literacy learning can also involve opportunities for drawing on the creative processes involved in art, music and drama. For example, Cremin et al. (2006) demonstrated how drama can provide children with an opportunity to respond to text using multiple modalities, and give them a springboard for creative writing. Children can improvise, taking on the roles of characters in stories they have read, identifying both their cognitive and affective dimensions. This, in turn, can lead to creative writing as children adopt the roles of their favourite characters. Another effective approach is writing composed in drama, where children move seamlessly from writing into drama and back again.

Research Report No. 16

Towards an Integrated Language Curriculum in Early Childhood and Primary Education (3-12 years)

Padraig Ó Duibhir and Jim Cummins.

Towards an Integrated Language Curriculum in Early Childhood and Primary Education (3-12 years)

Background

The National Council for Curriculum and Assessment (NCCA) prioritised the curriculum for language as an area for development in 2010. Language is one of seven areas in the Primary School Curriculum (PSC). It encompasses the teaching of English and *Gaeilge* 'Irish' which are currently taught in three different school contexts: English-medium schools, *Gaeltacht* schools and all-Irish schools. There is one curriculum for English and there are two curricula for Gaeilge. The same English curriculum is taught regardless of school context. Gaeilge is taught as a second language (L2) in English-medium schools. In the case of Gaeltacht and all-Irish schools, Gaeilge is considered to be the first language (L1) of the school and is taught on that basis.

The PSC was developed in 1999 within a bilingual framework. The situation in schools has changed radically since then with the addition of modern languages in fifth and sixth classes in 550 primary schools and the advent of English as an additional language (EAL) learners in schools. These contextual differences lead to a complex multilingual environment in which to teach languages. This environment requires a flexible approach to curriculum which does not exist at present where English, Gaeilge and modern languages are compartmentalised and little emphasis is placed on encouraging children to transfer skills acquired in one language to the other languages. Neither is there formal recognition of the prior language skills of EAL learners. In order to address this situation the NCCA issued a request for tenders to examine the feasibility and advisability of developing an integrated language curriculum for the primary school. We present the case for such a curriculum in this review.

Research questions

The report is structured around the following four key research questions contained in the NCCA request for tenders:

1. How can the idea of an integrated language curriculum be defined?

2. What are the key principles of language learning and development which should underpin a language curriculum for children aged 3 to 12 years?

3. Where is the evidence for it in policy and practice? What are the expected outcomes by 8 years of age for children's learning and development in the different language learning contexts described in the background to this research?

4. What kinds of structures are implied in an integrated curriculum for children's language learning from 3 to 12 years, and how would these structures accommodate the different language learning contexts described in the background to the research?

Theoretical perspectives and research foundations

In examining the rationale for an integrated language curriculum, we distinguish three dimensions of integration that apply to language curricula: (i) integration within the teaching of a specific language, (ii) integration across the curriculum, and (iii) integration across languages. It is the third one of these, integration across languages, which is the focus of our review.

While the theoretical basis and empirical research to support the integration of skills across languages has been in existence since the early 1980s, it is only in recent years that it has been manifested in curriculum design. The underlying theory for this type of pedagogy is derived from the *interdependence hypothesis* which implies that when children develop literacy skills in Irish, English or another language, they are not just learning how to read and write in a particular language. They are also developing a common underlying proficiency that enables the transfer of literacy skills and learning strategies to other languages. We identify four major types of cross-linguistic transfer:

i. transfer of conceptual knowledge

ii. transfer of specific linguistic elements

iii. transfer of phonological awareness

iv. transfer of metacognitive and metalinguistic strategies.

There is extensive research evidence to support the view that literacy-related skills and knowledge can be transferred across languages. When teachers encourage this transfer explicitly they make learning more efficient for the learners and reinforce effective learning strategies. Teachers can engage children in cross-linguistic projects such as the production of dual-language texts and partner class exchanges.

PRINCIPLES OF CHILDREN'S LANGUAGE LEARNING

The principles underlying second language teaching and learning have evolved and developed greatly over the past fifty years. The grammar

translation method was replaced by the audio-lingual method (ALM) in the 1950's. The ALM in turn fell out of favour when researchers began to investigate other hypotheses such as the importance of language input and output. Much of this work was based on a cognitive approach to language learning where the internal processes in the learner's brain were seen as most influential. This view evolved further with a greater emphasis on the social aspects of language learning influenced by the writings of Vygotsky and others on sociocultural theory. Over time the focus has shifted from course materials, to the individual, to the learning environment to issues of learner identity and learner autonomy. The advent of digital technologies in recent years has provided new ways to enhance the learning environment and caused a further reconceptualisation of the field.

The instructional implications of this research have been synthesised by Ellis (2005) who described the following ten principles for instructed language learning:

Principle 1: Instruction needs to ensure that learners develop both a rich repertoire of formulaic expressions and a rule-based competence.

Principle 2: Instruction needs to ensure that learners focus predominantly on meaning.

Principle 3: Instruction needs to ensure that learners also focus on form.

Principle 4: Instruction needs to be predominantly directed at developing implicit knowledge of the L2 while not neglecting explicit knowledge.

Principle 5: Instruction needs to take account of the learner's 'built-in syllabus'.

Principle 6: Successful instructed language learning requires extensive L2 input.

Principle 7: Successful instructed learning also requires opportunities for output.

Principle 8: The opportunity to interact in the L2 is central to developing L2 proficiency.

Principle 9: Instruction needs to take account of individual differences in learners.

Principle 10: In assessing learners' L2 proficiency it is important to examine free as well as controlled production.

The implications of these ten principles are that learners acquire the target language as a result of active engagement with the language by means of oral and written activities (both inside and outside the context of the school) that generate personal investment on the part of the learner.

Practical examples of language curriculum integration

The manner in which an integrated language curriculum is being implemented in practical ways in Alberta (Canada), Scotland and Wales provides important insights to inform the present study. In these contexts, largely the same descriptors and categories are used to describe the linguistic skills and outcomes for L1 and L2 and this facilitates teachers in integrating the teaching of skills across languages. Scotland and Wales have a common language curriculum for the first school language, whether it is English or Gàidhlig or Welsh. Children whose native language is Gàidhlig or Welsh are enabled to attain the same learning outcomes in their L1 as their native English-speaking peers. The skills they acquire in the first school language can be transferred to English at a later stage. Such an approach in the revision of the language curricula in Ireland would help to address the specific needs of native Irish speakers. It would also facilitate a total early immersion approach in all-Irish schools. A similar approach could be adopted for Irish L2 and modern languages with L2 outcomes cross-referenced with those of L1.

Structure to facilitate curriculum integration

The Common European Framework of Reference for Languages (CEFR) (Council of Europe, 2001) and its companion European Language Portfolio (ELP) (Council of Europe, 2006) provide a potential structure upon which to construct an integrated language curriculum in Irish primary schools. Part of the challenge in designing a suitable structure is to accommodate the variety of contexts in which languages are learned in Irish primary schools. Rather than trying to

write an individual curriculum for each language and the context in which it is taught, we believe that it is more productive to define a language learning pathway that individual learners can traverse at different rates according to their contact and engagement with the language both within the school and outside of it.

The CEFR is defined according to six levels of mastery from A1 to C2 and consists of 'can do' statements that are stated in terms of listening, speaking, reading and writing. These 'can do' statements would need to be sufficiently fine-grained to accommodate early L2 learners who might progress along the pathway at quite a slow pace. It would also need to take into account the fact that young children are only developing literacy skills at that stage.

The ELP consists of: i) a language passport, ii) a language biography, and iii) a dossier, and represents an important tool to facilitate the transfer of skills and knowledge across languages. The 'I can' statements of the ELP enable learners to self-assess their progress in the language, to reflect on what they have learned, and to set goals for future language learning. The combination of CEFR and ELP bring teaching, learning and assessment into closer contact and have the potential to facilitate implementation of the prescribed curriculum in a more learner-centred way.

The adaptation of the CEFR and ELP would require small-scale collaborative research projects to identify best practices and to investigate how they might be utilised effectively with young language learners for both L1 and L2. There is, however, considerable experience

in Ireland already through the adaptation of these tools for EAL and modern languages in the IILT and MPLSI projects respectively. We believe that the time required for this research would be rewarded in the longer term with a more satisfactory language learning experience for children.

Conclusions and recommendations

The PSC as currently structured is not suitable to meet the needs of diverse learners in different contexts. An integrated language curriculum would enable teachers to achieve learning efficiencies by explicitly drawing children's attention to similarities and differences between their languages.

The defining features of the current PSC are very close to the principles that we believe should underpin an integrated language curriculum. More attention may need to be paid to the role of literacy in supporting language development in L2 contexts in particular. The needs of L1 and L2 learners require more explicit differentiation in a revised language curriculum.

Integrated language curricula are being implemented in other countries and there are models of good practice upon which to draw. We recommend that there should be one L1 curriculum which children would follow in English or Irish depending on school context and child background. The L1 curriculum should be cross-referenced with the L2 and modern language curricula and use largely the same structures and descriptors. The L2 curriculum may require the addition

of objectives for pronunciation/phonology that might not be relevant to teaching the L1.This would enable teachers to explicitly promote transfer of skills and knowledge from L1 to L2. Learning outcomes should be stated by level, as opposed to by class, thereby providing a flexible structure to cater for different learning paths and contexts.

The CEFR and ELP represent structures and associated tools around which an integrated language curriculum could potentially be organised.These tools would need to be adapted to meet the needs of young learners. Learners would traverse a learner-centred language pathway with explicit support from teachers to transfer skills across languages as they go.We recommend that small-scale research projects be carried out to adapt the CEFR and ELP to the Irish primary school context and to assess the supports that teachers would require in order to use these tools effectively.

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An Chomhairle Náisiúnta Curaclaim agus Measúnachta
National Council for Curriculum and Assessment

ISSN 1649-3362

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National Council for Curriculum and Assessment
24, Merrion Square, Dublin 2.