OLSEL RESEARCH REPORT FINDINGS







Australian Government

Department of Education, Employment and Workplace Relations

The Oral Language Supporting Early Literacy (OLSEL) initiative was proposed by the Catholic Education Commission of Victoria Ltd (CECV) in response to converging evidence that oral language competence is a significant variable in early literacy outcomes (National Early Literacy Panel Report 2009; Vellutino et al. 2004; Chan & Dally 2000; Scarborough 1998; Snow, Burns & Griffin 1998). An increasing body of evidence further indicates that oral language development in the early years is strongly linked not only to literacy but more broadly to the development of:

- social skills
- friendships
- prosocial problem-solving and conflict resolution skills
- self-esteem
- · school attachment
- mental health (Snow & Powell 2008).

Evidence also indicates that a significant proportion of school-aged students experience difficulties with oral language. Recent studies have reported that oral language difficulties affect approximately 20% of students entering school, increasing to 25%–30% in low-SES communities (Hay & Fielding-Barnsley 2009; Reilly et al. 2010).

Another source of evidence that supports the need for exploration into the early years of schooling is the Australian Early Development Index (AEDI). The Australian Early Development Index (AEDI) is a population measure of young children's development. Like a census, it involves collecting information to help create a snapshot of children's development in communities across Australia. Teachers complete a checklist for children in their first year of full-time school. The Australian Early Development Index (AEDI) was undertaken as a nationwide endeavour in 2009 to measure the early development of children, in their first year of schooling, across five domains:

- · physical health and wellbeing
- social competence
- · emotional maturity
- · language and cognitive skills
- communication skills and general knowledge.

In Victoria 20.2% of children, in their first year of full-time school, were identified as developmentally vulnerable in at least one domain with 10% vulnerable in two or more domains and being noted as requiring further service system support. The AEDI also identified that children within the most disadvantaged areas are most likely to be vulnerable in the domain of communication skills and general knowledge.

The importance of oral language and literacy skills to school success and the prevalence levels of oral language difficulties evidenced in recent research studies and in the number of referrals for speech pathology services in the four Victorian Catholic dioceses indicated a strong need for targeted teaching with the capacity to improve students' learning trajectories. The OLSEL research project focused on enhancing teacher capacity to support the oral language learning of students in the early years. It was hypothesised that improving teacher knowledge of oral language and its role in facilitating early literacy acquisition would enable teachers to enhance teaching and learning interactions in the classroom. The focus on the explicit teaching of oral language skills across the curriculum would result in measurable gains in both the students' oral language and reading abilities. The project therefore focused on professional learning to build teacher knowledge, and support to teachers, in schools, to translate this knowledge into classroom approaches.

The OLSEL research project involved teams of early years teachers attending a series of professional learning days conducted over two years. The goal was to increase teacher capacity to effectively plan and implement strategies that specifically target the





development of oral language skills in the early years of schooling, with a particular focus on the first year of schooling. In order to further build school capacity, additional cluster meetings were held for school OLSEL leaders and principals. To further build expertise within the school the OLSEL lead teacher was sponsored to complete a Master-level unit at the University of Melbourne: 'Oral Language Learning: The Primary Years', conducted by Dr John Munro. The view was that support for classroom teachers would be directly available both during and after the research via the OLSEL school leader. School implementation was more broadly supported during the research by Catholic Education Office staff in the four Catholic dioceses and the project officer, who facilitated the implementation of strategies and supported changed practice.

Specific aims for the project were that teachers would:

- implement increasingly targeted teaching strategies to facilitate oral language and early literacy development
- use an evidence-based, action-research approach to classroom implementation
- work in teams to further analyse the needs of students and plan evidence-based interventions to be delivered both through the general curriculum provision and as targeted activities
- explore strategies for increased community participation and support through the provision of oral language and literacy activities adapted for use in the home context.

The professional learning program was informed by relevant literature and key experts in the field and included exposure to the ICPALER model (Munro 2005), the Collins, Brown and Newman (1989) Model of Teaching and Learning, and models of questioning such as the model proposed by Blank, Rose and Berlin (2003). Teams of early years teachers attended the professional learning sessions and subsequently developed implementation plans for their own school contexts.

The study was approved both by the CECV and the Monash University Human Research Ethics Committee. The schools eligible for this project were identified via the diocesan systemic school improvement initiatives, which combine a structured approach to internal school improvement planning with a component of external objective assessment and accountability. Consistent with the aims of the project, schools from both metropolitan and rural locations

targeted for involvement in the research belonged to one or more of the following descriptor categories:

- significant low-SES enrolment
- lower levels of literacy and numeracy attainment (number of students below benchmark)
- Indigenous student enrolment.

Following an expression of interest, 14 schools were selected for the project. Eight were designated as research schools and six designated as control schools. In the first year of the project (2009), 602 students in Prep and Year 1 were randomly selected and individually assessed. Oral language skills were measured using the:

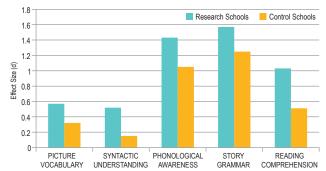
- Picture Vocabulary and Grammatical Understanding subtests from the Test of Language Development – Primary, Fourth Edn (Newcomer & Hammill 2008)
- Semantic and grammatical analysis of a narrative retelling – The Renfrew Language Scales: Bus Story Test (Renfrew 1997)
- selected subtests from the Sutherland Phonological Awareness Test – Revised (Neilson 2003).

The Reading Progress Test (Vincent, Crumpler & de la Mer 2004) was administered as an independent measure of reading ability. Students from these year levels who were not selected in the random sample were assessed with only the Reading Progress Test. Students were again assessed at the end of 2010, with approximately 90% of the students retained for the study. Intention-to-Treat analysis revealed that there were no significant differences in the language or literacy profiles of the students who were lost to follow-up primarily due to their moving schools. Interviews with 14 researchschool teachers and eight control-school teachers were conducted to gauge the impact of the learning and understandings gained during the course of the project. These were completed in May 2009 and November 2010. Participants also completed an evaluation of each professional learning session and commented on the overall value of their participation in the project.

Effect sizes have been used to indicate the strength of research outcomes (Hattie 2009). Consistent with other social and educational research, effect sizes of 0.2 or less are described as small, effect sizes approaching 0.5 as moderate and effect sizes of 0.8 or greater as large (Hattie 2009; Durlak 1998). For further descriptive purposes, effect-size coefficients of 0.4 and greater may also be described as being educationally significant (Hattie 2009; Wolf 1987).

Main Project Findings

- Focused classroom teaching achieved statistically and educationally significant gains in the students' oral language.
- Oral language accounted for 28% of variance in the early reading achievement of all students, 40% of variance for students from Language Backgrounds Other than English (LBOTE) and 38% for students from a low-SES background.
- Four elements of oral language ability were identified as contributing significantly to the development of reading comprehension for all student groups:
 - receptive vocabulary
 - comprehension and use of longer and more complex sentences
 - phonemic and phonological awareness
 - awareness and use of the story grammar schema.
- Focused teaching of oral language in the early years led to both statistically and educationally significant reading gains for students progressing from Prep to Year 1 (OLSEL schools' effect size: d = 1.22; Control schools' effect size: d = 0.52), as well as from Year 1 to Year 2 (OLSEL schools' effect size: d = 0.93; Control schools' effect size: d = 0.51).
- Students from particularly disadvantaged backgrounds (i.e. those in receipt of EMA) showed significantly greater gains in reading outcomes.
- Accelerative language and reading gains were evident for students from Language Backgrounds Other Than English (LBOTE).
- LBOTE students in the research schools achieved substantially stronger reading comprehension gains than their peers in the control schools, with the level of gain equivalent to 12 standard score points on the Reading Progress Test. LBOTE students in the research schools achieved stronger reading comprehension gains (16.87 standard score points) than their non-LBOTE peers. The opposite finding occurred in the control school group. While the
- **Figure 1:** Effect Size (d) Comparisons between Research Schools and Control Schools for Total Student Cohort P–2



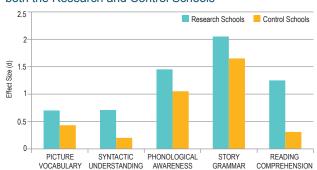
LBOTE students in the control schools did achieve improved reading comprehension scores, their level of gain was less than their non-LBOTE peers (3.02 standard score points). This finding suggested that for the LBOTE students in the control schools, the gap in reading ability between them and their non-LBOTE peers was increasing, not decreasing, over the period of the research project.

- Teachers and principals reported improvements in teacher knowledge and expertise, targeted teaching of oral language across all curriculum areas, enhanced professional discussion and curriculum planning leading to enhanced student engagement.
- Parents reported an increased awareness of the links between oral language and literacy and commented on improved oral language competence in their children.

TEACHER PERCEPTIONS: QUALITATIVE FEEDBACK

- My current level of confidence is much more advanced and I look forward to continuing to enhance and hone my skills/strategies to benefit my students.
- I have found the strategies extremely helpful and have noticed a huge difference in the outcomes for students.
- My knowledge about oral language has increased dramatically due to study of ICPALER, the OLSEL resource folder and the university subject. Each week an element of OLSEL is discussed, work samples compared, new ideas/websites explored. Classrooms are more vibrant, children are more confident and children's vocab and comprehension have increased. Many more children express their opinions. We will continue with strategies we are already using, build resources and use some ideas from this latest PD day. We will continue to research/study the website and the ICPALER folder regularly and improve parent sessions to keep them informed through newsletters, workshops and demonstration lessons.

Figure 2: Effect Sizes (d) achieved for LBOTE Students in both the Research and Control Schools









PRINCIPAL PERCEPTIONS: QUALITATIVE FEEDBACK

- I am thrilled with the way OLSEL has impacted on our staff and most importantly our students. It has highlighted an important area of the curriculum and our staff have certainly benefited from the program.
- The OLSEL journey has been challenging, frustrating, stimulating, invigorating and rejuvenating. It has affirmed and refined teaching praxis which directly empowers and supports quality teaching and learning experiences. All of our junior children have benefitted and we are excited by the next challenge of embedding and sustaining OLSEL into our normal curriculum delivery, within the 'All Kinds of Minds' Response to Intervention framework.
- I would strongly recommend [Catholic education] systemic involvement in ongoing longitudinal action research and I believe these learnings will eventually translate to pre-service teaching courses.

PARENT PERCEPTIONS: QUALITATIVE FEEDBACK

- My children have both excelled under the OLSEL project. They use sentences when speaking and use their manners when taking turns to speak in a conversation.
- Questions are varied and interesting and responses are built upon.
- Both my children enjoy writing stories and can articulate their thoughts easily.
- I find the simple request of 'please use a sentence' or 'use your words' an invaluable tool for promoting conversation at home and both of my children have thrived in their verbal responses.

INDEPENDENT EVALUATOR COMMENTS – DR PAMELA SNOW

Findings clearly showed significant advantages on both oral language measures and reading competence for children in the research schools, and in many cases, the intervention effects were of medium to large size. Teachers in the research schools rated the OLSEL intervention very positively, indicating that it 'filled in

gaps' that had been left by their pre-service teacher education and subsequent in-service education, and was easily transferred into their everyday practices with children. The study described in this report demonstrates that, in return for a modest investment of teacher, school, and sector time, substantial gains can be made in both oral language and reading skills of children who are living and being educated in low-SES communities. Such value-adding on normal classroom experience stands to strengthen their academic attachment and achievement, and thus to avert some of the adverse outcomes that accompany school failure. Modest academic effects early in life may well translate into much larger *cumulative* effects on 'downstream' variables such as school retention and mental and emotional wellbeing, over time.

IMPLICATIONS OF OLSEL PROJECT FINDINGS

The provision of targeted training focused on enhancing teachers' professional understanding of oral language, its relationship to early reading achievement and the language demands of teaching and learning interactions has a highly significant impact on accelerating reading achievement for early years students. Consistent with this, educationally significant improvements in students' oral language competence are also achieved. Results indicate that targeted teaching of oral language has the capacity to positively impact on the learning trajectories of early years' students, including students who have been identified as developmentally vulnerable on measures such as the AEDI, as well as LBOTE and Indigenous students. Further research is warranted.

The success of this initial research has led the CECV to seek ethics approval to track the reading progress of participating students in 2011 and beyond. The CECV will seek further grants to expand research trials and develop oral language assessment and teaching resources for use by early years' teachers. An OLSEL website was developed to provide school communities with easy access to information and teaching resources and to support ongoing implementation.



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