Oral Language
Supporting Early Literacy

Catholic Education Commission of Victoria
“The only way to improve outcomes is to improve instruction.”

2007 McKinsey report
Strategy Approach
Linking professional learning and research

Practices are evidence-based & data-driven
Prevalence Levels and low SES

What is the research community reporting?
 Unless an education system is highly effective the impact of differences in socio-economic status will be significant

Total number of words (millions) heard by child at age 4*

Children of ‘professional’ parents

45

Children of ‘working class’ parents

26

Children of ‘welfare’ parents

13

* Based on longitudinal research of 42 families in Kansas City
Source: Betty Hart and Todd Risley, 1995
Vocabulary Growth - First 3 Years

B Hart & T Risley Meaningful Differences in Everyday Experiences of Young American Children 1995
Ian Hay and Ruth Fielding-Barnsley

• Approximately 15% of students entering year one with some deficit in language skills. (In low SES communities, one in four students were found to be below developmental benchmarks for expressive language).

Australian Journal of Language and Literacy, June 2009
### Results at 4 years

#### Prevalence of communication problems

<table>
<thead>
<tr>
<th>Language Impairment</th>
<th>Poor Non-verbal performance</th>
<th>Specific Language Impairment</th>
<th>Speech Sound Disorder</th>
<th>Stuttering</th>
</tr>
</thead>
<tbody>
<tr>
<td>310/1559 (19.9%)</td>
<td>75/1595 (4.7%)</td>
<td>201/1377 (14.6%)</td>
<td>163/1579 (10.3%)</td>
<td>133/1619 (8.2%)</td>
</tr>
</tbody>
</table>

- **CELF-P2**: score $\geq 1.25$ SD
- **K-BIT - Matrices**: standard score $< 85$ (score $<-1$ SD)
- **CELF-P2 and K-BIT**: NV-P: $\geq 85$ & Language: $>-1.25$ SD Excluding HL, NESB
- **GFTA-II**: score $< 90$ (bottom decile for ELVS sample)
- **SP confirmed stuttering**: onset up to 4 years and not resolved
Why Oral Language?

“Converging evidence supporting the view that limitations in oral language abilities are at the basis of students who may experience early reading difficulties rather than general cognitive or visual perceptual weaknesses.”

Chan & Dally (2000)
Dr Pamela Snow

• Evidence indicates that oral language development in the early years is strongly linked to:
  • the development of social skills, friendships and hence mental health,
  • prosocial problem solving and conflict resolution skills,
  • transition to literacy which is linked to self esteem, school attachment and mental health, and
  • mastery of an increasingly complex range of written and spoken discourse genres.
OLSEL Background

• Initiated in 2007 as the third component of the Catholic Education Office Melbourne (CEOM) literacy intervention strategy.

• Response to a range of factors indicating that a differentiated approach was necessary to address oral language difficulties, particularly in low SES communities.
Text Level Pre Test Prep 2005
Text Level Pre Test Prep 2007
Text Level Pre Test Prep 2008

![Bar chart showing frequency of scores](chart.png)
Text Level Pre Test Prep 2009
Text Level Post Test Prep 2005
Text Level Post Test Prep 2006
Text Level Post Test Prep 2007
Research Project 2009-2010

• DEEWR granted funding under the Literacy and Numeracy in Low SES Communities Pilot Projects for Oral Language Supporting Early Literacy research initiative to be implemented by the Catholic Education Commission of Victoria, within eight schools in low SES communities across Victoria.
Hypothesis

• The research initiative hypothesised that if teachers were to strategically implement targeted instruction in oral language skills for students in Years Prep, One and Two it would result in significant gains in both students’ oral language and reading outcomes.
Ethics Approval

• This study was approved by the Monash University Standing Committee on Ethics in Human Research (now known as the Monash University Human Research Ethics Committee) and by the Targeted programs Committee of the Catholic Education Commission of Victoria
School Selection

Semi-randomised controlled trial methodology utilised.

14 Schools from metropolitan and rural contexts were identified via:

- diocesan school improvement initiatives
- SES factors
- school data re literacy and numeracy attainment (number of students below benchmark) and
- Indigenous enrolment.
Research and Control Schools

- Eight Schools were semi-randomly allocated into the intervention cluster
- Six schools were designated as control schools
- Active consent was obtained for all individually assessed students.
- Where active consent was not obtained, students participated in class assessment (RPT)
## Total Participating Students 2009

Number of students who participated in either oral language or reading assessments or both in 2009

<table>
<thead>
<tr>
<th></th>
<th>No.</th>
<th>Prep</th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>769</td>
<td>248</td>
<td>243</td>
<td>278</td>
</tr>
<tr>
<td>Control</td>
<td>479</td>
<td>148</td>
<td>182</td>
<td>149</td>
</tr>
<tr>
<td>Total</td>
<td>1248</td>
<td>396</td>
<td>425</td>
<td>427</td>
</tr>
</tbody>
</table>
14 Schools identified for participation (8 designated research schools and 6 designated control schools)

**2009**

Initial sample of n=292 research school students and n=310 control school students individually assessed by research project staff on oral language measures i.e. n=602

Of these 602 students, 285 research school and 292 control school students also completed the Reading progress Test (n = 577)

**2010**

Of this group (n=577), 489 (246 research and 243 control school) students were re-assessed on both reading and oral language measures at the final data collection point in 2010 (= 84.7% retention rate)
Individually Assessed Students Research and Control Schools

Students Administered both oral language and reading measures 2009 n = 577

<table>
<thead>
<tr>
<th></th>
<th>Prep 2009</th>
<th>Yr 1 2009</th>
<th>Yr 1 2010</th>
<th>Year 2 2010</th>
<th>% Attrition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>135</td>
<td>150</td>
<td>114</td>
<td>132</td>
<td>13.7</td>
</tr>
<tr>
<td></td>
<td>Total = 285</td>
<td></td>
<td></td>
<td>Total = 246</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>128</td>
<td>164</td>
<td>104</td>
<td>139</td>
<td>16.8</td>
</tr>
<tr>
<td></td>
<td>Total = 292</td>
<td></td>
<td></td>
<td>Total = 243</td>
<td></td>
</tr>
</tbody>
</table>
## Assessment Measures

<table>
<thead>
<tr>
<th>Test of Oral Language Development</th>
<th>TOLD P:4 Picture Vocabulary (subtest 1) Syntactic Understanding (subtest 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renfrew Language Scales Bus Story</td>
<td>• Semantic and grammatical analysis of a narrative retelling</td>
</tr>
</tbody>
</table>
| Sutherland Phonological Awareness Test | • Syllable Counting  
• Onset ID  
• Segmentation CVC  
• Blending CVC  
• Final Phoneme ID  
• Segmentation Blends |
| Reading Progress Test             | Phonological awareness, print concepts, word knowledge and cloze comprehension |
Professional Learning Program

Day 1
- Why Oral Language
- ICPALER Framework, Munro 2005 (part 1)

Day 2
- ICPALER Framework, Munro 2005 (part 2)
- Teaching and Learning procedures— applying the framework

Day 3
- Oral Language Scope and Sequence and Screening
- School Planning

Day 4
- Developing a School Action Plan
- Writing your own school action plan

Day 5
- OLSEL journey – a current research school update, 2 previous OLSEL schools
- Writing a teaching plan
- Preliminary findings – 4 elements
Professional Learning Program

Day 6
- Using ICPALER to deliver the 4 elements
- Colourful Semantics
- Building Self Talk

Day 7
- School Presentations – Our OLSEL journey
- OLSEL website updates

Subject
- The OLSEL Implementation Coordinator from each school completed the subject - Oral Language Learning – the Primary Years at University of Melbourne convened by Dr John Munro

School Days
- Schools also conducted their own professional learning days as part of their school implementation planning. These may have included whole days, Professional Learning Team meetings, part days, modelled sessions. Some sessions were facilitated by CEO staff or the project officer.
Principal and Coordinator Days

- Additional professional learning days offered for principals and coordinators of research schools to consider:
  - Leading change practice and developing school-based OLSEL implementation plans
  - Preliminary findings, 4 elements
  - Using effect size
  - AEDI findings for your locality
  - Engaging parents
School Implementation Support

• Schools were also provided with further support via diocesan staff during the planning components of the professional learning program and over the 2009/2010 implementation phase.

• Support staff included speech pathologists, Education Officers and the OLSEL project officer.
Participant Feedback

• Teachers who participated in the professional learning also provided feedback/rankings (Likert scale) on each session delivered.

• Teachers, OLSEL coordinators and principals provided written feedback and rankings (Likert scale) regarding their perceptions of OLSEL participation.
Interviews

• In depth interviews were conducted with 22 teachers (14 research school teachers and 8 control school teachers) at the commencement of the project.
• The interviews were repeated at the conclusion of the project with 20 teachers. (2 teachers left the research schools)
• The interviews were transcribed and analysed thematically.
Parent Engagement

- Each research school also developed various strategies to engage parents.
- Schools utilised various means to engage parents including parent forums, parent information sessions, creation of bookmarks to use at home whilst reading, etc.
Broader Community

• OLSEL website was created to promote oral language by engaging:
  – OLSEL research schools
  – Parents
  – Teachers across all schools contexts
  – Interested parties

www.olsel.catholic.edu.au
“The only way to improve outcomes is to improve instruction.”

2007 McKinsey report
Main Sample Comparisons – Research & Control Schools

Chi² Analysis do not indicate a significant difference in proportions of students:
• from a Language Background Other Than English;
• From an Indigenous background; or,
• who accessed LNSLN funding (disability)

• Chi² Analysis did indicate a significant difference in proportions of students who were in receipt of EMA 
  (Chi² = 108.8, p<0.05). More EMA students in research schools (n = 89 in comparison to n = 84).
Based on Initial Assessment in 2009:

- Overall, oral language competence explained about 30% of the variance in early literacy outcomes  
  \( F (3, 563) = 81.611, \ p < .001 \ / \ \text{Adjusted R}^2 = .299 \)
- This level of variance increased to approximately 40% when students were from a low socioeconomic background.
- The level of variance was also approximately 40% for students with an ESL background.
- Gender did not explain any significant variance.
Based on the initial analysis of the student assessment data, teachers in the OLSEL Research Schools targeted the following four oral language components:

1. Receptive Vocabulary
2. Comprehension and Use of Longer and More Complex Sentences
3. Awareness and Use of Story Grammar
4. Phonemic & Phonological Awareness
<table>
<thead>
<tr>
<th>What is the expected outcome of the proposed literacy activity?</th>
<th>What new language will need to be introduced?</th>
<th>What activities will be used to review the assumed language knowledge?</th>
<th>What teaching climate is most useful for language learning?</th>
<th>Have I been able to target two or more of the four components of oral language?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>What language is it assumed the students already know?</td>
<td>What activities will be used teach the new language?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Examples of Oral Language Activities Undertaken

• Discussion about characteristics of “good listening”;
• Increased use of the Blank, Rose & Berlin (2003) questioning rubric;
• Ensuring students respond in sentences;
• Targeted teaching of story grammar;
• Strengthening of phonological awareness activities based on text being read;
• Using activities to target vocabulary extension by facilitating awareness of synonyms and antonyms;
• Providing students with “think time” before responding.
Focused teaching of oral language within the context of existing literacy work units in the early years leads to both statistically and educationally significant reading comprehension gains for students progressing from PREP – YEAR 1 \((t = 5.29, p < .000)\)

OLSEL Schools’ Effect Size: \(d = 1.22\)

Control Schools’ Effect Size: \(d = 0.52\)
Focused teaching of oral language within the context of existing literacy work units in the early years leads to both statistically and educationally significant reading comprehension gains for students progressing from **YEAR 1 – YEAR 2** \((t = 4.30, p < .000)\)

**OLSEL Schools’ Effect Size: d = 0.93**

**Control Schools’ Effect Size: d = 0.51**
Statistically and educationally significant reading comprehension gains were achieved by OLSEL Schools’ students who came from a **low Socio-Economic background**.

OLSEL Schools’ Effect Size: $d = 1.29$

Control Schools’ Effect Size: $d = 0.53$
Statistically and educationally significant reading comprehension gains were achieved by OLSEL Schools’ students who had a **Language Background Other Than English**

**OLSEL Schools’ Effect Size:** $d = 1.25$

**Control Schools’ Effect Size:** $d = 0.31$
OLSEL RESEARCH PROJECT

OLSEL Project Findings

Students in the research schools have achieved twice the gains in literacy achievement as measured on the Reading Progress Test.

<table>
<thead>
<tr>
<th></th>
<th>April 2009</th>
<th>November 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Schools</strong></td>
<td>91.22</td>
<td>105.96</td>
</tr>
<tr>
<td><strong>Control Schools</strong></td>
<td>94.70</td>
<td>101.96</td>
</tr>
</tbody>
</table>
These gains were achieved in both year level groups:
Prep - Year 1 & Year 1–Year 2

<table>
<thead>
<tr>
<th>School Type</th>
<th>April 2009</th>
<th>November 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prep – Year 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td>86.90</td>
<td>102.90</td>
</tr>
<tr>
<td>Control</td>
<td>94.94</td>
<td>100.33</td>
</tr>
<tr>
<td>Year 1–Year 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td>95.10</td>
<td>108.61</td>
</tr>
<tr>
<td>Control</td>
<td>95.29</td>
<td>103.26</td>
</tr>
</tbody>
</table>
Table 5: Research and Control School Effect Size Comparisons: Prep – Year 1 Cohort

<table>
<thead>
<tr>
<th>Variable</th>
<th>Research Schools</th>
<th>Control School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picture Vocabulary</td>
<td>0.66</td>
<td>0.32</td>
</tr>
<tr>
<td>Syntactic Understanding</td>
<td>0.46</td>
<td>0.13</td>
</tr>
<tr>
<td>Phonological Awareness</td>
<td>2.62</td>
<td>1.82</td>
</tr>
<tr>
<td>Story Grammar</td>
<td>1.53</td>
<td>1.26</td>
</tr>
<tr>
<td>No of T Units</td>
<td>0.84</td>
<td>1.32</td>
</tr>
<tr>
<td>No Words/T-Unit</td>
<td>0.77</td>
<td>0.68</td>
</tr>
<tr>
<td>No Clauses/T-Unit</td>
<td>0.52</td>
<td>0.80</td>
</tr>
<tr>
<td>Reading Progress Test</td>
<td>1.22</td>
<td>0.52</td>
</tr>
</tbody>
</table>
**Table 7:** Research and Control School Effect Size Comparisons: Year 1 – Year 2 Cohort

<table>
<thead>
<tr>
<th>Variable</th>
<th>Research Schools</th>
<th>Control School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picture Vocabulary</td>
<td>0.50</td>
<td>0.31</td>
</tr>
<tr>
<td>Syntactic Understanding</td>
<td>0.58</td>
<td>0.17</td>
</tr>
<tr>
<td>Phonological Awareness</td>
<td>0.80</td>
<td>0.69</td>
</tr>
<tr>
<td>Story Grammar</td>
<td>1.59</td>
<td>1.26</td>
</tr>
<tr>
<td>No of T Units</td>
<td>0.63</td>
<td>1.25</td>
</tr>
<tr>
<td>No Words/T-Unit</td>
<td>0.74</td>
<td>0.46</td>
</tr>
<tr>
<td>No Clauses/T-Unit</td>
<td>0.76</td>
<td>0.55</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>0.93</td>
<td>0.51</td>
</tr>
</tbody>
</table>
• They are asking more questions. They have all improved their sentence structure.
• They are able to listen to instructions much quicker and they’re able to express themselves to each other.
• Over the two years because I’ve had some of my grade ones for two years, to see their development is unbelievable. They are telling me (new words), I’m not having to initiate that.
• So now they link words with the same meanings together which is good and I’ve never had experienced that before.
OLSEL PROJECT: TEACHERS’ COMMENTS REGARDING THE STUDENTS

• (Within the Big Book interactions), instead of the two or three calling out all the time just answering, everyone feels comfortable to be part of it.

• I think the main thing that’s really jumped out at me is that they now know that they can think and that’s accepted.

• They are more aware, more cognisant of the fact that they are learning words and they need to know new words. It just makes our talk more interesting and easier to listen to if we have some good interesting words to listen to.

• They are learning to articulate their thinking far better.
OLSEL PROJECT: TEACHERS’ SELF REFLECTIONS

- It’s just integrating and making it more explicit; definitely making it more explicit so the children have a really deep understanding.
- It’s been making the teaching more explicit so you know what we’re doing, explicit to the children in terms so they know what they’re learning and what our objective is.
- I just feel planning-wise, even my teaching is more in depth with not just the literacy but across the whole lot even our integrated topic.
- But those questions on the front cover .. you get so much out of your front cover before you even start the book.
It certainly made people very much aware of how much we take for granted that children know.

OLSEL was really timely because it took us back to basics, reminded us of the basics.

It was sort of that notion of being able to let go of something and think yes, I can do less but what I do do seems in my opinion to have more depth.

This took me back to fundamentals and how I could see it scaffolding.

It makes you self-reflect. I’m not afraid to say that I did that at Teachers’ College and it works.
Every opportunity, every occasion is an occasion to better their oral language and it’s easy.

When I think of oral language I think of it as across the curriculum. I don’t just put it in the literacy block and then we don’t do it for the rest of the day.

It’s not on its own. It’s integrated with other subjects as well, I mean, you can’t take that apart can you.

I’m a lot more aware of the oral language component not as a component itself but integrated into everything.

I can see how it permeates everywhere. I don’t think I had an idea of that.
## OLSEL PROJECT: TEACHER FEEDBACK ON PROFESSIONAL DEVELOPMENT

### Table 21  OLSEL Teachers’ Rating of the Overall OLSEL Initiative

<table>
<thead>
<tr>
<th></th>
<th>ALL (n = 43)</th>
<th>INVOLVED 2009 &amp; 2010 (n = 34)</th>
<th>INVOLVED 2010 only (n = 9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, rate the value of having been involved in the OLSEL Research Project and Professional Learning Program (Rating 1 – 5 / Limited Value – Highly Valuable)</td>
<td>4.63 (93%)</td>
<td>4.79 (96%)</td>
<td>4.00 (80%)</td>
</tr>
</tbody>
</table>
OLSEL PROJECT: TEACHER FEEDBACK ON PROFESSIONAL DEVELOPMENT

• OLSEL really opened my eyes on the way to best incorporate oral language into all areas of school.
• The ideas, suggestions and shared experiences have been most valuable. It has given more depth to my teaching.
• It was highly valuable in all aspects and the ongoing support from the OLSEL website will be a great aid in the future.
• The support from outside school has been tremendous.
• This is the best on-going PD I have ever been involved in (teacher of 30 years). Excellent combination of theory, practical application and expert support.
OLSEL PROJECT: TEACHER FEEDBACK ON PROFESSIONAL DEVELOPMENT

• Support from CEO and Project Staff great. OLSEL website a great aid.
• Highly valuable due to continued support and links made to other schools.
• It has been a very beneficial exercise and has had quite an impact for us. It has been GREAT. At first, I was totally confused but now am definitely a believer and a “doer” of OLSEL.
• Created awareness of providing ample opportunity to refine oral language and its importance as basis for literacy learning.
• It has affirmed what is “good” in my teaching practice and has reminded me of the benefits in not “throwing out the baby with the bathwater”.
• This project has made a significantly positive impact upon teaching and learning in our school.
• The value of this program is not limited to the oral language project. This program has helped build strong staff relationships and has helped provide information/strategies to meet a very evident need with the children in our school.
• This has been excellent PD. Classroom practices have changed; outcomes for children have changed.
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 the oral language and reading skills of children who are being educated in low SES communities. (p. 51)

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.

Associate Professor Pamela Snow
School of Psychology & Psychiatry, Monash University (March 2011)