Improving narrative and language skills in senior primary school students

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Summary

Positive evaluations of the evidence from existing whole-class language programs for Prep students at Mahogany Rise Primary School led to the hypothesis that similar results could be gained for students in years 5 and 6. All senior students at the school participated in a whole-class narrative program. Extended language intervention was provided to students identified through diagnostic assessments as having moderate to severe language difficulties.

Evidence demonstrated that all students who participated in the whole-class language program improved significantly in all areas of narrative production, comprehension and grammar complexity. All of the students identified as having moderate to severe language difficulties improved significantly, and the majority of these students are now within the normal range for all areas of language.

The link between oral language and literacy ability has been well documented (Greene 1994; Fein, Ardilla-Rey & Groth 2000). The aim of this strategy has been to support oral language development in order to support the acquisition of literacy skills.

Target student group

Mahogany Rise Primary School is in Frankston, Victoria. This small regional public school is situated in a low socio-economic area. It has an enrolment of approximately 130 students. This program focused on students in years 5 and 6.

Method

In 2011, data indicated that a number of older children at Mahogany Rise Primary School had high language needs, particularly in the areas of expressive and receptive language. The school staff decided that they would provide narrative oral language and comprehension strategies in the year 5 and 6 classrooms, with teachers being trained while participating. With this weekly training, the teachers developed skills that allowed them to follow up the goals of the strategy throughout the week.

The school applied for a grant so that volunteers could be trained by the school speech-language pathologist to work with small groups of children identified as having moderate to severe language delay and provide language intervention. This grant was essential for providing funds for the small-group intervention.
Using data to determine approach

All year 5 and 6 students were assessed at the beginning and end of the year. All students participated in a whole-class language strategy that targeted the skills assessed. An assessment tool appropriate for this age group was purchased – Expression, Reception and Recall of Narrative Instrument (ERRNI) – to assess children’s abilities before and after intervention to produce a narrative, comprehend a narrative and provide complex sentences.

The ERRNI assesses the ability to relate, comprehend and remember a story after a delay. It provides a rich source of information about children’s narrative skills. Check-normed on 146 children from Western Australia across three age bands – 6 years, 9 years and 12 years – it provides norms in relation to the following measures:

- Information indicating how much relevant story content is provided
- Complexity of grammatical structure
- Comprehension of the pictured narrative.

(Source: ERNNI)

Students identified with moderate to severe language difficulties using the ERRNI were withdrawn for further assessment using Clinical Evaluation of Language Fundamentals, Fourth Edition (CELF-4). CELF-4 is a standardised language test used to assess students from 5 to 21 years of age. The test is composed of a number of subtests, each one focusing on a different language area, function or skill. The subtests within the assessment can be broken into two categories:

- Receptive language skills
- Expressive language skills.

Students were flagged as having difficulty in the area of oral language, including skills in providing sufficient and relevant information, the use of appropriate vocabulary in a narrative structure, comprehension of a narrative and mean length of utterance (an indication of grammatical complexity). This data enabled a focus on particular skills for the whole-class language strategy.

Students diagnosed with language difficulties in the ERRNI were then assessed using the diagnostic CELF-4. Targeted small-group intervention therapy began with trained volunteers using a strategy developed to meet the needs identified in the CELF-4 assessment. These included making vocabulary links, formulating grammatically correct sentences, following directions and understanding spoken paragraphs. Strategies were adjusted as the students’ progress was monitored.
### Strategy content

#### Table 1: Whole-class language strategy content

<table>
<thead>
<tr>
<th>Part One</th>
<th>Part Two</th>
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</table>
| • Students focused on one area of a narrative each week (eg characters, settings, feelings, action, problems and solutions). Teaching and learning focused on the complexity of grammatical structure and comprehension of the pictured narrative.  
  
• Students developed oral presentations based on a narrative to develop and consolidate comprehension skills. They used a range of text types evident in the curriculum for their year level for the presentation. For example, students might use a persuasive text to invite their ‘strange’ character to a party.  
  
• Students brainstormed vocabulary for each activity in order to produce interesting, context-related language and complex sentences. They were encouraged to represent a range of emotive words, adjectives, conjunctions and synonyms for ‘said’.  
  
• Peer feedback questions were used to evaluate each other’s work. | Students planned, developed and orally shared their narratives using the skills learnt in Part One of the strategy. The narrative reading was recorded on video for later reflection. Students were provided with a rubric of assessment criteria to evaluate their own work and the work of others. |
| Teaching and learning focus:  
  
• Providing sufficient and relevant information  
  
• The use of appropriate vocabulary in a narrative structure  
  
• Comprehension of a narrative  
  
• Mean length of utterance – an indication of grammatical complexity. | Teaching, learning and assessment focus:  
  
• Providing sufficient and relevant information  
  
• The use of appropriate vocabulary in a narrative structure  
  
• Comprehension of a narrative  
  
• Mean length of utterance – an indication of grammatical complexity. |
Part Three

- Students evaluated their recording to determine in which areas they were performing well and which areas they could focus on for improvement.
- Students continued to study a range of children’s books, looking at the author’s intent and identifying all the elements of a narrative that they had previously studied.
- Students created picture books for Prep buddies, using their new understandings of narrative structure, relevant story content, grammatical structures and cohesive texts. In a sharing session with the buddies, they read the stories they had created. The Prep buddies were given the stories to take home.

Reflection and learning focus:

- Providing sufficient and relevant information
- The use of appropriate vocabulary in a narrative structure
- Comprehension of a narrative
- Mean length of utterance – an indication of grammatical complexity.

Use of volunteers

The volunteers spent a morning each training with the Mahogany Rise speech language teacher (SLT). This training included talking through each part of the strategy, how it would be used and what skills it would target. The strategies were modelled to the volunteers, who then used the strategies with students while the SLT observed and offered assistance where necessary.

Table 2: Small-group therapy classes

<table>
<thead>
<tr>
<th>Formulating sentences: students were provided with pictures and had to make up sentences using a mix of prepositions, conjunctions and adjectives in the sentence. The vocabulary used became more complex throughout the strategy.</th>
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</thead>
<tbody>
<tr>
<td>Following directions and understanding language concepts: students played games and created pictures by following increasingly complex directions.</td>
</tr>
<tr>
<td>Word classes: students identified and described vocabulary links through a range of board games created for the strategy. This included categorisation and learning new vocabulary. The use of a thesaurus was also practised.</td>
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<tr>
<td>Understanding paragraphs: Key into inference (Parkin, Parkin &amp; Pool 2002) and Key into reorganisation (Parkin, Parkin &amp; Pool 2003) were used to target this area.</td>
</tr>
</tbody>
</table>
Results

"Before-and-after assessments provided staggering results that demonstrated significant improvement in language skills for children participating in the whole-class language strategies. Students with severe language difficulties were provided with extra intervention. They also demonstrated significant improvement, and half of these students are now within the normal range for all areas of language. Although some improvement was expected, the extent of the improvement was much higher than anticipated. As this strategy had not been used to target year 5 and 6 students before, we had no way of assessing the likely improvement."

Year 5 and 6 students improved by an average of:
• 22 standard points in producing oral narratives, going from an average of 83 before the strategy to 105 after the strategy
• 14 standard points in the ability to comprehend an oral narrative, going from an average of 95 before the strategy to 109 after the strategy
• 13 standard points in sentence complexity, going from an average of 90 before the strategy to 103 after the strategy.

At the beginning of the whole-class narrative strategy and small-group language intervention, only eight out of 34 students were within the normal range for all areas assessed on the ERRNI. At the end of the strategy, 29 out of 34 students were within the normal range or above for all areas assessed on the ERRNI. Only one student scored above the normal range in one area assessed before the strategy. After the strategy, 19 students scored above the normal range in one or more areas. Every student participating in the strategy demonstrated improvement.

Seven year 5 and 6 students with language disorders averaged an improvement of 17.5 standard score points for both expressive and receptive language (moving from an average in the 70s to an average in the low 90s). All seven students demonstrated significant improvement in the areas targeted.

Quantitative data collected by the school also indicate improvement in students’ literacy in the areas tested.
Lessons learned

Several factors contributed to the success of the whole-class language strategy and small-group intervention.

The success of the program would not have been realised without the support of the school community and the principal. To our knowledge, this strategy had not been trialled before in Australia.

The experience and knowledge of a trained speech pathologist was instrumental in developing the strategy. Respectful professional relationships between the speech pathologist, the teachers and the volunteers created a foundation of trust, which built confidence in the strategy. A clear training plan – and the modelling of elements of the language strategy by the speech pathologist in the classroom and in intervention groups – increased the confidence of teachers and volunteers that they could implement the strategy within the curriculum. To sustain the whole-class language strategy in best-practice form, it is essential for a speech pathologist or qualified professional to continue to drive the strategy; to further develop the strategy; and to further the teachers’ knowledge of language development.

Weekly follow-up with the teachers was instrumental in the success of the strategy, as it allowed teachers to talk about individual students and the strategy, and to make adjustments where necessary.

The teachers integrated the language strategy into the everyday curriculum, reflecting on the strategy, and monitoring and following up on students’ language goals throughout the week.

Student data were used to inform the strategy. The ERNNI assessments highlighted the areas of greatest need for each class and each student, and the students were monitored during the classroom activities. In this way the strategy was tailored to best meet the needs of each class and each individual student.

The volunteers provided valuable hours of teaching with the small group of identified students. They contributed a great deal to the success of the strategy.
Next steps

Mahogany Rise now implements a whole-school language strategy, in which all students are screened once a year in the areas listed below, and a whole-class language strategy is developed for the areas of need. The school uses the following tools and focuses on specific skills:

- Narrative information (ERRNI)
- Phonological awareness (Sutherland Phonological Awareness Test: SPAT)
- Subtests of CELF-4:
  - following directions and understanding language concepts
  - formulating sentences
  - understanding paragraphs.

All students with moderate to severe language difficulties also receive individual or group therapy provided by a trained teacher or speech pathologist. Strategies are followed up in class by aides and teachers.

Research base

"With an understanding of oral language development and the tools to target language skills, teachers and trained volunteers can make a vital difference to a child's literacy development, social life and ability to verbally express emotions (which positively affects behaviour)."

Oral language skills and narrative capacity form the foundation for reading comprehension, the ability to produce coherent writing, and the ability to understand subjects such as history, social studies and science (Fein, Ardilla-Rey & Groth 2000; Jones & Cooper 2006; Kim 1999; Nicolopoulou, McDowell & Brockmeyer 2006; Schickedanz & Casbergue 2004).

When considering a larger-scale intervention for improving oral language, schools often debate the merits of providing speech-language intervention in the classroom (classroom-based) or outside the classroom (pull-out). The convergent findings from Throneburg et al. (2000) and Wilcox et al. (1991) suggested an advantage for classroom-based team-teaching models over pull-out intervention, at least in the domain of vocabulary.
Further reading and links

Bishop, D 2004, Expression, Reception and Recall of Narrative Instrument (ERRNI).


Contacts

For more information contact [Mahogany Rise Primary School](#).