

Reading Case Study #4/06

Emmanuel Primary School
Brisbane, Australia
(Spring 2006)

Overview and Demographics

The primary department within Emmanuel Primary School enrolls three classes in each grade. Enrollment is not academically selective with a normal percentage of students in the “at-risk” category experiencing mild to acute reading difficulties.

Case Study Summary

Scope: **Basic reading competency improvement**
Subject: **Phonics/reading**
Target Grade Proficiency: **Grade 2, month 2/3.**
Number of students in Group: **72**
Number of students in target group: **3**
Case study time frame: **6 weeks**

Intervention Strategy

It was important for the school to structure this case study outside of the regular school day in order not to interrupt the students’ regular school program. The intervention program was therefore conducted early morning prior to normal morning classes.

An initial assessment was conducted with DIBILS criteria for grade 2 reading, using the beginning of year (months 1 – 3) scoring criteria. Upon completion of the intervention program, students were again tested using the same DIBILS assessment.

Three students were selected to undertake the program based on their reading needs and availability to attend before-school classes for the six weeks of the program.

Pre-intervention assessment

The students in the target group were screened using DIBILS oral fluency (ORF), phoneme segmentation fluency (PSF), retell

fluency (RTF), nonsense word fluency (NWF), and initial sound fluency (ISF). The initial assessment results are shown in the table below.

The results of these assessments can be seen in the tables below. Data are shown for individual students and for their combined results.

Intervention

The intervention program consisted of three 40 minute classes per week. Classes continued for six weeks covering a total time of 4 hours of class contact in addition to about 20 minutes homework three times per week. Parents were asked to encourage student attitude towards the program as well as supervise homework assignments. Homework entailed continuing with the EDUSS software program as well as a small amount of paper-based work.

Class times were structured to include a time for homework review, a teacher-led instruction on what to expect in the next section of the EDUSS software program, followed by student use of the EDUSS phonics interactive software program.

Each student had access to a computer during the at-school sessions as well as at home.

While the teacher was instrumental in guiding students in new work and pronunciation exercises, most of the intervention was provided by the IMTAs inbuilt worked lessons and exercises.

Post-intervention assessment

The post-intervention assessment measured the same areas of reading fluency using DIBILS materials and scoring criteria.

The tables below provide a summary of individual and grouped results data for both the pre-intervention and post-intervention assessments.

Cooper - 8 yrs				
test	pre*	DIBILS band	post**	DIBILS band
ORF	12	at risk (0 - 25)	56	some risk (52 - 67)
PSF	9	deficit (0 - 29)	33	emerging (30 - 49)
NWF	11	deficit (0 - 29)	31	emerging (30 - 49)
RTF	8	n/a	35	n/a

Britney - 7 yrs				
test	pre*	DIBILS band	post**	DIBILS band
ORF	23	at risk (0 - 25)	61	emerging (52 - 67)
PSF	27	deficit (0 - 29)	47	emerging (30 - 49)
NWF	25	deficit (0 - 29)	48	emerging (30 - 49)
RTF	15	n/a	44	n/a

Jayden - 8 yrs				
test	pre*	DIBILS band	post**	DIBILS band
ORF	17	at risk (0 - 25)	59	some risk (52 - 67)
PSF	23	deficit (0 - 29)	43	emerging (30 - 49)
NWF	20	deficit (0 - 29)	40	emerging (30 - 39)
RTF	12	n/a	42	n/a

Grouped data				
test	pre*	DIBILS band	post**	DIBILS band
ORF	15.7	at risk (0 - 25)	58.7	some risk (52 - 67)
PSF	19.7	deficit (0 - 29)	41.0	emerging (30 - 49)
NWF	18.7	deficit (0 - 29)	39.7	emerging (30 - 49)
RTF	11.7	n/a	40.3	n/a

- pre* - pre-intervention assessment
- post* - post-intervention assessment
- ORF - oral reading fluency
- ISF - initial sound fluency
- PSF - phoneme segmentation fluency
- NWF - nonsense word fluency
- RTF - retell fluency

Results & discussion

Each student showed significant improvement in each of the elements of reading tested by the DIBILS criteria.

Cooper (Tier -3)

Cooper showed the acutest deficits in the initial assessment. His PSF and NWF scores placed him firmly in the DIBILS category of a "deficit." In the post intervention test his scores had shown considerable improvement moving him to the DIBILS category of "established" albeit at the low end of this category.

Of particular interest was the improvement in the ORF test. While improvements in competency in PSF and NWF are important, they are really precursors to the main event which is the ability to read whole words and sentences fluently. Cooper's scores in ORF moved him from the middle of the "at risk" category to the low end of the "some risk" band.

The RTF test was important given the nature of the improvement in the other criteria tested. This indicates that the other general fluency improvements reflected a corresponding retell or comprehension improvement. While the time of the intervention was not long, the fluency improvements and the attendant comprehension improvements indicate a desirable trend to automaticity of the essential fluency elements allowing available cognitive resources to improve comprehension.

Cooper's pre-intervention assessment placed him as a tier 3 level intervention. By the end of the program, his improvement moved him to a tier 2 program.

Britney (Tier 2) & Jayden (T2/3)

Both Britney and Jayden showed significant improvements in all the fluency elements tested in the DIBILS assessment. These improvements were similar in size to those shown by Cooper even though they came off a higher initial threshold.

Britney began the intervention at a tier 2 level and improved to a level where she was not far from resuming a normal tier 1 program.