

## **ABSTRACT**

Achieving fluency in reading involves learning to read with accuracy, with automaticity, and with prosody. Prosody in reading is a complicated process involving the use of features such as volume and intonation (expression), phrasing (meaningful syntactic units such as phrases, clauses and sentences), smoothness, pace (speed), and appropriate use of punctuation. Many children who read with accuracy and automaticity, lack the final component necessary to achieve truly fluent reading: prosody.

The hypothesis of this study is that **explicit teaching of prosodic features such as phrasing, intonation, punctuation and pace, for emerging and early readers, will develop prosodic sensitivity in text reading.**

The development of prosodic sensitivity in oral language is dependent on rhythm, stress and pausing to chunk the speech stream into syntactic units, all of which are generally modelled by primary caregivers from an early age. Prosodic cueing information in text reading is scarce, hence the need for explicit instruction, modelling and feedback utilizing a strategy that ultimately supports independent, prosodic reading.

In this study, emerging and early readers were taught the ‘P.I.P.P’ acronym as a cueing device for prosodic reading, together with three self-management strategies to encourage metacognitive learning. The acronym stands for:

P: Phrasing

I: Intonation

P: Punctuation

P: Pace

The self-management strategies are:

\*Listen to your own voice to see if it sounds like a storyteller’s voice

\*Reread to restore storytelling voice

\*Use self-talk to remind yourself / set personal goals.

Results from this investigation with grade one students suggest that explicit teaching of prosodic features can be effectively included from the beginning of reading instruction, as part of a balanced approach to developing reading fluency. However, these results are minimal, perhaps indicating that the development of prosody in text reading is a gradual process, linked to the development of full prosodic sensitivity in oral language.

## SECTION ONE: INTRODUCTION

It has long been recognized by teachers of the early years of primary school, that a key, instructional aim of any reading program is to produce 'fluent readers'. The role of fluency in reading has been acknowledged as important, because of its affect on how well readers understand what they read (Rasinski, T, 200?, p.2). However, knowing what constitutes 'fluent reading', together with how to teach this explicitly, has been less understood.

Fluency can be defined simply as '...the reading of text with speed, accuracy and proper expression.' (Miller & Schwanenflugel, 2006,p.839.) Rasinski emphasizes two components of fluency: *automaticity* (speed/accuracy) and *prosody* (phrasing and expression). This study focuses on the development of **prosody** as a crucial part of fluent reading. Many emerging and early readers become quite competent word readers, but fail to utilize the 'prosodic or melodic features of spoken language' (Rasinski, p.10), that transform competent word readers into fluent readers at the sentence and text levels. Previous studies into prosodic aspects of fluency appear to have focused most often on identifying and measuring prosody in oral language, identifying and measuring prosody in written language, establishing links between prosodic speech and prosodic reading, establishing links between prosody and comprehension and the role of punctuation in text prosody.

Whalley & Hansen (pp. 2-3, 2006) note that prosody is crucial to the development of oral language, as it chunks the speech stream into syntactic units such as words, clauses, phrases and sentences. Use of prosodic elements such as rhythm, stress and pauses support the listener in the construction of meaning; individuals develop 'prosodic sensitivity' as a key part of oral language development. However, while prosodic cues are richly embedded in spoken language, these are poorly embedded in text language. Minimal support is available to the reader, conveyed minimally via punctuation for pauses (commas and full stops), italics for stress and capitalization to mark the beginning of news sentences (Whalley & Hansen, p. 18). In response, therefore, to the scarcity of prosodic information in text, explicit teaching of prosodic strategies to emerging and early readers, would appear to be necessary to develop prosodic sensitivity in reading.

In a 2006 study, Miller and Schwanenflugel (p. 839), noted Dowhower's 1991 description of prosody as embodying appropriate phrasing, pause structures, stress and rise/fall patterns. In a 2004 study into the use of prosodic features in oral reading, Schwanenflugel et al (pp.119-120), described the main prosodic features in reading as:

1. Perceived changes in pitch/fundamental frequency
2. Stress and loudness
3. Duration and pausing both within and between sentences
4. Chunking groups of words into phrases or meaningful units.

Punctuation was considered of minor importance, due to limitations as a cueing device, eg. different role of commas as demarcations in sentences and as dividers between strings of adjectives. Both studies attempted to objectively measure prosodic elements. Results from the 2004 study suggested that fluent decoders read with shorter pauses, steeper sentence-final declines, and a more adult-like prosodic contour. (p. 128.) Results from the 2006 study indicated that emerging readers read with lengthy and inappropriate pausing both within and between sentences, and a flat sentence-final decline. It would seem appropriate, therefore, to include explicit information regarding intonation and pausing when teaching emerging readers about commas and full stops. Rasinski believes that prosodic features include stress, pitch variations, intonation, rate, phrasing and pausing (p. 10.) His 'multidimensional fluency scale' (pp. 13-14), developed in partnership with J. Zutell in 1991 and adapted for use in 200?, provides a rubric that describes and rates prosody under the headings of : A. Expression and Volume B: Phrasing C: Smoothness D: Pace

It is intended as a subjective measure of prosody in reading that can be effectively utilized by experienced teachers.

The present study contends that in order to develop fluent readers, it is necessary to develop prosodic sensitivity in emerging and early readers. It builds on the body of information about prosody constructed by earlier researchers, particularly the nature of prosodic sensitivity in oral language, and the descriptions of prosodic features in reading. This study seeks to utilize this research as a foundation for an effective, teaching intervention targeting prosody in reading. To this end, a strategy that explicitly addresses prosodic features in reading has been designed, focusing on:

1. Phrasing (identifying meaningful syntactic units such as phrases, clauses and sentences)
2. Intonation (the rhythm or melodic pattern of language, together with appropriate volume)
3. Punctuation (pausing and intonation expectations for full stops, commas, question and exclamation marks, talking marks and ellipsis, italics, capital letters)
4. Pace (appropriate speed)
5. Self-Management devices ('listening to own voice' to monitor prosody & 'rereading' to reestablish prosody)
6. Self-talk & Self-reflection (to transfer learning from modeling to independent practice)

A complete description of the "PIPP" strategy used in this study has been included in Appendix 2.

As this present investigation targets emerging and early readers, with an age range of approximately 5.5 to 8, (as present in a Prep/One classroom), it is important to note from the outset that previous studies question the practice of emphasising prosody too early in the process of reading instruction. According to Whalley and Hansen (p. 4), full perceptual understanding and productive control of prosodic intonation in oral language is not mastered until the age of 12 or 13. They mentioned, however, the likelihood of 'developmental progression' throughout early and middle childhood. Schwanenflugel et al (p. 120), noted that as children younger than eight may still be developing the prosodic features of speech as the same time as being taught prosodic features of reading, it may be possible to consider prosody an irrelevant feature of fluent reading at this age.

The fact that there may be a maturational dimension to the development of prosodic sensitivity in reading provides a cautionary note to this investigation. However, following many years of experience in classroom and specialist teaching roles, it seems feasible to suggest that there appears to be a strong, habitual component in the oral reading of emerging and early readers, particularly among those who demonstrate poor progress in reading. Focusing on the development of prosodic sensitivity in reading, from the very beginning of reading instruction, would seem to be a practical way to avoid the habituation of laboriously slow, monotonic reading. While decoding at the word level and the development of automaticity may remain priorities early in the reading process, allowing children a chance to reread texts to work on prosody would seem to be part of a 'best practice' approach to reading instruction.

Children develop 'prosodic sensitivity' in speech as part of oral language development. It seems likely that children can also develop 'prosodic sensitivity' in text as part of reading development, despite the paucity of cueing information in written language. *This study predicts that the explicit teaching of phrasing, intonation, punctuation and pace to grade one students develops 'prosodic sensitivity' in reading, contributing to the development of fluent reading.* It is hoped that this investigation may add to the current body of research in terms of practical, effective, instructional strategies that contribute to a 'best practice' model of teaching prosodic features in reading to emergent and early readers, as part of overall reading fluency.

## **SECTION TWO: METHOD**

### **1. Design**

The intervention described in this study utilizes a case study ‘OXO’ design, in which gains in prosody due to improvements in the use of phrasing, intonation, punctuation and pace when reading, were monitored for a group of grade one students deemed ‘low progress’ in the area of literacy. The study was conducted over a six week period. Pre-testing tasks were administered to all members of the teaching and control groups (week one.) Participants in the teaching group were involved in an intervention designed to support the hypothesis (weeks two, three, four.) Post-testing tasks were administered to all members of the teaching and control groups (week six.)

### **2. Participants**

The eight students selected for this study formed the basis of the ‘*reading recovery tentative selection list*’ for 2008. These students had been formally identified as ‘at-risk’ in the area of literacy at the end of 2007, reading at the lowest levels of text difficulty for this cohort. All eight students display significant weaknesses in writing development. Their inclusion on the tentative selection list was confirmed during pre-testing in February, 2008. All are in grade one, and are in their second year of primary school. Details have been summarized below in Tables One and Two. The mean age for the students is 83 months (6years, 11 months.)

The four students in the ‘Intervention Group’ are in P/1JP; the four students in the ‘control group’ are in two other classes – P/1AL and P/1AG. Of the eight students, two in the teaching group are nearing the end of the reading recovery program; three others from across the classes will be taken onto the program in terms two and three. Of the three students that will miss out on the reading recovery program, all have demonstrated steady progress within mainstream classroom settings.

An attempt has been made to match members of the intervention and control groups according to chronological age and gender criteria. The chronological age criterion proved problematic due to the fact that the four youngest participants were in the Intervention Group (mean age 80 months, 6years, 8 months), with the four older participants in the Control Group (mean age 87 months, 7years, 3 months.) Although age was therefore not a perfect match, aligning the oldest with the oldest was still deemed the most viable option, particularly as this allowed for accurate gender matching. Table three records matches for the purpose of this study.

#### ***Intervention Group***

<b>Student</b>	<b>Gender</b>	<b>Age in Years</b>	<b>Age in Months</b>	<b>Tentative Selection List 2008</b>	<b>Reading Recovery Intervention</b>	<b>Text Level PreStudy</b>	<b>Text Level Post Study</b>	<b>Class</b>
1L	M	6 y 10m	82	Yes	Pending	9	11	P/1JP
2D	M	6y 8m	80	Yes	No	10	12	P/1JP
3O	M	6y 7m	79	Yes	Yes	11	15	P/1JP
4S	F	6y 5m	77	Yes	Yes	11	15	P/1JP

*Table 1*

#### ***Control Group***

<b>Student</b>	<b>Gender</b>	<b>Age in Years</b>	<b>Age in Months</b>	<b>Tentative Selection List 2008</b>	<b>Reading Recovery Intervention</b>	<b>Text Level PreStudy</b>	<b>Text Level Post Study</b>	<b>Class</b>
5G	M	8y 2m	96	Yes	No	10	14	P/1AL
6R	M	7y 2m	86	Yes	Pending	9	10	P/1AG
7C	M	6y 10m	82	Yes	Pending	9	10	P/1AG
8R	F	6y 10m	82	Yes	No	9	13	P/1AL

*Table 2*

### ***Intervention/Control Group Matched Pairs***

<b>Student: Intervention Group</b>	<b>Age in Months</b>	<b>Gender</b>	<b>Student: Control Group</b>	<b>Age in Months</b>	<b>Gender</b>
1L	82	M	5G	96	M
2D	80	M	6R	86	M
3O	79	M	7C	82	M
4S	77	F	8R	82	F

*Table 3*

### ***Entry Behaviour: Use of Prosody***

*Student 1L:* Monotonic, word-by-word, and very slow delivery, even on easy, familiar texts. Fluency in oral language was within age appropriate expectations.

*Student 2D:* Word-by-word delivery, with little intonation and slow pace. Fluency in oral language reflected some of the same issues as that in reading.

*Student 3O* Reading delivery demonstrated little intonation, poor awareness of phrasing, and a tendency to ignore punctuation. Fluency in oral language was satisfactory, but there remain some immaturities in articulation and pronunciation.

*Student 4S* Word-by-word delivery; poor awareness of phrasing; monotonic with very slow pace. Fluency in oral language is poor; a referral for speech assessment has been completed.

*Student 5G:* Diagnosed with Asperger's Syndrome. Word-by-word delivery, with little evidence of intonation; pace tends to be inappropriately fast. Fluency in oral language is improving in terms of intonation and pace, but natural phrasing is poor. Articulation and pronunciation weaknesses remain issues that are being addressed in private speech therapy sessions.

*Student 6R :* Demonstrated little awareness of phrasing or intonation when reading, with slow, laborious pace. Fluency in oral language was within age appropriate expectations, but some articulation issues exist in speech. A referral for speech assessment has been completed.

*Student 7C :* Reading displayed little awareness of intonation, natural phrasing or appropriate pace. Fluency in oral language was within age appropriate expectations.

*Student 8R :* Little use of intonation or natural phrasing; pace was slow and laborious. Fluency in oral language was within age appropriate expectations. However, she has a long history of conductive hearing loss due to persistent middle-ear infections throughout early childhood.

### **3. Materials**

Participants were individually assessed for reading performance - at both pre and post testing phases - using four, key, measurement tools:

1. *Neale Analysis of Reading Ability (Revised Edition):* used to collect standardised data about reading accuracy, comprehension and rate; raw scores and scaled scores included as measurements of learning. Form 1 tasks administered at both pre and post testing sessions, as these materials were readily available to the administrator.

2. *Record of Oral Language (alternative questions)*: used to determine participant's ability to mimic phrasing and intonation in speech, as indicators of prosodic sensitivity in oral language. Each sentence was divided into phrases, with 104 phrases noted overall. Use of intonation was rated using Zutell and Rasinski's 'multidimensional fluency scale' (1=lowest - 4=highest). Raw scores and percentages are included as measures of learning.

3. *Running Record of Reading*: used to measure accuracy, phrasing, intonation and pace at a standard level of difficulty. For this study, a level 10 text was selected from the PM Benchmark Set, Series One: 'Lost at the Shopping Mall'; participants were required to read to the end of page 9(121 words); a phrase count was established to measure use of phrasing during reading (37 phrases). Use of intonation was rated using Zutell & Rasinski's scale. Raw scores and percentages have been included as measurements of and for learning.

4. *Multidimensional Fluency Scale*: used to record participant's use of phrasing, intonation, volume, smoothness and pace in a rubric format. Based on observations during the running record, this measure is more subjective, relying on the training and skill of the administrator. A rubric recording gains for each participant has been included as a measurement of and for learning (see Appendix 3.) The rubric scores use of components of fluent reading in a scale of 1 (least) through to 4 (proficient), giving a comprehensive description of behaviours expected at each level. Rasinski suggests that students be given a cumulative score between 4 and 16; scores below 8 indicate that fluency may be a concern. This rubric's measures for 'expression and volume' have been used to score use of intonation during the running record of reading. This scale is the key measure of participants' use of prosodic features in text reading for this investigation.

#### 4. Procedure

Following individual pre-testing sessions, the intervention designed for this study was delivered to the *intervention group* during a series of whole-group and small-group reading sessions. These took place during the daily, classroom, reading workshop, part of a literacy block based on the ClaSS model. The classroom teacher was responsible for designing and delivering the intervention strategy and the teaching sequence. Over a three week period, the four participants were involved in ten consecutive lessons delivered to the whole class (approximately 20 minutes in duration), and six non-consecutive lessons delivered specifically to them at the small-group level (approximately 20 minutes in duration.) In total, 16 lessons focussed on the 'P.I.P.P' strategy: phrasing, intonation, punctuation and pace. An outline of the 'P.I.P.P' strategy has been included in Appendix 1, and details of the teaching sequence have been included in Appendix 2. The *control group* had no access to the intervention strategy as participants belonged to different class groups; however, all classroom teachers are expected to provide a daily literacy block, based on the ClaSS model. All participants in the study were involved in individual post-testing sessions.

### SECTION THREE: RESULTS

#### *Neale Analysis of Reading Ability: pre & post test results for Intervention Group*

Student	Acc Pre Test	Acc Post Test	Comp Pre Test	Comp Post Test	Rate Pre Test	Rate Post Test	Acc SC Pre Test	Acc SC Post Test	Comp SC Pre Test	Comp SC Post Test
1L	11	16	1	6	16	27	13	38	21	34
2D	21	21	6	6	45	52	44	44	34	34
3O	10	10	2	3	23	30	30	30	25	28
4S	12	19	4	5	26	27	33	42	30	32

Table 4

*Legend:* Acc= accuracy raw score; Comp= comprehension raw score; Rate= rate raw score; Acc. SC= Accuracy scaled score; Comp SC= comprehension scaled score.

#### *Neale Analysis of Reading Ability: pre & post test results for Control Group*

Student	Acc Pre Test	Acc Post Test	Comp Pre Test	Comp Post Test	Rate Pre Test	Rate Post Test	Acc SC Pre Test	Acc SC Post Test	Comp SC Pre Test	Comp SC Post Test
5G	16	22	2	3	79	85	38	45	25	28
6R	10	12	1	6	37	38	30	33	21	31
7C	14	17	6	6	24	31	36	39	34	34
8R	15	18	4	5	28	31	37	40	28	32

Table 5

*Legend:* Acc= accuracy raw score; Comp= comprehension raw score; Rate= rate raw score; Acc. SC= Accuracy scaled score; Comp SC= comprehension scaled score.

Results were mixed. Many of the participants in both groups returned raw scores too low to provide an accurate reading age (<6.0) in the areas of rate and accuracy, and stanines remained largely unchanged between pre and post tests across the three areas, due to the small rates of movement; hence the use of raw scores and scaled scores to record movement. According to data recorded in tables 4 and 5, six participants recorded gains in accuracy, with two remaining on their original scores. Seven participants recorded gains in comprehension, with one remaining on his original score. All participants recorded gains in 'rate', the area in the Neale Analysis that seems most closely connected to reading fluency, linked to the concept of automaticity.

Student Intervention Group	Rate Raw Score Pre Test	Rate Raw Score Post Test	Percentage Of Gain	Student Control Group	Rate Raw Score Pre Test	Rate Raw Score Post Test	Percentage Of Gain
1L	16	27	11	5G	79	85	6
2D	45	52	7	6R	37	38	1
3O	23	30	7	7C	24	31	7
4S	26	27	1	8R	28	31	3

Table 6

For the Intervention Group, the average gain was 6.5%. For the Control Group, the average gain was 4.25%. According to the data, the Intervention Group recorded a bigger gain in the area of 'Rate' than the Control Group; however, the difference was only 2.25%, which is very small.

**Record of Oral Language: pre and post test results for Intervention Group**

Student	Raw Score & % Pre Test	Raw Score & % Post Test	Phrase Count & % Pre Test	Phrase Count & % Post Test	Use of Intonation Pre Test	Use of Intonation Post Test
1L	37 88%	38 90%	97 95%	96 94%	1	2
2D	20 48%	27 64%	89 87%	80 79%	1	3
3O	36 86%	38 90%	95 93%	101 99%	1	3
4S	24 57%	26 62%	85 83%	51 51%	1	2

Table 7 42 Questions; 102 Phrases. Numerical measures for intonation match rubric scores.

**Record of Oral Language: pre and post test results for Control Group**

Student	Raw Score & % Pre Test	Raw Score & % Post Test	Phrase Count & % Pre Test	Phrase Count & % Post Test	Use of Intonation Pre Test	Use of Intonation Post Test
5G	21 50%	25 60%	74 73%	84 82%	2	2
6R	39 93%	42 100%	100 98%	102 100%	1	2
7C	35 83%	37 88%	94 92%	102 100%	1	1
8R	34 81%	38 90%	98 96%	102 100%	1	2

Table 8 42 Questions; 102 Phrases. Numerical measures for intonation match rubric scores.

**Record of Oral Language: comparison of average scores**

Group	ROL Average Score Pre Test	ROL Average Score Post Test	Average Loss or Gain	Phrase Count Average Score Pre Test	Phrase Count Average Score Post Test	Average Loss or Gain
Intervention	70%	77%	7% gain	89%	81%	8% loss
Control	77%	84%	7% gain	90%	95%	5% gain

Table 9

The data gathered via the ‘Record of Oral Language’ was intended to inform the study of participants’ ability to mimic phrasing and intonation in speech, as an indicator of prosodic sensitivity in oral language. Raw scores for the ROL provided an indication of an individual’s ability to process syntactically complex sentences. Tables 7 and 8 summarize ROL data for both groups.

Table 9 summarizes average scores for two aspects of the ROL: overall score and phrase count. It should be noted that three students from the Intervention Group recorded lower scores for the phrase count in post tests, hence the 8% loss recorded by the group in this area.

One possible explanation is that the two students with the most significant losses for the phrase count, 2D and 4S, seem to have concentrated much harder on accurate replication of the test questions during the post testing session, than on mimicking natural phrasing (hence the rise in oral language raw scores and the drop in phrase counts.) Both students recorded gains in use of intonation (2D: 1-3; 4S: 1-2). These individual results might suggest that these students had difficulty balancing the competing needs of accuracy, phrasing and intonation. The need to listen carefully to the words and intonation used for each sentence outweighed the ability to replicate exact phrasing patterns. Data for these two students has been highlighted on Table 7.

The subjective scale used to rank data use of intonation indicates that 100% of participants in the Intervention Group improved in this area, compared with 75% of participants in the Control Group.



***Running Record of Reading: pre and post test results for Intervention Group***

<b>Student</b>	<b>Running Record Accuracy Pre Test</b>	<b>Running Record Accuracy Post Test</b>	<b>Running Record Phrase Count Pre Test</b>	<b>Running Record Phrase Count Post Test</b>	<b>Running Record Intonation Pre Test</b>	<b>Running Record Intonation Post Test</b>
1L	92%	99%	8%	24%	1	2
2D	93%	97%	14%	24%	1	2
3O	93%	98%	19%	22%	1	2
4S	98%	99%	11%	14%	1	2

*Table 10 Level 10 text difficulty; 121 words in passage; 37 phrases in passage; same intonation rating code as for ROL task.*

***Running Record of Reading: pre and post test results for Control Group***

<b>Student</b>	<b>Running Record Accuracy Pre Test</b>	<b>Running Record Accuracy Post Test</b>	<b>Running Record Phrase Count Pre Test</b>	<b>Running Record Phrase Count Post Test</b>	<b>Running Record Intonation Pre Test</b>	<b>Running Record Intonation Post Test</b>
5G	94%	97%	27%	35%	1	2
6R	92%	92%	5%	5%	1	1
7C	85.5%	92%	0%	5%	1	1
8R	89%	95%	8%	22%	1	2

*Table 11 Level 10 text difficulty; 121 words in passage; 37 phrases in passage; same intonation rating code as for ROL task.*

For the purpose of this study, the running record was administered to obtain some information about what each participant could achieve independently in the areas of accuracy, phrasing, intonation and pace. Immediately apparent is that participants in both groups recorded progress in all areas between pre and post testing sessions, with the exception of 6R with phrasing and intonation. Table 12 records average percentages and gains in accuracy and phrasing for comparative purposes.

***Running Record of Reading: comparison of average scores***

<b>Group</b>	<b>Running Record Accuracy Average Pre Test</b>	<b>Running Record Accuracy Average Post Test</b>	<b>Running Record Accuracy Average Gain</b>	<b>Running Record Phrase Count Average Pre Test</b>	<b>Running Record Phrase Count Average Post Test</b>	<b>Running Record Phrase Count Average Gain</b>
Intervention	94%	98%	4%	13%	21%	8%
Control	90%	94%	4%	10%	17%	7%

*Table 12*

Both groups achieved an average improvement of 4% in accuracy, with the Intervention Group demonstrating a slightly higher gain in the areas of phrasing. The most significant individual gains were demonstrated by 1L in both accuracy (7%) and phrasing (16%). All participants, with the exceptions of 6R and 7C, demonstrated movement in use of intonation, jumping one rating between pre and post testing sessions (tables 10 & 11.)

***Multidimensional Fluency Scale: pre and post test scores for Intervention Group***

<b>Student</b>	<b>Expression&amp; Volume (Intonation) Pre Test</b>	<b>Expression&amp; Volume (Intonation) Post Test</b>	<b>Phrasing Pre Test</b>	<b>Phrasing Post Test</b>	<b>Smoothness Pre Test</b>	<b>Smoothness Post Test</b>	<b>Pace Pre Test</b>	<b>Pace Post Test</b>
1L	1	2	1	2	1	2	1	1
2D	1	2	1	2	1	2	1	2
3O	1	2	1	1	1	1	2	2
4S	1	2	1	2	1	2	1	1

Table 13

***Multidimensional Fluency Scale: pre and post test scores for Control Group***

<b>Student</b>	<b>Expression&amp; Volume (Intonation) Pre Test</b>	<b>Expression&amp; Volume (Intonation) Post Test</b>	<b>Phrasing Pre Test</b>	<b>Phrasing Post Test</b>	<b>Smoothness Pre Test</b>	<b>Smoothness Post Test</b>	<b>Pace Pre Test</b>	<b>Pace Post Test</b>
5G	1	2	1	2	1	1	1	2
6R	1	1	1	1	1	1	1	1
7C	1	1	1	1	1	1	1	2
8R	1	2	1	2	1	2	1	2

Table 14

The data from tables 14 and 15 provide indications of each participant’s relative strengths and weaknesses in prosodic reading at both pre and post test stages. The rubric itself provides valuable teaching information for developing readers who utilize prosodic features. By utilizing this rubric as a regular assessment *for* learning, it is possible for teachers to provide focused instruction for individual readers.

***Multidimensional Fluency Scale: pre and post test aggregate scores for matched pairs***

<b>Student: Intervention Group</b>	<b>Pre Test Score</b>	<b>Post Test Score</b>	<b>Student: Control Group</b>	<b>Pre Test Score</b>	<b>Post Test Score</b>
1L	4	7	5G	4	7
2D	4	8	6R	4	4
3O	5	6	7C	4	5
4S	4	7	8R	4	8

Table 15

According to Kasinski’s model, scores below 8 indicate fluency may be a concern; therefore all participants were ‘of concern’ after pre testing, as all –with the exception of 3O with a raw score of 5 - scored 4 during pre testing. Scores of 8 or above indicate that a student is making ‘good’ progress in fluency. Two participants (one from each group) scored 8 in post testing. The rest remained in the ‘of concern’ range after post testing. One participant (7R) recorded no discernible progress between pre and post testing phases.

In terms of collective progress, the Intervention Group returned a raw score of 11, while the Control Group returned a raw score of 7. Using this basic approach to compare group data, it would appear that the Intervention Group had made some additional gains in multidimensional fluency compared to the Control Group (an overall difference of 3 points.)

### ***Individual Trends of Progress (Post Intervention)***

*Student 1L* demonstrated gains in accuracy, comprehension and rate in the Neale Analysis, and in his raw score for the ROL. Prosodic sensitivity in oral language appeared higher in phrasing than in the use of intonation in the pre test; this was reversed in the post test. Significant gains were recorded in accuracy and all areas of prosody measured in the running record, and an improvement of 3 points was registered on the ‘multidimensional fluency scale.’ It would appear that this participant benefited positively from explicit instruction in prosody, with a stronger result also in text accuracy.

*Student 2D* recorded the highest pre-test scores for accuracy and comprehension in the Neale Analysis; these remained static for the post -test, though a gain was recorded in the area of ‘rate’. Raw score for ROL was very low in the pre-test (48%), increasing by 16% for the post-test. Prosodic sensitivity in oral language appeared higher in phrasing than in the use of intonation in the pre test; this was reversed in the post-test. Based on ROL scores and daily classroom observations, this student appeared to have very prosodic sensitivity in oral language; his speech tended to be monotonic, with poor use natural phrasing. Gains were demonstrated in accuracy and use of prosodic features during the running record of reading. This participant recorded one of the highest post-test scores on the ‘multidimensional fluency scale’ (8 points), with an overall gain of 100% in use of prosody in text reading. Data for this participant suggests that prosodic sensitivity in oral language may not necessarily predict successful use of prosody in text reading.

*Student 3O* recorded a static result for accuracy in the Neale Analysis, with gains in the areas of comprehension and rate. Indicators of prosodic sensitivity on oral language (phrasing and intonation), were high in the ROL pre-test, and registered further gains in the post-test. Accuracy, phrasing and intonation all improved in post-test results for the running record of reading. However, this student registered an overall improvement of only 1 point for use of prosodic features in the ‘multidimensional fluency scale’, perhaps indicating that minimum benefit was obtained from the intervention strategy. His score adds further to the trend that prosodic sensitivity in oral language does not necessarily predict consistent use of prosody in text reading.

*Student 4S* recorded gains in all areas of the Neale Analysis, but registered the lowest scores for phrasing and intonation in the ROL. Based on these scores, together with daily classroom observations, this participant has the lowest prosodic sensitivity in oral language of all students. Normal speech is monotonic, with little natural phrasing. Gains were recorded in the ROL raw score intonation rating. Slight improvements were recorded in all areas of the running record of reading, with a positive overall gain of 3 points on the ‘multidimensional fluency scale’.

*Student 5G* registered gains in every area of the battery of pre and post tests. Data suggests positive trends of learning in oral language, text accuracy , rate, comprehension and prosody. Prosodic sensitivity in oral language improved significantly in both phrasing (22% gain) and intonation (1 point) areas, as did his ROL raw score (a gain of 23%). He registered an overall gain of 3 points on the ‘multidimensional fluency scale.’

*Student 6R* recorded modest gains in all areas of the Neale Analysis; results in ROL areas for both pre and post testing were strong, indicating healthy prosodic sensitivity in oral language. Results remained static in all areas of the running record of reading, with no progress recorded on the ‘multidimensional fluency scale.’ The trends for this student appear quite disparate, suggesting strong prosodic sensitivity in oral language, but little if any progress in use of prosody in text reading.

*Student 7C* was the only participant to record a deficit in the comprehension area of the Neale Analysis, with modest gains in accuracy and rate. Gains were recorded in the ROL raw score and phrasing count, but use of intonation remained static (1 point.) Gains were recorded in

accuracy, phrasing and intonation in the running record of reading, with an overall improvement on 1 point on the ‘multidimensional fluency scale’. Data suggests stronger prosodic sensitivity in oral language than in text reading.

*Student 8R* registered gains in all areas of the pre and post-testing battery. Data suggests a trend of positive learning across accuracy and prosody areas. Prosodic sensitivity in oral language was healthy, as was overall use of prosody in text reading. This participant shared the highest score for the ‘multidimensional fluency score’ (8 points), with a 100% increase in use of prosody in text reading.

#### **SECTION FOUR: DISCUSSION**

The original hypothesis posed in this investigation predicted that use of prosodic features in text reading would improve with exposure to explicit teaching. It would appear that the degree to which the above data supports the predictions is limited. Data from two specific tests relate directly to prosodic sensitivity in oral language (phrase count and intonation rating in the Record of Oral Language), and use of prosodic features in text reading (phrasing and intonation in the Running Record of Reading.) Only one key measurement tool is specifically details prosody in text reading: Zutell and Rasinski’s ‘Multidimensional Fluency Score’. Table 16 compares key results for both groups in areas directly related to prosody.

##### ***Comparison of Gains between Intervention and Control Groups***

<b>Intervention Group</b>		<b>Control Group</b>	
<i>Area</i>	<i>Overall Gain</i>	<i>Area</i>	<i>Overall Gain</i>
Phrase Count (ROL)	-8% (loss)	Phrase Count (ROL)	5%
Intonation (ROL)	10 points	Intonation (ROL)	7 points
Phrase Count (Running Record of Reading)	8%	Phrase Count (Running Record of Reading)	7%
Intonation (Running Record)	8 points	Intonation (Running Record)	6 points
Multidimensional Fluency Scale	11 points	Multidimensional Fluency Scale	7 points

*Table 16*

Data indicates the Control Group performed more strongly in the area of phrasing in the ROL, while the Intervention Group were slightly more competent in the text reading. Three participants in the latter group returned lower scores in the phrase count for the ROL post-test, though their overall raw scores improved significantly. The Intervention Group clearly outperformed the Control Group in the area of intonation in both oral language and text reading. In the only tool to measure areas of prosody in text reading in detail –the ‘multidimensional fluency scale’ – the Intervention Group outscored the Control Group. However, in all areas, differences between the two groups’ results were modest.

Data for individual members of the Intervention Group were fairly uniform, suggesting a trend of steady progress overall. With the Control Group, however, two participants (5G and 8R) demonstrated particularly strong progress in most areas between pre and post testing. The other two participants (6R and 7C) returned the lowest gains in most areas between pre and post testing. The participants in the Intervention Group demonstrated small but positive gains in most areas tested. In addition to formal testing, anecdotal records kept during small-group sessions indicated that all could *articulate* the major components of the primary intervention strategy. With prompting, these students could use ‘*self-talk*’ to identify the prosodic feature and/or the

self-management strategy that they would concentrate on during text reading. All four were beginning to *reflect* on their own use of the 'P.I.P.P strategy during 'sharing time'.

An explanation for the use of prosodic features in reading by 75% of participants (that maintains the original prediction), is that all six received explicit instruction in phrasing and intonation as part of the reading workshop. Four of the six belong to P/1JP (the Intervention Group); the other two belong to P/1AL. It is possible that 'reading with expression' has been an explicit focus in their classroom, using an alternative instructional strategy.

Although not directly related to the original prediction, an interesting question that has arisen during the course of this study is the relationship between prosodic sensitivity in oral language and the competent use of prosody in text reading. Three members of the Intervention Group seemed unable to balance the competing demands of accuracy, phrasing and intonation during the Record of Oral Language task, returning scores in the post-test that might indicate weaknesses in prosodic sensitivity in oral language. Coincidentally, prosody is not as evident in the speech of these particular children. The same three students, however, demonstrated the ability to incorporate multiple prosodic features when reading connected text, with positive improvements in 'multidimensional fluency scores'. By contrast, three members of the Control Group scored comparatively strongly in Record of Oral Language tasks, indicating quite well-developed prosodic sensitivity. However, of the three, two utilized few, if any, prosodic features in text reading, with minimal movement in 'multidimensional fluency scores'. Such outcomes, though limited, suggest that developing prosody in reading is not limited by weaker prosody in oral language. Exploring connections between prosodic sensitivity in oral language and prosodic competence in reading presents as an interesting topic for future investigation.

Upon reflection, more appropriate formal measures of prosodic sensitivity could have been selected for the purpose of this study, specifically targeting prosodic features such as phrasing, intonation, and pace. These may have provided more specific, objective data to compare individual and group performances, to support the original prediction. For example, the 'DEEdee' task and the 'Compound Nouns' task utilized by Whalley and Hansen in their research into prosodic sensitivity. Paucity of supporting data limits the objective claims that can be made as a result of this investigation, or the contribution it can make to existing research. However, some implications for teaching practice can be offered on the basis of subjective data such as the multidimensional fluency scale, and anecdotal guided reading records, that may be worth future investigation.

This study maintains that prosodic sensitivity in reading can be developed through the use of teaching strategies that explicitly address prosodic features in text. Given Whalley and Hansen's comments about the scarcity of prosodic cues in written language, *explicit instruction* would seem to be a key requirement for learning the prosodic conventions of reading. When linked strongly to the 'storytelling' traditions in oral language, young children seem more able to identify, understand and transfer prosodic features such as phrasing, intonation, volume and pace to text reading, particularly when provided with a mnemonic strategy that supports articulation and promotes self-management. The 'P.I.P.P' strategy designed for the intervention component of this study, proved a useful instructional tool for developing prosodic sensitivity in emerging and early readers, providing mnemonic support for self-talk and self-reflection.

Keeping in mind the developmental nature of prosody in both speech and reading, it may well be that the 8-10 years age group is a more appropriate target population for a stronger focus on the prosodic features of reading. Emerging and early readers from the 5-7 age group may need to concentrate more on the challenges of word decoding and automaticity. However, subjective results from this study in the areas of simple phrasing, use of intonation, recognition and use of punctuation cues, and use of appropriate pace, suggest that prosodic sensitivity can be developed alongside the other components of fluent reading in very young readers. Indeed, explicit focus on prosodic features may help to prevent the habituation of word-by-word, monotonic reading by many emerging readers, who attend exclusively to decoding at the word level. Adjusting the

instructional balance between components of fluent reading, rather than omitting one altogether, seems a more sensible approach to the teaching of reading.

Finally, it should be noted that the intervention component of this study took place over a relatively short period of time (three weeks.) In reality, this was just enough time to introduce the various components of the 'P.I.P.P' strategy. Given that the development of prosodic sensitivity is likely to be a developmental process in both speaking and reading, similar to the development of phonological awareness in oral and print languages, explicit instruction in the use of prosody when reading will need to continue throughout primary school years. Data collection at regular intervals during the early years of school may record more discernible trends in the use of prosody than did the data collected for this investigation. Selecting and implementing a P-6 assessment schedule that includes appropriate tests for use of prosodic features would provide empirical data to map progress and trends in this area at both cohort and individual levels.

## **BIBLIOGRAPHY**

1. Collins, A, Brown, J.S, & Newman, S.E. ‘Cognitive apprenticeship: teaching the crafts of reading, writing and mathematics’, in Resnik, L.B. (ed.), Knowing, learning and instruction: Essays in honour of Robert Glaser, Lawrence Erlbaum, NJ, 1989
2. Cowley, J, The Red Rose, Shortland Publishers Ltd, Auckland, 1983
3. Fox, M, Night Noises, Omnibus Books, Adelaide, 1989
4. Giles, J, Little Chimp and Baby Chimp, Nelson Australia Ltd, Sth. Melbourne, 2001
5. Giles, J, The Toy Town Racing Car, Nelson Australia Ltd, Sth. Melbourne, 2001
6. Giles, J, Tom’s Ride, Nelson Australia Ltd. Sth. Melbourne, 2001
7. Graham, A, In the Middle of the Night, Era Publications, Adelaide, 1988
8. Jorgensen, G, On a Dark and Scary Night, MacMillan Company of Australia, Pty. Ltd., Melbourne, 1990
9. Miller, J. & Schwanenflugel, P, ‘Prosody of Syntactically Complex Sentences in the Oral Reading of Young Children’, in Journal of Educational Psychology, Vol. 98, No. 4, 2006, pp.839-853, USA
10. Neale, N, Neale Analysis of Reading Ability, 3<sup>rd</sup> Edition, ACER Press, Melbourne, 1999
11. Nelley, E. & Smith, A, PM Benchmark Kit, Nelson ITP, Sth. Melbourne, 2000
12. Randall, B, Tabby in the Tree, Nelson Price Milburn Ltd, Petone, NZ, 1994
13. Randall , B, The Best Cake, Nelson Price Milburn Ltd, Petone, NZ, 1994
14. Rasinski, T.J, ‘Assessing Reading Fluency (2004)’ as reviewed by Chard, D., Kuhn, M, Line, W, for Pacific Resource for Education and Learning.; Educational Service Material, product #ESO414 (this internet article was emailed to me by B. Dalheim; no publishing details provided apart from those cited above; pagination referred to as pp. 1-18 as no page numbers were provided in the article.)
15. Schwanenflugel, P, Hamilton, A.M, Kuhn, R, Wisenbaker, J.M, Stahl, S.A, ‘Becoming a Fluent Reader: Reading Skill and Prosodic Features in the Oral Reading of Young Readers’, in Journal of Educational Psychology, Vol. 96, No. 1, 2004, pp. 119-129, USA
16. Smith, A, Lost at the Shopping Mall, Nelson ITP, Sth, Melbourne, 2000
17. Vickers, K, The Wizard and the Rainbow, Rigby Education, Melbourne, 1987
18. Whalley, K & Hansen, J, ‘The Role of Prosodic Sensitivity in Children’s Reading Development’, in Journal of Research in Reading, Vol. 29, No. 3, pp. 288-303, August 2006, U.K.

**APPENDIX ONE**

**Rubrics for Multidimensional Fluency Scale  
(one per participant, pre and post test results highlighted)**

*Multidimensional Fluency Scale: 1L May / June*

<b>Dimension</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>A. Expression and Volume</b>	Reads with little expression or enthusiasm in voice. Reads words simple to get them out. little sense of trying to make text sound like natural language. Tends to read in a quiet voice.	Some expression. Begins to use voice to make text sound like natural language in some areas of the text, but not others. Focus remains largely on saying the words. Still reads in a quiet voice.	Sounds like natural language throughout the better part of the passage. Occasionally slips into expressionless reading. Voice volume is generally appropriate throughout the text.	Reads with good expression and enthusiasm throughout the text. Sounds like natural language. The reader is able to vary expression and volume to match his/her interpretation of the passage.
<b>B. Phrasing</b>	Monotonic with little sense of phrase boundaries, frequent word-by-word reading.	Frequent two and three-word phrases giving the impression of choppy reading; improper stress and intonation that fail to mark the ends of sentences and clauses.	Mixture of run-ons, mid-sentence pauses for breath, and possibly some choppiness; reasonable stress/intonation.	Generally well phrased, mostly in clause and sentence units, with adequate attention to expression.
<b>C. Smoothness</b>	Frequent extended pauses, hesitations, false starts, sound-outs, repetitions, and/or multiple attempts.	Several 'rough spots' in text where extended pauses, hesitations, etc, are more frequent and disruptive.	Occasional breaks in smoothness caused by difficulties with specific words and/or structures.	Generally smooth reading with some breaks, but word and structure difficulties are resolved quickly, usually through self-correction.
<b>D. Pace (during sections of minimal disruption)</b>	Slow and laborious.  (Pre & Post Tests)	Moderately slow.	Uneven mixture of fast and slow reading.	Consistently conversational.



*Multidimensional Fluency Scale: 2D May / June*

<b>Dimension</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>A. Expression and Volume</b>	Reads with little expression or enthusiasm in voice. Reads words simple to get them out. little sense of trying to make text sound like natural language. Tends to read in a quiet voice.	Some expression. Begins to use voice to make text sound like natural language in some areas of the text, but not others. Focus remains largely on saying the words. Still reads in a quiet voice.	Sounds like natural language throughout the better part of the passage. Occasionally slips into expressionless reading. Voice volume is generally appropriate throughout the text.	Reads with good expression and enthusiasm throughout the text. Sounds like natural language. The reader is able to vary expression and volume to match his/her interpretation of the passage.
<b>B. Phrasing</b>	Monotonic with little sense of phrase boundaries, frequent word-by-word reading.	Frequent two and three-word phrases giving the impression of choppy reading; improper stress and intonation that fail to mark the ends of sentences and clauses.	Mixture of run-ons, mid-sentence pauses for breath, and possibly some choppiness; reasonable stress/intonation.	Generally well phrased, mostly in clause and sentence units, with adequate attention to expression.
<b>C. Smoothness</b>	Frequent extended pauses, hesitations, false starts, sound-outs, repetitions, and/or multiple attempts.	Several 'rough spots' in text where extended pauses, hesitations, etc, are more frequent and disruptive.	Occasional breaks in smoothness caused by difficulties with specific words and/or structures.	Generally smooth reading with some breaks, but word and structure difficulties are resolved quickly, usually through self-correction.
<b>D. Pace (during sections of minimal disruption)</b>	Slow and laborious.	Moderately slow.	Uneven mixture of fast and slow reading.	Consistently conversational.

*Multidimensional Fluency Scale: 30 May / June*

<b>Dimension</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>A. Expression and Volume</b>	Reads with little expression or enthusiasm in voice. Reads words simple to get them out. little sense of trying to make text sound like natural language. Tends to read in a quiet voice.	Some expression. Begins to use voice to make text sound like natural language in some areas of the text, but not others. Focus remains largely on saying the words. Still reads in a quiet voice.	Sounds like natural language throughout the better part of the passage. Occasionally slips into expressionless reading. Voice volume is generally appropriate throughout the text.	Reads with good expression and enthusiasm throughout the text. Sounds like natural language. The reader is able to vary expression and volume to match his/her interpretation of the passage.
<b>B. Phrasing</b>	Monotonic with little sense of phrase boundaries, frequent word-by-word reading.  (Pre & Post Test)	Frequent two and three-word phrases giving the impression of choppy reading; improper stress and intonation that fail to mark the ends of sentences and clauses.	Mixture of run-ons, mid-sentence pauses for breath, and possibly some choppiness; reasonable stress/intonation.	Generally well phrased, mostly in clause and sentence units, with adequate attention to expression.
<b>C. Smoothness</b>	Frequent extended pauses, hesitations, false starts, sound-outs, repetitions, and/or multiple attempts.  (Pre & Post Test)	Several 'rough spots' in text where extended pauses, hesitations, etc, are more frequent and disruptive.	Occasional breaks in smoothness caused by difficulties with specific words and/or structures.	Generally smooth reading with some breaks, but word and structure difficulties are resolved quickly, usually through self-correction.
<b>D. Pace (during sections of minimal disruption)</b>	Slow and laborious.	Moderately slow.  (Pre & Post Test)	Uneven mixture of fast and slow reading.	Consistently conversational.

*Multidimensional Fluency Scale: 4S* **May / June**

<b>Dimension</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>A. Expression and Volume</b>	Reads with little expression or enthusiasm in voice. Reads words simple to get them out. little sense of trying to make text sound like natural language. Tends to read in a quiet voice.	Some expression. Begins to use voice to make text sound like natural language in some areas of the text, but not others. Focus remains largely on saying the words. Still reads in a quiet voice.	Sounds like natural language throughout the better part of the passage. Occasionally slips into expressionless reading. Voice volume is generally appropriate throughout the text.	Reads with good expression and enthusiasm throughout the text. Sounds like natural language. The reader is able to vary expression and volume to match his/her interpretation of the passage.
<b>B. Phrasing</b>	Monotonic with little sense of phrase boundaries, frequent word-by-word reading.	Frequent two and three-word phrases giving the impression of choppy reading; improper stress and intonation that fail to mark the ends of sentences and clauses.	Mixture of run-ons, mid-sentence pauses for breath, and possibly some choppiness; reasonable stress/intonation.	Generally well phrased, mostly in clause and sentence units, with adequate attention to expression.
<b>C. Smoothness</b>	Frequent extended pauses, hesitations, false starts, sound-outs, repetitions, and/or multiple attempts.	Several 'rough spots' in text where extended pauses, hesitations, etc, are more frequent and disruptive.	Occasional breaks in smoothness caused by difficulties with specific words and/or structures.	Generally smooth reading with some breaks, but word and structure difficulties are resolved quickly, usually through self-correction.
<b>D. Pace (during sections of minimal disruption)</b>	Slow and laborious.  (Pre & Post Test)	Moderately slow.	Uneven mixture of fast and slow reading.	Consistently conversational.

*Multidimensional Fluency Scale: 5G May / June*

Dimension	1	2	3	4
<b>A. Expression and Volume</b>	Reads with little expression or enthusiasm in voice. Reads words simple to get them out. little sense of trying to make text sound like natural language. Tends to read in a quiet voice.	Some expression. Begins to use voice to make text sound like natural language in some areas of the text, but not others. Focus remains largely on saying the words. Still reads in a quiet voice.	Sounds like natural language throughout the better part of the passage. Occasionally slips into expressionless reading. Voice volume is generally appropriate throughout the text.	Reads with good expression and enthusiasm throughout the text. Sounds like natural language. The reader is able to vary expression and volume to match his/her interpretation of the passage.
<b>B. Phrasing</b>	Monotonic with little sense of phrase boundaries, frequent word-by-word reading.	Frequent two and three-word phrases giving the impression of choppy reading; improper stress and intonation that fail to mark the ends of sentences and clauses.	Mixture of run-ons, mid-sentence pauses for breath, and possibly some choppiness; reasonable stress/intonation.	Generally well phrased, mostly in clause and sentence units, with adequate attention to expression.
<b>C. Smoothness</b>	Frequent extended pauses, hesitations, false starts, sound-outs, repetitions, and/or multiple attempts. (Pre & Post Tests)	Several 'rough spots' in text where extended pauses, hesitations, etc, are more frequent and disruptive.	Occasional breaks in smoothness caused by difficulties with specific words and/or structures.	Generally smooth reading with some breaks, but word and structure difficulties are resolved quickly, usually through self-correction.
<b>D. Pace (during sections of minimal disruption)</b>	Slow and laborious.	Moderately slow.	Uneven mixture of fast and slow reading.	Consistently conversational.

*Multidimensional Fluency Scale: 6R* **May / June**

<b>Dimension</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>A. Expression and Volume</b>	<p>Reads with little expression or enthusiasm in voice. Reads words simple to get them out, little sense of trying to make text sound like natural language. Tends to read in a quiet voice.</p> <p>(Pre &amp; Post Tests)</p>	<p>Some expression. Begins to use voice to make text sound like natural language in some areas of the text, but not others. Focus remains largely on saying the words. Still reads in a quiet voice.</p>	<p>Sounds like natural language throughout the better part of the passage. Occasionally slips into expressionless reading. Voice volume is generally appropriate throughout the text.</p>	<p>Reads with good expression and enthusiasm throughout the text. Sounds like natural language. The reader is able to vary expression and volume to match his/her interpretation of the passage.</p>
<b>B. Phrasing</b>	<p>Monotonic with little sense of phrase boundaries, frequent word-by-word reading.</p> <p>(Pre &amp; Post Tests)</p>	<p>Frequent two and three-word phrases giving the impression of choppy reading; improper stress and intonation that fail to mark the ends of sentences and clauses.</p>	<p>Mixture of run-ons, mid-sentence pauses for breath, and possibly some choppiness; reasonable stress/intonation.</p>	<p>Generally well phrased, mostly in clause and sentence units, with adequate attention to expression.</p>
<b>C. Smoothness</b>	<p>Frequent extended pauses, hesitations, false starts, sound-outs, repetitions, and/or multiple attempts.</p> <p>(Pre &amp; Post Tests)</p>	<p>Several 'rough spots' in text where extended pauses, hesitations, etc, are more frequent and disruptive.</p>	<p>Occasional breaks in smoothness caused by difficulties with specific words and/or structures.</p>	<p>Generally smooth reading with some breaks, but word and structure difficulties are resolved quickly, usually through self-correction.</p>
<b>D. Pace (during sections of minimal disruption)</b>	<p>Slow and laborious.</p> <p>(Pre &amp; Post Tests)</p>	<p>Moderately slow.</p>	<p>Uneven mixture of fast and slow reading.</p>	<p>Consistently conversational.</p>

**Multidimensional Fluency Scale: 7C May / June**

Dimension	1	2	3	4
<b>A. Expression and Volume</b>	<p>Reads with little expression or enthusiasm in voice. Reads words simple to get them out. little sense of trying to make text sound like natural language. Tends to read in a quiet voice.</p> <p>(Pre &amp; Post Tests)</p>	<p>Some expression. Begins to use voice to make text sound like natural language in some areas of the text, but not others. Focus remains largely on saying the words. Still reads in a quiet voice.</p>	<p>Sounds like natural language throughout the better part of the passage. Occasionally slips into expressionless reading. Voice volume is generally appropriate throughout the text.</p>	<p>Reads with good expression and enthusiasm throughout the text. Sounds like natural language. The reader is able to vary expression and volume to match his/her interpretation of the passage.</p>
<b>B. Phrasing</b>	<p>Monotonic with little sense of phrase boundaries, frequent word-by-word reading.</p> <p>(Pre &amp; Post Tests)</p>	<p>Frequent two and three-word phrases giving the impression of choppy reading; improper stress and intonation that fail to mark the ends of sentences and clauses.</p>	<p>Mixture of run-ons, mid-sentence pauses for breath, and possibly some chopiness; reasonable stress/intonation.</p>	<p>Generally well phrased, mostly in clause and sentence units, with adequate attention to expression.</p>
<b>C. Smoothness</b>	<p>Frequent extended pauses, hesitations, false starts, sound-outs, repetitions, and/or multiple attempts.</p> <p>(Pre &amp; Post Tests)</p>	<p>Several 'rough spots' in text where extended pauses, hesitations, etc, are more frequent and disruptive.</p>	<p>Occasional breaks in smoothness caused by difficulties with specific words and/or structures.</p>	<p>Generally smooth reading with some breaks, but word and structure difficulties are resolved quickly, usually through self-correction.</p>
<b>D. Pace (during sections of minimal disruption)</b>	<p>Slow and laborious.</p>	<p>Moderately slow.</p>	<p>Uneven mixture of fast and slow reading.</p>	<p>Consistently conversational.</p>

*Multidimensional Fluency Scale: 8R* **May / June**

Dimension	1	2	3	4
<b>A. Expression and Volume</b>	Reads with little expression or enthusiasm in voice. Reads words simple to get them out. little sense of trying to make text sound like natural language. Tends to read in a quiet voice.	Some expression. Begins to use voice to make text sound like natural language in some areas of the text, but not others. Focus remains largely on saying the words. Still reads in a quiet voice.	Sounds like natural language throughout the better part of the passage. Occasionally slips into expressionless reading. Voice volume is generally appropriate throughout the text.	Reads with good expression and enthusiasm throughout the text. Sounds like natural language. The reader is able to vary expression and volume to match his/her interpretation of the passage.
<b>B. Phrasing</b>	Monotonic with little sense of phrase boundaries, frequent word-by-word reading.	Frequent two and three-word phrases giving the impression of choppy reading; improper stress and intonation that fail to mark the ends of sentences and clauses.	Mixture of run-ons, mid-sentence pauses for breath, and possibly some chopiness; reasonable stress/intonation.	Generally well phrased, mostly in clause and sentence units, with adequate attention to expression.
<b>C. Smoothness</b>	Frequent extended pauses, hesitations, false starts, sound-outs, repetitions, and/or multiple attempts.	Several 'rough spots' in text where extended pauses, hesitations, etc, are more frequent and disruptive.	Occasional breaks in smoothness caused by difficulties with specific words and/or structures.	Generally smooth reading with some breaks, but word and structure difficulties are resolved quickly, usually through self-correction.
<b>D. Pace (during sections of minimal disruption)</b>	Slow and laborious.	Moderately slow.	Uneven mixture of fast and slow reading.	Consistently conversational.

## APPENDIX TWO: KEY INSTRUCTIONAL STRATEGY FOR THIS INVESTIGATION

### *The “P.I.P.P Strategy*

*‘P.I.P.P’* is an acronym for the key instructional strategy used in this intervention. The letters signify the main prosodic features explicitly taught to students, and provide mnemonic support for emerging and early readers to read *‘like storytellers.’*

**P = phrasing** (three, four or five words that make sense when read together smoothly)

**I = intonation** (making your voice go ‘up and down’ and ‘louder and softer’ as you read )

**P = punctuation** (the pause and intonation you put into your voice for each punctuation mark)

**P = pace** (the speed at which we read: not too fast & not too slow, though sometimes a bit faster or a bit faster to make the story interesting!)

(The acronym can also be presented in ‘acrostic’ format)

#### ***Punctuation List:***

**Full stop:** voices drop right down and completely stop (like cars do at a ‘stop’ sign)

**Comma:** voices stay even –and stop for a second – before reading on.

**Question Mark:** voices usually go up, and must come to a complete stop.

**Exclamation Mark:** use powerful, interesting voices, and come to a complete stop.

**Talking Marks:** use ‘character’ voices to make dialogue interesting.

**Elipsis:** ‘stretch’ your voices along the words, and pause dramatically before reading on.

**Italics:** add ‘stress’ to your voices for these words – power and maybe volume.

NB: children are taught that there may be variations to some of these conventions, eg. commas for adjective lists.

#### ***Self-Management Strategies:***

To promote metacognitive learning, the children are explicitly taught two self-management strategies to monitor and restore break-downs in the use of prosody when reading.

1. **Listen to Your Own Voice** to make sure it sounds smooth, that the phrases make sense, that you drop down and stop for full stops, that you are reading at the right pace, etc.
2. **Reread** any part that doesn’t sound like ‘storytelling’, and fix it up.
3. **Self-Talk** used to identify personal goal prior to reading.

Much time is spent during instruction discussing ‘trickier’ parts of the strategy such as identifying meaningful phrases, and scanning on to the next line.

Children are encouraged to specify the prosodic feature they are going to ‘practise’ prior to reading connected texts; they are also encouraged to read texts at least twice, to provide additional time to attend more to prosody than decoding.



### **APPENDIX THREE: Teaching Sequence for Explicit Instruction in Prosodic Reading**

*Whole Class Sessions (20-25 minutes in duration). These lessons emphasise the ‘modelling’, ‘coaching’, ‘articulation’ and ‘reflection’ aspects of Collins et al’s Model of Teaching and Learning’*

*(NB: ‘exploration’ aspect not included in this strategy at this point in time; it is intended that it would be introduced later in the teaching sequence, when children are more independent users of P.I.P.P)*

\*\*All texts mentioned in whole group lessons are in ‘big book’ format.

#### **Lesson One: Modelling**

1. Brainstorm things we need to do with our voices if we want to read like ‘storytellers.’
2. Record list on butcher paper/interactive whiteboard for future reference.
3. Introduce ‘P.I.P.P’ strategy and record alongside ‘brainstorm’ list. Briefly explain components (phrasing, intonation, punctuation and pace), and link to suggestions on the ‘brainstorm’ list.
4. Identify one component to practise today, eg. intonation (making your voice go up and down.)
5. Shared Reading Text: “The Wizard and The Rainbow” (discuss title & vocabulary/predict possible events/note rhyming words.) Read first few pages (however many time permits.) Focus strongly on use of intonation with some key sentences/verses.
6. Ensure that the P.I.P.P strategy is displayed prominently.
- 7.

#### **Lesson Two: Modelling**

1. Use brainstorm list to recall ‘storytelling’ skills.
2. Recall P.I.P.P strategy: phrasing, intonation, punctuation, pace.
3. Discuss what some component really mean, eg. small groups of words within a sentence that we read smoothly together, making voices go up and down, not too fast and not too slow!
4. Use ‘The Wizard and the Rainbow’ to explicitly model some of the key prosodic features, eg. intonation & pace.
5. Shared reading: read on from yesterday’s finishing point; emphasise intonation and pace; reread key sentences/verses to fine-tune use of intonation and pace.
6. If possible, finish the text.

#### **Lesson Three: Modelling**

1. Ask children to recall/articulate the P.I.P.P strategy. Discuss what each component means.
2. Focus on punctuation: brainstorm main punctuation marks and then articulate what to do with voices for each (see Appendix 2).
3. Point out & model intonation and pausing for key punctuation marks in the shared text, particularly final declination for full stops.
4. Shared reading: reread ‘The Wizard and The Rainbow’ from cover to cover, providing coaching and feedback for intonation and pace.
5. Discuss & model variations in pace and volume as a ‘storytelling’ device at different points within the text.

#### Lesson Four: Articulation/Modelling

1. Children recall and articulate current understandings of the P.I.P.P strategy (note gaps.)
2. Focus attention on 'Phrasing', explaining that most longer sentences have small groups of words that we can say smoothly together to make our reading sound more like the way we speak.
3. Explicitly model syntactically meaningful phrases and clauses in a longer sentence selected from today's shared reading text. Practise together.
4. Shared reading: 'The Red Rose' (use fingers to frame phrases and clauses.)
5. 2<sup>nd</sup> reading: reread, focusing on identifying and 'smoothly' reading phrases.

#### Lesson Five: Articulation/Modelling

1. Children recall and articulate current understandings of the P.I.P.P strategy (starting to fill in the gaps.)
2. Discuss the idea of self-management strategies: 'How do good readers know if they are reading like robots??' 'What do good readers do to fix robot reading??' Explicitly introduce two self-management strategies: \*Listening to your own voice when reading; \*Rereading to restore smooth reading (or prosody.)
3. Before shared reading, remind children to 'practise' listening to their own voice (not the voices around them.)
4. Shared reading: reread 'The Red Rose', using P.I.P.P strategy.
5. After reading, survey children about who remembered to listen to own voices; who forgot?? (Praise honesty & explain that it takes practise!)

#### Lesson Six: Articulation/Modelling

1. Children articulate structure and understandings of the P.I.P.P strategy, including self-management key self-management strategies.
2. Survey group about perceptions of strengths and weaknesses with prosody, eg. 'think about which parts of the 'P.I.P.P' strategy you use really well; what parts do you still need to practise? What part are you going to practise today?'
3. Invite some children to share which part of the strategy they are going to work on in shared or guided reading. Remind everyone to 'listen to your own voice.'
4. Shared reading: 'One Dark and Scary Night': note the use of exclamation marks and what this means for our voices!! Read this short text together.
5. Reread, focusing on variations in volume to add power and interest to the 'storytelling.'
6. Invite some children to reflect on what they noticed about their own voices when they were reading this text.

#### Lesson Seven: Articulation/Modelling/Reflection

1. Children articulate understandings about the self-management strategies for the P.I.P.P strategy.
2. Explicitly introduce the concept of 'self-talk' as a way of 'reminding ourselves' what we need to practise or learn or focus on next.
3. Ask children to use 'self-talk' in their minds to decide what to practise in reading today: 'Today I'm going to focus on ..... so that I sound more like a 'storyteller'.
4. Encourage children to turn to their neighbour and share their 'self-talk'.

5. Briefly recall understandings of 'phrasing' and model using a sentence from today's text.
6. Shared reading: 'In the Middle of the Night': remind children of their self-selected focus; frame phrases during this first reading.
7. Invite some children to reflect on own performance: what did they choose to practise, how did they get on, how could they improve???

Lesson Eight: *Modelling/Articulation/Reflection*

1. Children articulate P.I.P.P strategy, explaining key components in some detail, including the concept of 'self-talk'.
2. Model some obvious problems with prosody, eg. too fast, too slow, robotic/monotonic, poor phrasing, long pausing, over-running fool stops, etc, and have children suggest solutions.
3. Model 'self-talk' sentence starter; give children time to formulate own 'self-talk' goal and share this with neighbour. Remind them to 'listen to your own voice' when reading today.
4. Shared reading: reread 'In the Middle of the Night', focusing again of syntactically meaningful phrasing, with variations in volume and pace.
5. Ask children to reflect on which parts of the P.I.P.P strategy they are using really well, and share this with the group (sharing circle.) Invite anyone to articulate which parts are still a bit tricky.

Lesson Nine: *Articulation/Reflection*

1. Ask children to reflect on the parts of the 'P.I.P.P' strategy we still need to practise if we are to be brilliant 'storytellers'.
2. List suggestions on paper/interactive whiteboard for future reference.
3. Together, decide some priorities, and articulate the key understandings for these.
4. Formulate a 'group-talk' sentence to articulate and record today's shared goal in prosodic reading.
5. Shared reading: 'Night Noises' (discuss title & concepts/predict events)
6. Read together, as far as time permits, with reminders about our 'group-talk goal'.
7. Together, reflect on how well we achieved our goal; articulate and record agreed upon results in a statement.

Lesson Ten: *Articulation/Reflection*

1. Construct a chant for 'P.I.P.P' strategy, together with appropriate hand gestures, eg. clap, click, knee slaps, etc.
2. Refer back to list of priorities for improving prosodic reading; articulate and record 'group-talk' goal for today's reading.
3. Shared reading: 'Night Noises': read on from yesterday's finishing point, rereading occasionally to fine-tune today's focus feature, eg. phrasing, scanning onto new line, etc.
4. Reflect on the success of today's focus, and articulate/record in a statement.
5. If time permits, allow a second reading to practise 'listening to your own voice' on a familiar text.

\*\*\*Follow up shared reading sessions with learning centre tasks such as selecting/practising/presenting a familiar text in 'brilliant' storytelling fashion to the whole group during 'sharing time'!!

**Small Group Sessions (20 minutes in duration). Emphasis is placed on the ‘coaching’, and ‘scaffolding and fading’ aspects of Collins et al’s ‘Model of Teaching and Learning’.**

*Session One:* Guided reading text: ‘Little Chimp and Baby Chimp’ level 10 PM

\*Pre-reading discussion: prosodic features articulated in P.I.P.P strategy. Prompt for intonation & pace.

\*Who read like a storytellers?

*Session Two:* Guided reading text: ‘The Best Cake’ level 10 PM

\*Pre-reading discussion: self-management strategies. Prompt for use of final declination for full stops, together with appropriate pausing.

\*What did your voice sound like?

*Session Three:* Guided reading text: ‘Tabby in the Tree’ level 10 PM

\*Pre-reading discussion: use ‘self-talk’ to select personal goal. Prompt for use of phrasing, and attention to personal goal.

\*Share reflections on personal goal.

*Session Four:* Guided reading text: ‘Tom’s Ride’ level 11 PM

\*Pre-reading discussion: articulate P.I.P.P components & set personal goals.

\*Prompt for phrasing, intonation, punctuation and pace, as needed.

\*Reflect on ‘tricky’ areas.

*Session Five:* Guided reading text: ‘The Toytown Racing Car’ level 11 PM

\*Pre-reading discussion: focus self-talk on personal ‘tricky areas’.

\*Prompt to attend to these areas of need.

\*Reflect on successes/challenges.