

# 'Tape Assisted Repeated Reading' For a Group of Low Progress Readers in a Secondary School

Theoretical Context: Vygotskian (ZPD)

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Can an eight week daily 'Tape Assisted Repeated Reading Programme' (Rainbow Reading Programme) provide success in improving reading comprehension and word recognition skills for a group of secondary school low progress readers?

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## Section One: Introduction

### ABSTRACT

Fifteen low-progress readers in Years 8 to 10 were identified by an urban Catholic Girls' Secondary School, decile 5. The goal was to determine whether a programme using tape-assisted repeated reading materials (the Rainbow Reading Programme) improved secondary students' reading comprehension and word recognition skills. Assessment of the students' reading ages established the baseline age level that students could read comfortably on their own with 70% comprehension. The objective was to then provide them with a tape assisted reading programme (Pluck, 96), to scaffold their learning. Students were withdrawn from half of one of their period one classes and placed in one of two random groups. The teacher-aide facilitated the programme, providing the students with half an hour of daily reading practice. Students were tested using running records for accuracy and comprehension as well as the Burt Word Recognition Test, immediately prior to and following eight weeks of daily half-hour instruction. Analysis of pre and post-test reading scores, revealed an average of 1.2 years' progress on the accuracy and comprehension tests, and an average of 9.7 months in word recognition skills. The significance of this investigation is considerable in that secondary schools can feel confident in using a tape-assisted repeated reading programme to assist low-progress readers. Knowing that students can make substantial progress in an eight week intervention, is likely to be appealing. Secondary schools often lack the resources for addressing reading needs and a programme such as this can help them fulfil the National Administration Guideline 1 ...'*giving priority to student achievement in literacy...*' (MOE, 1999)

This investigation was based on Vygotsky's theory of the 'zone of proximal development' [ZPD] and used a tape assisted repeated reading programme [TARP] to scaffold students' learning in reading. Vygotsky defines the ZPD as the distance between the actual developmental level for independent problem solving and the level of potential development with adult guidance or with more capable peers (Vygotsky, 1978). The adult reading aloud on the tape provided assisted guidance. Students asked for a conference when they were ready to 'let go' of the scaffolding and perform the oral reading task alone. This was in keeping with the ZPD philosophy where learners gradually internalize the knowledge until it becomes their own. Vygotsky felt

that the teacher's task was to establish an appropriate level of difficulty which is challenging but not too difficult. This was done through establishing the instructional reading ages of the students defined as over 90% accuracy for oral reading with 70% comprehension of the text at that age level.

Research supports repeated reading of short sections of text by low-progress readers, as a means of increasing reading performance (Dowhower, 1994; Samuels, 1979, 1997). A reduced reading rate means that students may be putting too much cognitive effort into identifying individual words and may have difficulty processing meaning (LaBerge & Samuels, 1974; Samuels, 1987; Sindelar, 1987). Reading rate (fluency) is correlated with other measures of reading, including reading comprehension (Fuchs & Fuchs, 1992, Samuels, 1997). The research addressed results for primary school-age students but the researcher felt that the materials contained enough high-interest topics to interest secondary school students. Therefore it would be useful to confirm its efficacy at a secondary school. Secondary schools often lack the skilled reading teachers or resources to assist students experiencing reading difficulties.

The premise of repeated reading is that students, by active listening to the text, can enhance their fluency in reading and thereby improve their ability to comprehend text. An improvement in word recognition skills was not mentioned but the researcher hypothesized that there could also be an improvement in word recognition skills because of the daily exposure to vocabulary, assisted by the tape.

Wheldall, 2000, researched the Rainbow Reading Programme using a group of Year 2 to 7 students already attending an intensive literacy intervention programme which included a less structured, repeated reading section. His investigation was to ascertain if the 'Rainbow Reading Programme' added value to the programme he already had in place.

Wheldall found that the Rainbow Reading Programme was equally as effective as the existing intensive reading programme, which it replaced. but it did not add any value to the existing programme. Wheldall felt that despite this, Rainbow Reading was a version of repeated reading which less experienced teachers could use. The results were as good as the existing programme and the teaching team admired the resource. The students enjoyed using the programme.

Wheldall suggested that Rainbow Reading might demonstrate its validity within more traditional classrooms where an intensive literacy intervention programme was not in place. Wheldall's results supported the method of repeated reading but the programme he already had in place was enabling students to make good progress, and therefore enhanced efficacy was not demonstrated. It was trialled for a nine-week period. He validated the attractiveness of the resource for students which influenced the researcher's decision to use this in a secondary school which did not have any literacy support personnel or interventions in place.

Medcalf, 1989, compared a 'Pause Prompt Praise' programme with a tape-assisted reading programme and determined that both systems were beneficial to a group of 9-11 year old low-progress readers. Benefits of the tape assisted reading programme, [TARP] included students being enthusiastic and gaining confidence in their ability to read. Students in the experimental group of four ranged from 1.9 year deficit to 4.3 years. The setting was within the regular classroom during reading time. Gains made during the eight-week period ranged from 6 months to 3 years 6 months. He suggested that results may be even better if students were withdrawn to a separate setting. Follow-up tests six weeks later showed gains were maintained.

## Section Two: Methodology

The method for improving comprehension, fluency and word recognition skills for low-progress readers was through following the steps of 'The Rainbow Reading Programme' (Pluck, 1996) which is a taped-assisted reading programme involving repeated readings. By listening to and reading along with the same text repeatedly, the reader's fluency increases. There are a series of age-graded books with audiotapes, a training video, a teacher's manual and an assessment manual. Sequencing, cloze activities, and oral comprehension questions were included as part of the programme to improve comprehension.

The special needs committee surveyed the teachers to find out who they felt were struggling in class as well as having low PAT comprehension scores. The students were selected from a group of thirty five identified students. The selection of the fifteen students was based on running records of accuracy using Rainbow Reading levels and Burt word recognition scores. Students were assessed in terms of reading accuracy, comprehension and sight vocabulary, as measured by Rainbow Reading levels (normed on the Elley noun frequency count, 1989 cited in Pluck, 95) and the Burt Word Reading Test (New Zealand Council for Educational Research, 1981). Although the ages for the Burt and for the running records were in age bands, for ease of recording the researcher selected the middle level of the band and (for the Burt) converted it to a decimal figure. Students read a section (about 200 words) of unfamiliar text and were given five comprehension questions.

Priority was given to those students who were more than two years behind their chronological age in reading accuracy and comprehension. Students were placed at the accuracy level of over 90% with 70% correct answers for comprehension (three and a half out of five). The students were retested following eight weeks of instruction.

The fifteen selected students were divided into two random groups containing a mix of students from Years 8-10. Students were given the choice of participating and were withdrawn from their regular classes. They worked in the seminar room for half an hour per day, either from 9.00am to 9.30am or 9.30-10.00am. All fifteen selected students agreed to participate and parents consent was gained.

Many of the selected students had English as a second or 'other' language [ESOL]. There were a variety of ethnic groups represented including four Tongans, three Samoans, two Fijian Indians, one Maori, one Cook Islander, one Pakeha, one Ethiopian, one Japanese, and one Chinese and the ages ranged from twelve years three months, to seventeen years.

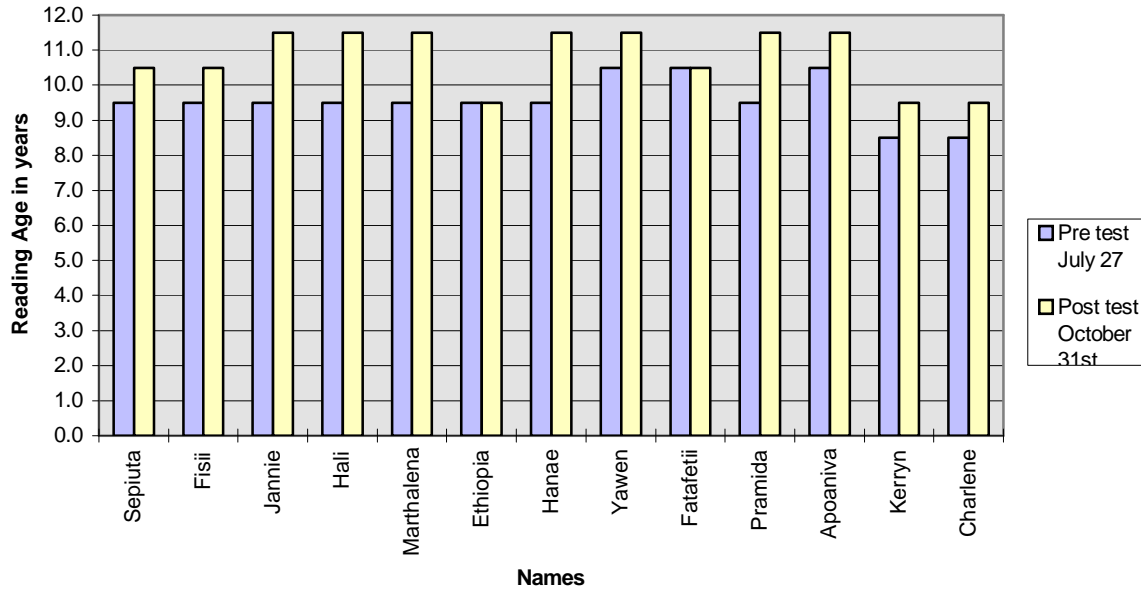
The researcher was involved for one session per week to ensure the teacher- aide felt comfortable and could ask any questions if unsure. The teacher-aide was asked to complete an evaluation sheet as to how well she had been supported with introducing 'Rainbow Reading'.

This programme was conducted by a trained, enthusiastic teacher-aide during daily half-hour reading lessons. Students requested a 'conference' with the teacher-aide when they believed that they had mastered the text, and were ready to move on to another book or another level.

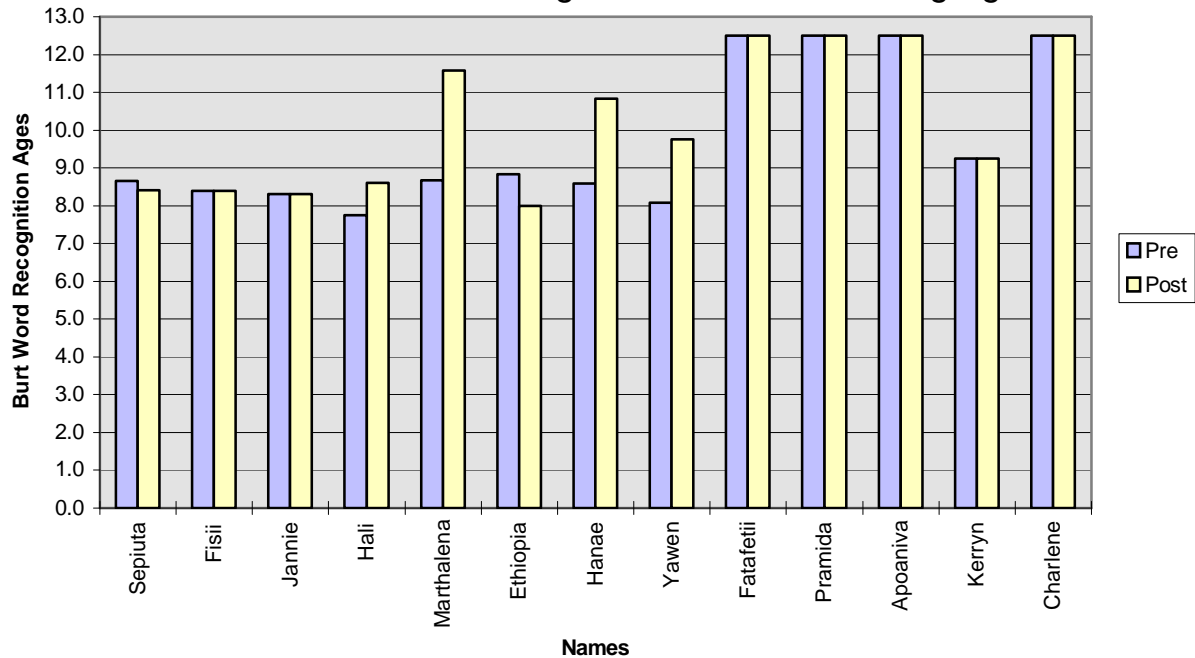
## Section Three: Results of the Investigation

(also see Appendix 1)

Reading Progress after 8 Week Rainbow Reading Programme (criteria 90+% accuracy with 70% comprehension)



Test Results of Word Recognition Scores in Reading Ages



## Section Four: Discussion of the Results

Follow-up measures used to determine the effects of repeated reading instruction were a repeat of the pretests; running records to show accuracy of oral reading and comprehension, and the Burt to show word recognition.

The results of the pre tests (Appendix 1) showed that many of the students were reading at considerably higher accuracy rates than their comprehension rates. Their expression and phrasing was not good but their speed in many cases was adequate. Initially the researcher was concerned that this may mean that a tape assisted reading programme may not be the best programme to address their needs. They were already reading at a high accuracy rate. However because the research asserted that comprehension increased with fluency, it was decided to continue with the repeated reading. It was decided that the students needed to have a combination of high accuracy with a good standard of comprehension. If the students had high accuracy and low comprehension, which was common, they were started on the next level lower and continued on that level until their comprehension increased to a level of 70%.

Results from this eight week study were extremely positive. There was an average gain in reading accuracy and comprehension of 1.2 years per student. Five students made two years progress and another five students made one year's progress, whilst three students made no change. Sixteen years' progress was made overall by thirteen students after an eight week period. Two of the students with no change had not attended well, and for the other one the reason is unknown. Her comprehension her did not improve and her accuracy was good from the beginning.

The Burt Word Recognition Scores improved for five students. Four were already at the top of the scale, three made no change and one regressed. One was absent during the testing week. Overall 8 years 1 month was gained for those students who were not already at the top of the scale, an average of 9.7 months for those ten students who had room for improvement (those not at the top of the scale). It was felt that for the four students who made no gains in sight word recognition, specific word recognition strategies needed to be incorporated.

The overwhelming response of the students to the programme was positive (fourteen out of fifteen students, see Appendix 1). The students felt that they had made good progress and enjoyed coming to the sessions.

One difficulty encountered was that the teacher-aide was absent for ten days which meant that a replacement had to be trained for that time-period. However the important factor was that the programme was able to continue. Having contingencies for this type of occurrence in school is important as these can happen often. The daily practise was an essential part of the success.

The motivation for this study was an attempt to assist a secondary school to cater for the needs of its low progress readers. According to the results, repeated reading instruction did result in notably higher performance on reading accuracy and comprehension measures. Students were able to demonstrate significant gains in comprehension after 40 days. In this sense, repeated reading instruction was indeed effective. These results add support to Samuel's (1997) assertion that repeated reading instruction can be an

effective method to improve the comprehension skills of students as well as reading accuracy. There were also reasonable gains in word recognition for a number of students, particularly the ESOL students.

It is important to realise in research that not one method is going to suit all students. However the success rate of this project for at least 11 out of the 13 students post tested, 85% of the students, meant that it was a very worthwhile educational project. The enthusiasm of the teacher-aide who followed the programme correctly with commitment to the students, was felt to be an important part of the success of this trial. These factors are important to take into account before embarking on such a programme. There needs to be commitment and support for the programme from all involved. Eight weeks was felt to be a minimum time for running the programme. The students were still highly motivated after eight weeks so this time could be increased.

It could also be useful to tape the students' pre-tests so that at the time of post testing they could listen to themselves and recognise their progress. Asking the students to graph their progress so that they could see the benefit as they progressed could have been used as an additional motivating factor

It would be interesting to compare PAT comprehension results from this year with the Year 2001 results to see whether the reading gains were evident in the standardized testing. It needs to be recognised that this was a girls' secondary school and that the results may not be the same for boys. The students were from a variety of ethnic backgrounds, most of whom spoke other languages and who may have less English language experience and therefore lower reading ages.

Perhaps reading ages could have been confirmed by using an additional measure such as the revised Neale Analysis of Reading (Neale, 1988). An additional component for the investigation to validate the findings would be a 'no-treatment' control group for comparison.

## **Section Five: Overall Evaluation**

Involving the teachers in the initial survey to select students whom they felt would benefit was a good starting point for gaining their commitment to this project. There is often reluctance by secondary teachers to release students from subject classes so this was felt to be important. Speaking with the students at the initial lesson was important as a means of letting them know the purpose of the programme and how they could benefit. This gained their motivation as did giving them a choice to participate.

For improvements for the future it would be useful to increase the daily time period for the group. Half a period was difficult for managing to attend to the students that needed conferences in a session. One hour would be more manageable. Future research could include a reciprocal teaching component with the support of peers. It could possibly be set up as a peer tutoring system using Year 13 students as well as the teacher-aide to administer the conferences and testing. If this were possible then half an hour could be managed.

It would be useful to have a more thorough knowledge of the students' English speaking backgrounds and to include this information in the investigation. There were a variety of different ethnic backgrounds but some of the students had been speaking English for only two years whereas others were born in New Zealand. This

data would be important for teachers as they could decide whether it was useful for ESOL classes as well as for low progress readers.

An essential part of the success of the study was that the students enjoyed the programme which is important information for secondary teachers who may be concerned that the material may appear too immature for their students. This was not the case for this investigation. Students did not comment on the material being unsuitable and indeed their evaluation comments were almost invariably positive (Appendix 1).

The researcher who is a Resource Teacher: Learning and Behaviour [RTLb] is confident that training secondary school teachers to use this programme for their low progress readers would be beneficial. The important aspects for success were a commitment to the project by a teacher or teacher-aide who is trained to run the programme carefully, daily opportunity for the students to participate- a minimum of half an hour daily, involving the students in choosing to participate with explanation of gains they can expect, and a minimum of eight weeks to participate. It is a very worthwhile intervention to recommend for secondary schools who need assistance in meeting the needs of their low-progress readers.

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