EDMONTON PUBLIC SCHOOLS

December 14, 1999

TO:	Board of Trustees
FROM:	E. Dosdall, Superintendent of Schools
SUBJECT:	Writing Road to Reading Pilot Results
ORIGINATOR:	A. McBeath, Department Head

RESOURCE:

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INFORMATION

Background:

In the 1997-98 school year a short 16 week pilot was conducted to assess the utility of a program then called **The Writing Road to Reading**. (Appendix I: Riggs-Spalding Method) A report was brought to the Board in June of 1998, which reported, that despite the brevity of the pilot, indications pointed to the program's potential to significantly contribute toward enhanced student achievement.

As a consequence a larger full year pilot was run in the 1998-99 school year. The pilot involved 46 teachers and 723 students ranging through kindergarten to grade six in 14 district elementary schools. All participating teachers agreed to take a 30 hour training program and then apply the method in their classrooms. Students targeted for exposure to the program were pre-tested in September and post-tested in May. The tests used were sections of the Wechsler Individual Achievement Test (WIAT). The WIAT is a series of eight subtests for K – 12 with an age-based reliability of 0.81-0.92 for each of the subtests. The tests selected were to measure the impact of the program on reading and listening. Spelling and pronunciation were measured with two other standardized tests, Morrison-McCall Spelling Test and the Wide Range Reading Test (WRRT). Highest Level of Achievement Tests (HLAT) were also used where applicable. Caution should be exercised when reading the results as "grade equivalents", as the quantified grade equivalent is at best a relative indicator of change, but not an actual measure of grade level of achievement. The units however, provided a standardized and reliable means of quantifying growth experienced by students. For some of the charts the grade five and six scores are not given due to the small sample

size of sixteen grade five students and three grade six students, the sample size makes it impossible to extrapolate.

All students in the classrooms involved were included in the treatment and testing whether in regular program or opportunity, autistic, physically handicapped, learning disabled, adaptation, basic literacy, multiple handicapped, hearing impaired and ESL.

Following initial teacher training and implementation, teachers were engaged in selfmonitoring with regard to the degree of implementation undertaken in particular classrooms. Several meetings were arranged to give teachers the opportunity to get together and discuss problems, successes and various aspects of the program. Program mentors visited the majority of the classrooms to answer questions arising from the implementation.

The interaction with the pilot teachers along with questionnaires enabled the research staff to quantify the degree of implementation in the participating classrooms. This proved a valuable tool in measuring the impact of the program given various levels of implementation.

Key Findings:

Based on the analysis of the pre and post testing and the completed teacher surveys, the following key findings were recorded:

Reading:

Testing demonstrated significant increases in reading levels in grades one to four, beyond what would normally be expected, especially in classes where there was a more complete implementation of the program. The grade four sample has a very high special needs population (43.9 per cent) and even when including classes where there was a lower level of implementation reading levels increased 1.5 grade equivalents. (Appendix II: Reading and Writing Results 1999).

The HLAT results for the Riggs student sample, including all special needs and all levels of implementation, are compared to results for the district (Appendix II). The data shows the Riggs samples significantly above the district average for reading and writing in grades one and two, and above in reading in grade three. It is interesting to note the grade four outcome considering that 43.9 per cent were special needs, many of whom made substantial gains during the program.

The reading trend indicated that almost all the grades achieved at least one grade level increase, with most achieving an increase of more than 1.5 G.E. (Appendix III: WIAT Reading G.E. Change versus Grade). Of particular interest are the strong gains made by the grade six students, all of whom were special needs who entered the program with a K.5 reading level.

Listening:

The gains in listening comprehension were significant largely in those classes where there was a higher degree of implementation. The techniques of the program are designed to develop concentration, memory and attention span, thus contributing to listening ability. The findings indicate that the gains expected of a child in this program are in proportion to the

degree of application of the program technique. (Appendix IV: WIAT Listening G.E. Change versus Grade)

Spelling:

The impact on spelling was measured by means of the Morrison-McCall Spelling Test, and was administered for students in grades two through six. The findings again made clear that strong implementation of the program produced stronger results, at or above 1.5 grade equivalents. This was the case even when high numbers of special needs students were present. Even when the data is not controlled for levels of implementation or numbers of special needs, the mean gain in spelling was 1.4 G.E.'s. (Appendix V: Morrison-McCall Spelling G.E. Change versus Grade)

Pronunciation:

Student pronunciation and their ability to interpret, understand and use the sounds of the language improved most significantly in grade one. While significant gains were noted throughout the sample, the results point to the need for an early exposure to the method as the critical gains will be made in the early part of division one. Degree of implementation also proved to be a factor. (Appendix VI: WRRT Reading G.E. Change versus Grade)

Effect of Differing Levels of Implementation:

The impact of the **Writing Road to Reading** program on the student sample, as mentioned, grew in significance proportionally with the intensity of implementation. This was determined largely through teacher feedback on surveys and interviews between teachers and mentors. There were a number of reasons for the variance, ranging from teacher trust in the program, administrative support, class composition, mentor availability and time available. A number of teachers indicated how important positive support of the administration was to the program.

Appendix VII (WRRT Reading – G.E. Change versus Implementation) provides valuable data in demonstrating the impact of thorough implementation of the method. One can note in particular that at higher levels of implementation even the lower classes are achieving gains of greater than 1.5 grade equivalents.

It is observed that a more complete implementation allows the intended instructional method to be fully employed, along with frequent assessments. The importance of the mentorship in keeping to the intended pattern of implementation is also noted as a factor, just as it has been noted in other programs such as Balanced Literacy.

Effect on Low Socio-Economic:

One of the most significant findings of the study was the impact on students in high needs locations (Appendix VIII: Effect of Riggs in varying Socio-economic Settings). High needs is defined in terms of schools who received **Enhanced Opportunity Grant of High Socio-Economic Needs Funding**.

The reading results quantify the dramatic impact of **The Writing Road to Reading** in high needs populations. Given the relatively low cost of the program and its comparative ease of implementation, the pilot shows the Riggs method to be one of the approaches that may be considered in promoting literacy in high needs situations.

Parent Information:

It became clear that a feature of the implementation which greatly enhances its possibility for success is an information evening for parents, to thoroughly explain the method, its rationale, purpose and suggestions as to how parents can partner in the process. At sites where parent information evenings were held teachers generally reported greater success with the program.

Time:

The most common concern expressed by teachers was the time demands of the program. To offer the program as designed it is necessary to provide some timetabling flexibility particularly in the first half of the year and especially at the grade one and two level.

Summary:

Overall the year long pilot of the Writing Road to Reading has served to identify it as one of a number of legitimate programs which schools may chose to enhance literacy skills, and by extension, improve achievement across the curriculum. It is, from a methodological perspective, different from many of the programs currently in use, but has shown clearly that it is compatible with the outcomes of Alberta curriculum, meeting or preparing students to meet those outcomes. The pilot has shown Writing Road to Reading as a particularly powerful tool in meeting the needs of students with special needs, and in particular, the requirements of students in high socio-economic need situations. The program is very cost effective, with a one time training and resource cost, supplemented by some mentoring in the implementation phase. The data indicates the program enhances the students' chances of being able to achieve early mastery of reading and writing skills, and improve overall achievement in Language Arts The program's effectiveness is enhanced when teachers at a single site coordinate their efforts in delivering the program, and when the teachers are supported by administration. To maximize the effect of the program some timetabling adjustments may be required to provide sufficient time for instruction, particularly in grade one and two.

SW:dh

APPENDIX I:	Riggs-Spalding Method – The Writing Road to Reading
APPENDIX II:	Summary of the WIAT Testing and HLAT Reading and Writing Results
APPENDIX III:	WIAT Reading G.E. Change versus Grade
APPENDIX IV:	WIAT Listening G.E. Change versus Grade
APPENDIX V:	Morrison-McCall Spelling G.E. Change versus Grade
APPENDIX VI:	WRRT Reading G.E. Change versus Grade
APPENDIX VII:	WRRT Reading – G.E. Change versus Implementation
APPENDIX VIII:	Effect of Riggs in varying Socio-economic Settings

APPENDIX IX: Participating Schools and Sample Comments from Participating Pilot Teachers

APPENDIX I

Riggs-Spalding Method

THE WRITING ROAD TO READING

The origin of this method of teaching language to children began in 1937 with Dr. Samuel Orton, a neurological pathologist, who studied the functions of the human brain with respect to the learning of language skills. Dr. Orton warned of the dangers of the "look-see" method for those 30% of children who were not visual learners. In 1957, Romalda Spalding used Orton's phonograms, in conjunction with spelling research done by Columbia professor William McCall, to produce **The Writing Road to Reading**. The methods outlined in this publication are today know as the Riggs-Spalding method.

There is a large body of empirical research to support the effectiveness of the program, as well as thirty years of successful application in which students have consistently performed above norms, despite their socio-economic background.

The method is fundamentally sequential language arts instruction which fully integrates the following language arts strands: listening, speaking, penmanship, phonetics, spelling, syllabication, composition, reading, comprehension, vocabulary development, syntax and critical thinking.

The method of instruction is multi-sensory using sight, sound, speaking and writing, so that each student's learning style can be addressed. Emphasis is on mental control to develop attention span, enabling the student to focus on the task. Students are helped to believe themselves capable of learning whatever is presented, with self-esteem being build only through accomplishment, always competing against their own last, best effort. Praise is given when warranted. The program can be easily adapted to accommodate differential learning rates. Intensive vocabulary development is stressed with daily reading, which is initially taught through writing and spelling. Correctness and high quality of product is expected in all facets of student work.

For further information see the Riggs-Spalding Web site:

http://www.riggsinst.org