Reading and Writing Gains for Maori Students in Mainstream Schools: Effective Partnerships in the Rotorua Home and School Literacy Project.

The Rotorua Energy Charitable Trust with support from the Ministry of Education funded a home and school literacy project in nine Rotorua primary schools. The project funded each school to train a home-school liaison worker (either a school staff member or a community person) to assist schools in developing a working partnership with the students' parents or whanau (family) members. This paper reports on data across the nine schools from a group of 70 maori students in English medium education. Approximately half of the participating students in each school (school group) were randomly assigned to receive support from the project's reading and writing procedures implemented at school. The remainder (home and school group) received additional support from the home and school partnership procedures implemented by their school's liaison worker and the research team. Pre- to post-program reading and writing gains for students in the home and school group were generally greater than those for students in the school group. However, a number of students in several schools achieved gains in the school program that were as good as or better than those achieved by those in the home and school program. Further, most schools were able to apply, and improve on, reading and writing gains from the home and school program when working subsequently with their remaining students. (Contains 25 references and 6 tables of data.) (Author/RS)
Reading and writing gains for Māori students in mainstream schools: Effective partnerships in the Rotorua Home and School Literacy Project

Ted Glynn
School of Education
University of Waikato

Mere Berryman
Specialist Education Service
Poutama Pounamu Education Research Centre

Vin Glynn
School of Education
University of Waikato

Paper presented at the 18th World Congress on Reading, Auckland, July 12, 2000
Re-write October 2000
ABSTRACT

The Rotorua Energy Charitable Trust with support from the Ministry of Education funded a home and school literacy project in nine Rotorua primary schools. The project funded each school to train a home-school liaison worker (either a school staff member or a community person) to assist schools develop a working partnership with the students’ parents or whānau members. This paper reports on data across the nine schools from a group of 70 Māori students in English medium education. Approximately half of the participating students in each school (school group) were randomly assigned to receive support from the project’s reading and writing procedures implemented at school. The remainder (home and school group) received additional support from the home and school partnership procedures implemented by their school’s liaison worker and the research team.

Pre- to post- programme reading and writing gains for students in the home and school group were generally greater than those for students in the school group. However, a number of students in several schools achieved gains in the school programme that were as good as or better than those achieved by those in the home and school programme. Further, most schools were able to apply, and improve on, reading and writing gains from the home and school programme when working subsequently with their remaining students.

Home and school partnership and collaboration

Over more than 20 years specific research studies have underlined the significance of relationships between family involvement in children’s learning to read and write and children’s progress at school (McNaughton, Glynn, Robinson & Quinn, 1981; McNaughton, Glynn & Robinson, 1987; Glynn & McNaughton 1985; Glynn, 1995; Hohepa, 1999: Hohepa & McNaughton, 1999). The report of the New Zealand Literacy Experts Group to the Secretary of Education (Literacy Experts Group, 1999) notes that
family literacy practices impact on children’s achievement at school in two ways. The first is through specific activities such as reading books to children in ways that extend children’s understanding and book language. The second is through family members participating in school related tasks, either through being present in classrooms, or through supporting children’s reading at home. The present paper is concerned with this second process, in which families collaborate with the school to support their children’s reading and writing at home.

McNaughton & Glynn (1998) argue that in the context of home and school partnership, collaboration ideally entails shared expertise between educationalists and family caregivers. That expertise requires shared understandings about goals and processes of teaching and learning. It also requires shared actions arising from those shared understandings. Consistent with the report of the Literacy Experts Group, McNaughton and Glynn believe that this sharing of understandings and actions should not be unidirectional but, rather, reciprocal. In this way parents and teachers will be better able to learn from and complement each other. Such a working partnership does not belittle or undermine the professional standing or expertise of teachers, (Glynn, 1987; Glynn, Fairweather & Donald, 1992). On the contrary, the modification of teachers' expertise required by shared understanding with students’ caregivers enhances the professional standing and expertise of teachers.

Collaboration implies interdependence between parents and teachers. For example, specific guidance for families on how to carry out reading activities at home can contribute to children’s progress at school. However, the effectiveness of this guidance depends on the degree to which families feel instrumental in influencing school processes and goals (Delgado-Gaitan, 1990). This is evident when well written narrative texts in students’ home language and dealing with topics of concern and interest to the home culture are developed for families to read to their children. Families can then contribute not only to their children’s reading at home, but also to their reading at school. However, effectiveness of the pedagogies which families practise at home also depends on literacy goals and actions shared between home and school (Gallimore & Goldenberg, 1993).
The form of home and school collaboration embodied in this project involved incorporating school-like activities into family activities. This can occur where families begin to use forms of literacy that share properties with school forms of literacy. One example of this form of collaboration is parents’ implementing the Pause Prompt Praise reading tutoring procedures at home (Glynn, McNaughton, Robinson & Quinn, 1979; McNaughton, Glynn, Robinson & Quinn, 1981). Another example is parents’ use of previewing and reviewing procedures in reading and discussing stories with their own children to support their reading at school. Further examples in the context of writing include introducing “brainstorming” and responsive written feedback procedures at home to support children’s early writing at school (Glynn, Jerram & Tuck, 1986; Hopman & Glynn, 1988).

_Culture counts in literacy programmes for Māori students_

The need to understand and promote effective forms of home and school collaboration is heightened in the present New Zealand context of increasing ethnic, linguistic, cultural and socioeconomic diversity (Wilkinson, 1998). Particular challenges arise when parents and teachers come from different ethnic and cultural groups. In this cross-cultural context, better models of family, community and school working relationships are needed. This is especially so if conventional (mainstream) schools in New Zealand are to enhance the reading and writing achievement of Māori students and to provide active support for recent Māori education initiatives.

In New Zealand the Treaty of Waitangi provides a clear model for educational professionals to address the power imbalance between Māori and Tauiwi people in terms of both curriculum and pedagogy (Glynn, 1998; Bishop & Glynn, 1999). Māori children are entitled to see their own language and culture well represented both in the delivery of the National curriculum and in the learning contexts and learning styles that schools provide. Success at school for Māori children should not have to come at the expense of
their own language and culture (Glynn, 1998). Indeed, it can be argued that success for Māori students has resulted from those Māori educational initiatives such as kōhanga reo and kura kaupapa Māori which promote teaching and learning from within a total Māori worldview, rather than from a Western European world view (Smith, 1992). For Māori students, just as for migrant and refugee students, and just as for Tauiwi students, “culture counts” (Bishop & Glynn, 1999).

The Literacy Experts Report (1999) comments that a key to effective teaching is for teachers to have clear strategies for gaining knowledge about children’s literacy and language skills, particularly when children bring widely differing literacy experiences to school. The instructional challenge for teachers is one of recognising, accepting and building on the diverse skills brought by children from different cultural backgrounds. In addition to this, it is important that learning and teaching strategies devised and implemented by teachers should not undermine the uniqueness and integrity of students’ home language and culture. For Māori students and whānau, this is clearly an issue to be addressed in terms of the Treaty of Waitangi. Article 2(a) of the Treaty cedes to Māori the undisturbed right to define, protect and promote all of their taonga. Included amongst these taonga are te reo Māori (Māori language) and mātauranga Māori (Māori knowledge). Concerns about the rights of Māori to define and transmit knowledge locate the Treaty of Waitangi firmly within the contexts of curriculum and pedagogy. These concerns were seen as crucial in the design and implementation of the collaborative home and school strategies adopted in the Rotorua Home and School Literacy Project.

The Literacy Experts Report stresses the importance of schools addressing each of the speaking, reading and writing dimensions of literacy, as well as recognising their close interdependence. The report emphasises that understanding the interdependence of the reading, writing and speaking dimensions of literacy is especially important when students’ in New Zealand schools come from non-English speaking backgrounds (NESB). Such students may face the extremely challenging task of reading from English texts that take them beyond the limits of their current competence in speaking English. For NESB students this difficulty is usually addressed through additional teaching effort.
being applied to developing both oral and written English skills to support or scaffold their reading of English texts. However, New Zealand educators appear to be slow in recognising that quite similar challenges face the increasing numbers of Māori students who are required to deal with English texts where content and structure differ greatly from the English and Māori language that may be spoken at home. We appear to be even slower in addressing their difficulty in the same manner, through putting more teaching effort into developing students’ oral and written skills to support or scaffold their reading of English texts. Clearly, the collaborative school and home literacy strategies adopted in this project needed to address all three dimensions – reading, writing and oral language.

**METHOD**

The research team began by meeting with members of the Rotorua Energy Charitable Trust, iwi representatives, school principals, members from Boards of Trustees and other school and community representatives. A general discussion about reading at school and home led to the group identifying that parents in the community could be powerful allies in schools’ commitment to improve their students’ literacy. The research team spoke about possible home and school partnerships that might provide worthwhile solutions and the community groups present indicated a willingness to provide support. This information was presented at a meeting of the local School Principals Association where the chairperson encouraged principals to have their schools participate in the project. At a third meeting principals, community people and the research team collaborated in setting parameters for the project.

**Participants**

**Schools**

Nine low decile (1 – 3) primary schools including one kura kaupapa Māori and eight conventional schools volunteered to participate in the project. These included a full primary school, schools with bilingual units, as well as English and Māori immersion classrooms. The research team indicated that a balance of school types and classroom settings should be represented in each set of schools. Accordingly, principals placed their
own schools into one of the three sets so that each set contained three similar sized schools and included students in English immersion, bilingual and Māori immersion settings. This study reports data only for Māori students learning to read in English. Each school chose the classes from which the students would participate in the project.

**Home-school liaison workers**

Within each school one person volunteered to train and act as the home-school liaison worker responsible for collaborating with the research team in implementing the programme. The project funding provided the resources for schools to either release the school staff member or to employ the community person who was to be the home-school liaison worker. The amount of release time was 0.2 days per week during “school” phases and 1.0 day per week during “school and home” phases. Specific responsibilities of the home-school liaison workers included assisting the research team to:

- **identify and contact** family or whānau members of students who were to participate in the home and school condition
- **train parents and whānau members** to implement the reading and writing strategies
- **monitor parent and teacher implementation** of the reading and writing strategies
- **arrange places and times** for the pre and post assessments of students’ reading and writing, and liaise with classroom teachers

**Students**

Schools identified all participating students as experiencing difficulties with reading and writing. Students were aged between seven and eight years on entering the programme following permission from their parents or whānau members. Just prior to introducing the home and school procedures, in each of the nine schools, the research team randomly assigned students to home and school and school groups. Each set of schools targeted students whose ages were such that they would all be within the same range when they entered the home and school programme. When the project began, Set 1 students were 7 years 5 months to 8 years 10 months, Set 2 students were 6 years 11 months to 8 years 4 months and Set 3 students were 6 years 5 months to 7 years 10 months.
Parents and whānau members

In consultation with school staff the liaison worker identified and arranged an initial contact with parents or whānau members of students whose progress in reading and writing was of greatest concern. The research team, with the support of the liaison worker, then approached parents or whānau either at school or at home. The team explained the aims of the project, the nature of the training and support to be provided and the commitment required of volunteer participants. These parents and caregivers were then invited to join the project. Between five and ten volunteer parents and care givers, and their children, participated from each school. In addition, the liaison worker and research team invited any other teachers from each school who had a particular interest to take part in the project.

Research Design

The programme was introduced to the first set of three schools in terms 3 and 4 1998, to the second set in terms 1 and 2 1999, and to the third set in terms 3 and 4 1999. The design thus provided an opportunity for three successive evaluations of the programme. Data from Māori students learning to read in English were combined across schools within each set to provide a sufficient pool of students.

Within each set of schools data from students who participated directly in the home and school programme (the “home and school” group) were compared with data from students who participated indirectly in the programme (the “school” group). This indirect participation arose as the project progressed because teachers in most schools chose to adopt elements from the home and school reading and writing procedures or from the project assessment strategies into their classroom practice. Similarly, home and school liaison workers exchanged advice, support and information both within and between sets of schools during all phases of the project. Furthermore, the whānau relationships among Māori parents and caregivers resulted in explicit sharing of information and help between the two groups. Some members of the “home and school” group not only took responsibility for checking on the attendance and task completion of members in their
group, but also taught some of the procedures to parents and whānau in the “school” group. This resulted from some strong leadership from a Māori liaison worker who was a whaea with great mana within the local community. Hence data cannot be interpreted simply in terms of a standard comparison between an “experimental” and a “control” condition.

Parent and Whānau Training

General Procedure

The second author led the training in all reading and writing intervention procedures for parents and teachers in all schools. Emphasis was on assisting teachers and parents to work in partnership. The training focussed on building parents’ and teachers’ understanding of students’ growth in literacy as a process occurring simultaneously at home and at school. It was emphasised that students’ success at reading and writing required a careful exchange of information and coordination of activities between home and school.

Training extended across both “school and home” and “school” phases of the project. It focussed on helping parents, whānau and teachers to understand both the assessment and the tutoring procedures implemented throughout the project. Training sessions incorporated video presentations of reading and writing procedures, as well as hands-on workshop demonstrations and exercises. The second author and the liaison teacher provided specific feedback to parents and whānau members on their implementation of the reading and writing procedures. Parents and whānau members were invited to contact their liaison worker at any time for advice and assistance in implementing the procedures with their child. Parents and whānau members were encouraged to ask questions during the training, during implementation of the procedures and during feedback phase. They were supported to explore and share solutions to challenging child behaviour issues arising at home. To facilitate this process, the research team introduced an A-B-C (antecedents-behaviours-consequences) model for understanding behaviour (Wheldall & Glynn, 1989). They were encouraged to make their tutoring sessions short but frequent, to take the time to plan
ahead, to invite their children to participate rather than ordering them to do so. They were encouraged to model the positive behaviour interaction they wanted from their child during the tutoring process.

**Training in Reading Procedures**

*Pause Prompt Praise plus Preview & Review*

These reading tutoring procedures encouraged parent and whānau tutors to preview the story with their child before the story was read and then to tutor their child using the Pause Prompt Praise procedures. This involves first pausing when a reader makes an error (to allow opportunity for reader self-correction without tutor help). Where the error is not self-corrected, tutors offer different types of prompt to assist the reader with the meaning of the word. The first type of prompt is the read-on or read-again prompt, which assists readers to pay closer attention to the context of the sentence, where the error occurred. The second type of prompt provides the reader with information or clues about the meaning of the word. However, where the error indicates the reader has already understood the meaning of the word the tutor may use the third type of prompt using phonemic or visual information. Tutors also employ specific praise to reinforce readers’ use of independent strategies such as self corrections and corrections following tutor prompts. Extensive descriptive data reported by Wheldall, Wenban-Smith, Morgan, and Quance (1988) demonstrate that even trained practising teachers do not ‘naturally’ implement these strategies when hearing children read. These strategies need to be learned. Parents were encouraged to conclude their tutoring sessions by reviewing the story read with their child.

Parents or whānau members undertook reading tutoring or writing sessions in their own homes at times that had previously been negotiated between parent and child. Reading tutoring sessions took place at least three times per week with each session lasting between fifteen to twenty minutes. Following the training, measures of parents’ use of the reading tutoring procedures were taken in order to establish how closely the procedures were followed. The tutoring pair audio-taped home-based tutoring sessions during the first three weeks after training and returned their tape to the research team. The research team
provided specific responsive and corrective feedback to each of the tutors, on more than one occasion where needed or desired by tutors. This written and oral feedback was given to the tutor in a school or home setting the following week.

**Reading Texts**
The texts used in this project were selected because of availability and appropriateness to the students. They were placed within the appropriate reading level framework. The Colour Wheel system was used for English texts. Each parent was supplied with a box of books that had been selected at school by the home-school liaison worker. Books were chosen at the child's level of instruction, which had been identified through teacher assessment of current reading achievement.

During training, parents also learned how to identify when a book was at an appropriate level of instruction for tutoring. This involved the simple method of counting 50 words before tutoring and then identifying the number of miscues made by their tutee. Once the books had all been read or the reader was making less than two errors in the identified 50-word selection, books were returned to the school for exchange. Parents thus had some control over what books were selected and when they were exchanged. If they chose, they were able to select new books themselves from books at an appropriate level of difficulty.

**Training in Writing Procedures**

**Responsive Writing Plus Structured Brainstorming**
The research team trained parents and liaison workers in two different writing procedures. The first procedure, responsive written feedback (Glynn, Jerram & Tuck, 1986; Jerram, Glynn, & Tuck, 1988), encouraged parents to write regular brief and personalised responses to their child's writing. The strategy was to respond in writing to the messages conveyed within the piece of writing and not to focus upon structure, error correction or evaluative comments. Parents were encouraged to respond to what they were able to understand of the message in their child's story rather that simply responding to errors. Parents were also trained to monitor and collect ten-minute writing samples of unassisted writing from their child. Children generated these samples alternatively at home and at
Writing done in the home was to be responded to by the school and writing done at school was to be responded to at home.

The second procedure, a structured brainstorm encouraged parents to talk with their child about writing topics set at school and then to support their child in generating and organising words related to each topic. They were assisted to do this by using a "brainstorming sheet". Regular and focused parent and child "brainstorms" of interesting words were an important aspect of this procedure. Parents returned the completed brainstorm record sheets to school where the child could use them as the basis for writing their stories in the classroom.

Each of the training sessions allowed parents and whānau members to see the reading and writing procedures modeled by the research team and then to practise these through role-plays. Training also examined briefly how the procedures related to the objectives in the reading and writing (level one and two strands of the language curriculum documents in English, (Ministry of Education, 1994).

Assessment
Reading and writing data were gathered at pre- and post- programme for all three sets of schools. Follow up data were gathered from sets 1 and 2 only. Reading achievement was assessed from analysis of audio-tapes of three-minute oral reading samples. Writing achievement was assessed from analysis of ten-minute (write) plus five-minute (proof read) samples of students' writing.

Reading Assessment Procedures
The reading assessment procedures (followed the colour wheel leveling system. The following assessment procedures were used with each of the texts selected:
1. **Preview of text.** The researcher began the session with a brief discussion of the story, and relating it to the reader's experience.

2. **Three-minute oral reading sample.**
   This was a three-minute, audio-taped sample of students' oral reading from a text at their appropriate instructional level. The reading was accurately timed. It was explained to the child that when they heard the timer signal they could read to the end of the sentence before stopping. The audio-tapes were analysed using an oral reading data analysis sheet. The three-minute samples provided data on reading accuracy and reading rate (number of correct and incorrect words read per minute).

3. **Oral recall questions.** If the student did not succeed in answering any of the questions correctly the researcher chose another book at an easier level. If the child got at least one correct answer the child was then asked to read the book out loud for a period of three minutes.

4. **Oral Cloze (comprehension) task.** An identical level text was used for the cloze with the target words blanked out. The researcher read the story to the student who was asked to supply words that would fit in the gaps. Exact word appropriate word substitutions were accepted.

**Collecting the writing samples**
Writing assessments were modeled on the English Standard 2 Survey's use of unassisted writing samples (Hamilton Education Board Resource Teachers of Reading, 1989). The researchers provided six A3 size photographs and ten prompt words per photograph to help motivate students to write. Three of the pictures were of well-known Rotorua landmarks, two showed peer group interactions and one showed a positive interaction between a young girl and a father figure. Care was taken to ensure that the images shown in each photograph were representative of the lives of these students. The same photographs and prompt words were used at each of the four writing assessment points. However, these photographs served
only to suggest topics. Students were free to write on any topic they liked. The research team also suggested further topics when individual students asked for assistance.

The researchers supplied students with a sheet of lined refill and a pencil and instructed them to head the paper with their name and the date. Up to ten minutes were allowed for students to choose their topic and for a brief informal discussion. However, this did not involve any form of written planning. Next, students were instructed to begin their ten minutes of writing, using pencil. The use of erasers was discouraged. At the end of ten minutes pencils were collected and exchanged for pens. The team then asked students to try to improve their writing in any way they could, this time using the pen. A further five minutes was allowed for this proof reading task. During the writing and proof reading times students were free to use resources from around the room to assist them with their writing, but asking other students for words was discouraged. Where practical, researchers noted any resources students used during their writing. Finally researchers gathered in students’ stories for analysis.
Analysis of writing assessment data

Writing assessments utilised a definition of errors that had been arrived at collaboratively between the research, and kaumatua and whaea at the Specialist Education Service Poutama Pounamu Education Research Centre. The definition incorporated punctuation, spelling, unrecognisable words, unclear messages, incorrect language structures and tenses. Errors in students’ writing samples were marked with a highlighter. Data on writing rate, accuracy, and quality (holistic ratings of “audience impact” and “overall language quality”) together with additional information in the writing samples were analysed with the aid of a writing data scoring sheet. Raters who were unaware of students’ names provided the holistic ratings, their membership of the “home and school” or “school” groups, and the dates on which specific samples were taken.

RESULTS

As indicated earlier, treatment differences between groups 1 and 2 were blurred due to a ready exchange of information and support between groups, facilitated by the liaison workers. Both groups of students were able to benefit from schools’ adopting elements of the home and school reading and writing procedures into classroom practice between the post programme and maintenance phases.

Set 1 Schools: Reading

Table 1 presents mean reading outcome data on four different measures for the two groups of Māori students learning to read in English in Set One schools. These measures are book level, cloze (comprehension), correct rate and incorrect rate, (number of correct and incorrect words read per minute).

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>SET ONE SCHOOLS READING</td>
</tr>
<tr>
<td>GROUP 1 (n =12) (Home and School)</td>
</tr>
<tr>
<td>Time 1</td>
</tr>
</tbody>
</table>

Rotorua Home and School Literacy Project
At Time 1 (baseline) students in group 1 (home and school) read a passage at level 15, with a mean cloze (comprehension) score of 32%. In contrast, students in group 2 (school) read at Time 1 a passage at level 13, with a mean cloze score of 64%. Despite the random assignment of students to groups, the large difference in baseline cloze scores suggests that group 1 students may have had greater difficulty in understanding what they read than group 2 students.

At Time 2 (post programme) students in group 1 read a passage at level 17, maintaining their correct reading rate and slightly decreasing their incorrect rate from 8 to 6 incorrect words per minute. However, their cloze score remained low (26%). At Time 2 students in group 2 read a passage at level 22, while maintaining their correct reading rate and incorrect rate. In addition, they maintained their cloze score at 60%.

At Time 3 (a maintenance assessment after a further six months) the situation of groups 1 students had considerably improved, relative to group 2 students. During this time schools took over the responsibility for continuing the home and school programme procedures, and extending them to other students. Table 1 shows that at Time 3, group 1 students were able to read a passage at a similar level to group 2 students (book levels 22 and 21 respectively). The cloze scores of the two groups were now similar (62% and 61%). Despite both groups now reading passages much more difficult than they were at baseline,
there were similar increases in correct reading rate, from 35 to 43 words per minute (group 1) and from 37 to 45 (group 2), as well similar slight decreases in incorrect rate.

Writing

Table 2 presents mean writing outcome data on eight different measures for the two groups of Māori students learning to write in English. These measures are total words attempted and total words correct, basic words attempted and basic words correct, adventurous words attempted and adventurous words correct, audience impact, and language quality.

Table 2

<table>
<thead>
<tr>
<th>SET ONE SCHOOLS</th>
<th>GROUP 1 (n =12) (Home and School)</th>
<th>GROUP 2 ( n =12) (School)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL WORDS Attempted</td>
<td>Time 1</td>
<td>Time 2</td>
</tr>
<tr>
<td>Correct</td>
<td>34</td>
<td>45</td>
</tr>
<tr>
<td>Basic Words Attempted</td>
<td>24</td>
<td>31</td>
</tr>
<tr>
<td>Correct</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>Adventurous Words Attempted</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Correct</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Audience Impact 1-7 Rating</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Language Quality 1-7 Rating</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Note

<table>
<thead>
<tr>
<th>Time</th>
<th>1</th>
<th>baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time 2</td>
<td>post programme</td>
<td></td>
</tr>
<tr>
<td>Time 3</td>
<td>maintenance</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 shows that in their ten-minute writing sample at Time 1 (baseline), Māori students in group 1 and group 2 attempted a similar number of words, and wrote a similar high number of these words correctly. 34 and 37 words were attempted, and 25 and 24 words were correct, respectively. Students in both groups displayed similar numbers of basic words attempted (24 and 27) and correct (20 and 22) as well as similar numbers of adventurous words attempted (5 and 6) and correct (2 and 1).

At Time 2, (post programme) and again at Time 3 (maintenance) Māori students in both groups displayed very similar increases in their scores on all these measures. At Time 2, group 1 students attempted 45 words of which 33 were written correctly, while at Time 3 the respective figures were 50 and 34. At Time 2, group 2 students attempted 44 words of which 31 were written correctly, while at Time 3 the respective figures were 54 and 40.

Table 2 indicates also that for both groups at Time 2 and Time 3 there were similar increases in basic words attempted and correct and in adventurous words attempted and correct. Calculations based on data in Table 2 indicate that the percentage of basic words correct increase for both groups across the three assessment points. These percentages (not shown in Table 2) were 83, 81 and 84 for group 1 students, and 81, 76 and 86 for group 2 students. Clearly, increases in total writing rate, and increasing inclusion of adventurous words did not lower the writing accuracy of basic words for either group.

Table 2 shows that the independent rating of audience impact for both groups at Time 1 (baseline) was 2.0. At Time 2, (post programme) this rating had increased to 3.0 for both groups of students. By Time 3, (maintenance) the rating for both groups of students had returned to 2.0.

The independent rating of overall language quality in the writing samples for both groups at Time 1 (baseline) was 2.0. At Time 2, this rating had increased to 3.0 for students in
group 1, but remained at 2.0 for students in group 2. At Time 3, the rating for students in group 1 had returned to a level of 2.0 where group 2 students remained throughout.

Set 2 Schools: Reading

Table 3 presents mean reading outcome data on the four different measures for the two groups of Māori students learning to read in English, book level, cloze (comprehension), correct rate and incorrect rate.

Table 3 shows that at Time 1 (baseline) students in group 1 (home and school) read a passage at level 5, with a mean cloze (comprehension) score of 81%. At Time 1 students in group 2 (school) read a passage at level 4, with a mean cloze score of 70%. These two groups of students appeared to be more evenly matched than their counterparts in Set One schools.

<table>
<thead>
<tr>
<th></th>
<th>GROUP 1 (n =10)</th>
<th>GROUP 2 ( n =8)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Home and School)</td>
<td>(School)</td>
</tr>
<tr>
<td>BOOK LEVEL (Difficulty)</td>
<td>Time 1</td>
<td>Time 2</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>CLOZE (Comprehension)</td>
<td>81</td>
<td>71</td>
</tr>
<tr>
<td>CORRECT RATE (words per minute)</td>
<td>32</td>
<td>42</td>
</tr>
<tr>
<td>INCORRECT RATE (words per minute)</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Note: Time 1 baseline, Time 2 post programme, Time 3 maintenance.
At Time 2 (post programme) students in group 1 read a passage at level 8, while maintaining a cloze score of 71%. At Time 2, students in group 2 read a passage at level 6, but increased their cloze score to 81%. Table 3 shows that while both groups increased their correct reading rate, group 2 students also increased their incorrect reading rate, (from 5 to 8 words per minute).

At Time 3 (maintenance) assessment, students in both groups showed a remarkable gain of eight levels in passages read successfully. Group 1 students were now reading at level 16, and group 2 students at level 14. Both groups maintained their cloze scores (69% and 66%) on this much more difficult text. Both groups also displayed highly similar correct and incorrect reading rates. During this time schools took over the responsibility for continuing the home and school programme procedures, and extending them to other students.

Writing
Table 4 presents reading outcome data on eight different measures for Tauiwi students learning to write in English, total words attempted and total words correct, basic words attempted and basic words correct, adventurous words attempted and adventurous words correct, audience impact, and language quality.

<table>
<thead>
<tr>
<th>Table 4</th>
</tr>
</thead>
</table>
| **SET ONE SCHOOLS**
| **English Medium: Tauiwi Students**
| **WRITING**
| | **GROUP 1 (n =9)** | **GROUP 2 (n =4)** |
| | (Home and School) | (School) |
| **TOTAL WORDS Attempted** | **Time 1** | **Time 2** | **Time 3** | **Time 1** | **Time 2** | **Time 3** |
| | 20 | 32 | 36 | 20 | 40 | 51 |
| **Correct** | 13 | 23 | 24 | 13 | 14 | 38 |

Rotorua Home and School Literacy Project
Table 4 shows that in their ten-minute writing sample at Time 1 (baseline) Tauiwi students in group 1 and group 2 attempted the same number of words in total (20) and also wrote the same number of words correctly (13). Students in both groups displayed similar numbers of basic words attempted (13 and 12) and correct (11 and 10) as well as similar numbers of adventurous words attempted (4 and 6) and correct (1 and 1).

At Time 2, (post programme) group 1 students attempted 32 words of which 23 were written correctly, while at Time 3 the respective figures were 36 and 24. At Time 2, group 2 students attempted 40 words of which 14 were written correctly, while at Time 3 the respective figures were 51 and 38. Table 4 shows that a similar pattern is evident in the continued increases in the number of basic and adventurous words attempted and written correctly. Clearly, the number of words attempted and correct continued to increase after schools took up the responsibility for maintaining the programme.
Calculations based on data in Table 4 indicate that the percentages of basic words correct increase for both groups across the three assessment points. These percentages (not shown in Table 4), were 85, 79 and 83 for group 1 students, and 83, 89 and 84 for group 2 students. Again, increases in total writing rate, and increasing inclusion of adventurous words did not greatly lower the writing accuracy of basic words for either group.

Table 4 shows that the independent rating of audience impact for both groups at Time 1 (baseline) was 2.0. At Time 2, (post programme) this rating had increased to 3.0 for group 1 students while the rating for group 2 students remained at 2.0. By Time 3, (maintenance) the rating for group 1 students had returned to 2.0, while the rating for group 2 students had increased to 3.0.

The independent rating of overall language quality in the writing samples at Time 1 (baseline) was 1.0 for group 1 and 2.0 for group 2. At Time 2, this rating had increased to 2.0 for students in group 1, but remained at 2.0 for students in group 2. At Time 3, the rating for students in group 1 had returned to 2.0 while the rating for students in group 2 remained on 2.0 throughout.

Taken together, these independent holistic ratings of audience impact and language quality indicate gains in favour of group 1 (home and school between Time 1 and Time 2, and in favour of group 2 (for audience impact) between Time 2 and Time 3. This pattern is consistent with expectations of schools taking up responsibility for programme implementation after direct research team input was discontinued.

**Set 3 Schools: Reading**

Because the programme was introduced into Set Three schools towards the end of the contract period, there was no opportunity to gather maintenance data. Tables 5 and 6 present data from Time 1 (baseline) and Time 2 (post programme) only.
Table 5 presents mean reading outcome data on the four different measures for the two groups of Māori students learning to read in English. These were book level, cloze (comprehension), correct rate and incorrect rate.

Table 5

<table>
<thead>
<tr>
<th></th>
<th>SET THREE SCHOOLS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>READING</td>
<td>GROUP 1 (n =15)</td>
<td>GROUP 2 (n = 11)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Home and School)</td>
<td>(School)</td>
</tr>
<tr>
<td>BOOK LEVEL</td>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
</tr>
<tr>
<td>(difficulty)</td>
<td></td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>CLOZE (comprehension)</td>
<td></td>
<td>53</td>
<td>65</td>
</tr>
<tr>
<td>CORRECT RATE (words per minute)</td>
<td>40</td>
<td>43</td>
<td>44</td>
</tr>
<tr>
<td>INCORRECT RATE (words per minute)</td>
<td>6</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Note

Time 1    baseline
Time 2    post programme

No maintenance data gathered from Set Three Schools

Table 5 suggests that at Time 1 (baseline), group 2 Māori students (school) were performing at a slightly higher level than students in Group 1 (home and school). Group 1 students read passages at level 17, with a cloze score of 53%. Group 2 students read passages at level 18 with a cloze score of 65%. The correct and incorrect reading rates were similar for the two groups.

At Time 2, (post programme), group 1 students were reading passages at level 21, with a cloze scores increased to 65%, while group 2 students were reading passages at level 20, but with a cloze score diminished to 52%. These data are consistent with group 1 students
benefiting from the one to one Pause Prompt Praise tutoring. Pause Prompt Praise emphasises tutors providing prompts to assist students’ understanding of text read. In addition the tutors provided previewing and reviewing of text. There was little change in the correct and incorrect reading rates of the two groups.

Writing

Table 6 presents mean writing outcome data on the eight different measures for the two groups of Māori students learning to write in English, total words attempted and total words correct, basic words attempted and basic words correct, adventurous words attempted and adventurous words correct, audience impact, and language quality.

Table 6

<table>
<thead>
<tr>
<th>SET TWO SCHOOLS</th>
<th>English Medium: Māori Students</th>
<th>WRITING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GROUP 1 (n =10)</td>
<td>GROUP 2 (n =8)</td>
</tr>
<tr>
<td></td>
<td>(Home and School)</td>
<td>(School)</td>
</tr>
<tr>
<td>TOTAL WORDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attempted</td>
<td>35 38 56</td>
<td>21 39 51</td>
</tr>
<tr>
<td>Correct</td>
<td>24 23 43</td>
<td>14 27 42</td>
</tr>
<tr>
<td>BASIC WORDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attempted</td>
<td>28 28 39</td>
<td>17 27 36</td>
</tr>
<tr>
<td>Correct</td>
<td>22 21 36</td>
<td>13 23 33</td>
</tr>
<tr>
<td>ADVENTUROUS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WORDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attempted</td>
<td>4 5 10</td>
<td>3 6 8</td>
</tr>
<tr>
<td>Correct</td>
<td>1 1 3</td>
<td>1 2 4</td>
</tr>
<tr>
<td>AUDIENCE IMPACT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-7 Rating</td>
<td>2 3 2</td>
<td>2 2 2</td>
</tr>
</tbody>
</table>
Table 6 shows that in their ten-minute writing sample at Time 1 (baseline) Māori students in group 1 attempted a higher number of words (35) to group 2 students (21) but the percentage of words correct was similar for both groups (69% and 67%).

At Time 2, (post programme) group 1 students had slightly increased their total words attempted to 38 of which 23 (61%) were written correctly. At Time 2, group 2 students increased their total words attempted to 39 words of which 27 (69%) were written correctly. Increases between Time 1 and Time 2 on measures of basic and adventurous words attempted and correct show little advantage to either group.

Table 6 shows that both groups of students continued to make writing gains between Time 2 and Time 3, particularly in the number of words written correctly. Group 1 students increased their total words correctly written from 23 to 43, while the corresponding increase for group 2 students was from 27 to 42.

There was a further gain in basic words and adventurous words attempted between Time 2 and Time 3 for group 1 students. Basic words increased from 28 to 39 and adventurous words increased from 5 to 10. Group 2 students displayed a similar increase in basic words between Time 2 and Time 3 (from 27 to 36), but a lesser increase in adventurous words (from 6 to 8).

Table 6 shows that the independent rating of audience impact for both groups at Time 1 (baseline) was 2.0. At Time 2, (post programme) this rating had increased to 3.0 for group 1 students while the rating for group 2 students remained at 2.0. By Time 3,
(maintenance) the rating for group 1 students had returned to 2.0, while the rating for group 2 students remained on 2.0.

The independent rating of overall language quality in the writing samples at Time 1 (baseline) was 2.0 for both groups. At Time 2, this rating had increased to 3.0 for students in group 1, but remained at 2.0 for students in group 2. At Time 3, the rating for students in group 1 returned to 2.0 while the rating for students in group 2 remained at 2.0.

The pattern in the quantitative writing data at Time 1 is consistent between group 1 and group 2 in that the major increases in total words attempted, basic words attempted, and adventurous words attempted all occurred between Time 2 and Time 3. These data suggests that there was no advantage for students in the Home and School group over students in the school group.

However the pattern of the qualitative holistic ratings of audience impact and language quality indicate gains in favour of group 1 (home and school) between Time 1 and Time 2. These patterns are consistent with expectations of greater gains for the home and school group between Time 1 and Time 2.

**DISCUSSION**

Data presented in this study demonstrate substantial positive reading and writing gains for seven to eight year old students within each of the three sets of schools who participated in the project. All of these students came from schools with the low decile rankings (1 - 3) and all were selected by their schools as those in greatest need of assistance with reading and writing.

Between the Time 1 assessments (baseline) and Time 3 assessments (maintenance) the research team held responsibility for introducing the programme and for training liaison workers and parents. In general, the reading and writing gains made during these times were greater for group 1 (home and school) students than for group 2 (school) students.
This is consistent with the expectation of greater benefits for group 1 students at this time due to the home and school programme.

Between Time 2 assessments (post programme) and Time 3 assessments (maintenance), Set 1 and 2 schools took over responsibility for maintaining the programme and for introducing it to other students, including those in group 2. In general, the gap between the reading and writing performance of group 1 and 2 students at Time 2 had been narrowed or closed by Time 3. This pattern held across both sets of schools, despite considerably lower reading and writing levels of Set Two students at Time 1 (baseline). This is consistent with the expectation of continuing benefits to group 1 students but greater benefits for group 2 students at this time. Between Time 2 and Time 3, Set 1 and 2 schools were maintaining and extending the home and school programme to group 2 students and incorporating some of the writing components into their classroom practice.

Major readings gains were seen in the markedly increased level of text passages which children could read successfully at each assessment point. These gains were particularly impressive as the assessment procedures pressed students into reading texts beyond their current instructional reading level, and with minimal tutorial support from the assessors. However, the assessment process was not stressful or threatening for students, who came to enjoy their times working with the assessors, and frequently asked assessors when it would be their turn to do some more reading and writing.

Cloze measures (comprehension) in general indicated that students either maintained or increased their comprehension across Time 1, Time 2 and Time 3 assessment points, even though they were reading text material of greatly increasing difficulty and beyond their current instructional level. Furthermore, as noted above, they were reading this material largely unsupported.

Measures of correct and incorrect reading rate, expressed as number of correct and incorrect words read per minute yielded worthwhile additional information. The correct
rate measure generally established that as students progressed through text passages of increasing difficulty, their reading rate increased. They were not reduced to slow or hesitant word by word reading when they encountered more difficult material. However, the incorrect read measure enabled us to check whether merely reading faster meant making more errors. More often than not group 1 (home and school students) lowered their incorrect rates between Time 1 and Time 2, and group 2 (school) student lowered their incorrect rates between Time 2 and Time 3. This occurred, despite the increases in text difficulty.

Data from students' writing samples established considerable increases in the amount written across Time 1, Time 2 and Time 3 assessment points. Data also show that these increases in rate did not occur at the expense of accuracy. The general pattern was for both groups to increase their proportion of both basic and adventurous words written correctly. The pattern of change was generally consistent with the expectation of greater gains for group 1 students (home and school) between Time 1 and Time 2 (pre-programme to post-programme), and greater gains for groups 2 (school) students between Time 2 and Time 3 (post-programme to follow up).

However, performance differences between the two groups from Time 2 to Time 3 were often less distinct on the writing measures than they were on the reading measures. We believe that this resulted from schools incorporating the writing procedures into their classroom practice between Time 2 and Time 3, so that the students in both groups benefited.

In general the qualitative holistic ratings for audience impact and overall language quality of the writing samples show increases for group 1 (home and school) students between Time 1 and Time 2, and again between Time 2 and Time 3. They also show increases for group 2 (school) students between Time 2 and Time 3. The general pattern of changes in these holistic qualitative ratings of writing samples is similar to that of the quantitative (rate and accuracy) measures. However, the size of these increases is limited to two points
on the seven-point scale, typically showing movement from 2.0 to 3.0, and sometimes to 4.0. Without the rater knowing which students had produced which samples, and without knowing where the samples came in the sequence, these ratings nevertheless detected positive shifts that corresponded with the group 1 (home and school) and the group 2 (school) interventions.

Overall, the assessment procedures and measures in this project provided a range of data that was sensitive enough to demonstrate differences between the performance of students in the home and school and school groups and at the different time points. The use of multiple measures of reading (rate, accuracy, book level and cloze) and multiple measures of writing (rate, accuracy, audience impact and overall language quality) allowed us to ensure that reading and writing gains reported were not simply uni-dimensional, but covered different and important components.

Students enjoyed participating in these assessment sessions, and formed warm and positive relationships with the assessment team. They enjoyed taking responsibility for timing the reading and writing procedures, and finding people who were genuinely interested in their progress at school, even though these people were not actually teaching them during the assessment process. The research team was able to collect and collate complete sets of reading and writing data on 70 students on either two or three occasions. This speaks highly of the degree of cooperation and support received from staff in every school. Schools went out of their way to ensure that the assessment team had suitable space to work in and that students were available to complete the assessments on the days and times allocated. They also greatly assisted the team in following up students not present at particular assessment days as well as students who moved from one of the project schools to another.

The outcome data in this report argue clearly for the effectiveness of the reading and writing procedures as implemented by parents and whānau members in this project. These parents were highly motivated to work hard to help their own students who were
experiencing great difficulty in reading and writing at school. As was the case with the Mangere Home and School Project in the late 1970s (McNaughton, Glynn, Robinson & Quinn, 1981), parents and whānau in the Rotorua Home and School Literacy Project lacked nothing in dedication and motivation to help their own children succeed at school. What they did lack, however, were specific strategies that connected with the way their children were being taught at school. These were the strategies that were included in the home and school training procedures.

Implementing these strategies required parents to invest approximately one hour per week in reading activities (three sessions of approximately 20 minutes) and a further hour per week in writing activities, over two school terms. Even though many parents were unable to meet this target every week because of the multiple life stressors they were experiencing, they nevertheless implemented sufficient of the programme to benefit their children’s performance at school.

Parents were ably and conscientiously supported in their learning and teaching by the professional and caring assistance from the home-school liaison workers. These workers spent many hours in making home contacts, home visits, and spending time with parents and whānau in small groups at school or in the community. They provided the necessary link between the work of the research team and parents and whānau members on the one hand, and between the work of parents and whānau and the schools on the other. Experience within this project shows that liaison workers need not always be members of a school’s teaching staff. There were advantages arising from some liaison workers being established and respected members of the community in their own right. Home contacts and home visits were certainly easier to arrange and conduct when the liaison worker lived in the same neighbourhood or belonged to the same hapu, marae, or community groups as the parents of students in the project.

Overall, the Rotorua Home and School Project has demonstrated the effectiveness of providing resources for direct input into training parents of low-achieving students.
Parents were able to learn and implement a range of reading and writing strategies, to sustain these over two school terms, (and in many cases longer than this), so that their children made measurable gains in both reading and writing. Parents and whānau were able to achieve this despite extremely adverse economic conditions and despite having minimal power to effect improvements in their own circumstances of in their children's learning at school. The data also demonstrate that the three sets of schools in this project were able to utilise and take on board many elements of the programme and to apply these to other students after the research team withdrew its direct input. This speaks very highly of the quality of the work done by the home and school liaison workers.

It was particularly pleasing to find that in all three sets of schools, the programme benefited Māori students learning in English medium education. These schools clearly improved the reading and writing of their lowest achieving students. The overall strategy of having a specifically trained liaison worker who is an acknowledged member of the community, and who work “hands on” with parents, either at home or at school, has proved to be a viable means of developing effective learning partnerships between schools and communities.

A key element in establishing the effective partnerships in the three sets of schools was the calibre and commitment of the home and school liaison workers. In the case of those liaison workers training and supporting Māori parents and whānau, Māori cultural values took centre stage. For example, the process of whakawahanaungatanga (establishing familial connections) between liaison worker and child and parents proved to be a vital element of successful programme implementation. This showed up the gaining and maintaining of commitment by families to participate, as well as to support and care for each other (manaaki). Further, concepts of collective identity and collective ownership of the programme were particularly highly valued amongst Māori parents and whānau. This was particularly evident in monitoring of programme implementation and volunteering of support and assistance and transferring materials, between families of students in the home and school groups.
The type of community school partnership established in the three sets of schools in this study appeared to provide a better balance of power between parents or whānau members and the school, and to allow those parents and whānau members more agency in improving learning outcomes for their own students. It is this type of partnership, a genuine consultative, working relationship between parents and teachers that is likely to shift parents and teachers from blaming each other for students’ failure at school to taking collective responsibility for seeing that students succeed.

Ehara taku toa i te toa takitahi
Engari taku toa i te toa takitini
My strength lies not in what I can achieve on my own
My strength lies in what I can achieve through working with others
REFERENCES


Reproduction Release

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Reading and Writing Gains for Maori Students in Mainstream Schools: Effective Partnerships in the Rototara Home and School Intervene Project.

Author(s): Ted Glynn, Mere Bekyamen, Vin Glynn.

Corporate Source: School of Education, University of Waikato

Publication Date: July 2000

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the Resources in Education (RIE) system, are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the Educational Resources Information Center (ERIC) Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign in the indicated space.

[ ] Non-.Copyrighted Document
[ ] Copyrighted Document - EDRS Reproduction
[ ] Copyrighted Document - EDRS Reproduction with Copyright Notice

Page: 1
The sample sticker shown below will be affixed to all Level 1 documents.

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2A</th>
<th>Level 2B</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Sample Sticker" /></td>
<td><img src="image2" alt="Sample Sticker" /></td>
<td><img src="image3" alt="Sample Sticker" /></td>
</tr>
</tbody>
</table>

PERMISSION TO REPRODUCE AND DISSEminate THIS MATERIAL IN MICROFICHE AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY HAS BEEN GRANTED BY TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

PERMISSION TO REPRODUCE AND DISSEminate THIS MATERIAL HAS BEEN GRANTED BY TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

PERMISSION TO REPRODUCE AND DISSEminate MICROFICHE ONLY

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g. electronic) and paper copy.

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only.

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche, or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: [Signature]
Printed Name/Position/Title: Ted Glynn, Professor of Teacher Education
Organization/Address: School of Education, University of Waikato, Private Bag 3105, Hamilton, New Zealand
Telephone: 64-7-838 4518
Fax: 64-7-838 4553
E-mail Address: glynn@waikato.ac.nz
Date: November 21, 2000

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):
If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)
IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

<table>
<thead>
<tr>
<th>Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td></td>
</tr>
</tbody>
</table>

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

**ERIC/REC Clearinghouse**
2805 E 10th St Suite 140
Bloomington, IN 47408-2698
Telephone: 812-855-5847
Toll Free: 800-759-4723
FAX: 812-856-5512
e-mail: ericcs@indiana.edu
WWW: http://eric.indiana.edu

EFF-088 (Rev. 9/97)