Over the past two decades, researchers and language specialists have addressed the problem of a lack of resources in developing nations for teaching English as a Second Language by using the Book Flood approach, which "floods" classroom with high-interest illustrated story books. Components of such programs include language experience, shared reading, story reading aloud, independent reading, paired reading, and guided silent reading and writing. The Book Flood strategy draws on many of the components of a child-centered approach to literacy teaching, developed over many years by New Zealand teachers. A Book Flood program was established in eight rural schools in Fiji in the early 1980s. Pupils experienced an "unusually rapid" rate of English language growth. Lack of funds prevented continuation of the project. In 1985, the Singapore Ministry of Education embarked on a similar Book Flood project called REAP (Reading and English Acquisition Program). Results were similarly positive, and became part of the regular primary education curriculum by 1990. The most recent large-scale Book Flood project that has been systematically evaluated is located in Sri Lanka. The pilot project has confirmed, in only 5 months, what the earlier studies took much longer to demonstrate: that an abundant supply of high-interest illustrated story books can have a strong impact on children's language growth, provided that teachers ensure that the children interact with books daily and productively. Over the past 16 years, READ Education Trust, an independent organization based in Johannesburg, South Africa, has been working to improve reading levels in Black schools throughout South Africa using methods similar to those described above. The program has been widely rated by teachers and is highly successful in making pupils more fluent readers and confident users of English. (Contains 11 references and 7 figures of data.) (RS)
Lifting Literacy Levels with Story Books: Evidence from the South Pacific, Singapore, Sri Lanka and South Africa

Warwick Elley
Brian Cutting
Francis Mangubhai
Cynthia Hugo

In thousands of Third World schools around the world, pupils are required to learn in a language different from that of their homes. In other words, they are expected to learn to read and write in a second or third language. For such children, the usual problems of lack of resources and lack of competent teachers are compounded by a lack of exposure to the target language. How can they learn to decode and understand the vocabulary and syntax of a language that they are exposed to for only two or three hours per week? Many surveys of schools literacy show that they rarely do (e.g., Elley 1992, Haddad et al. 1990).

Over the past two decades, a number of researchers and language specialists have been addressing this problem, with some success, in the primary schools of the South Pacific, South-East Asia, Sri Lanka and South Africa. Briefly, the approach used has been to "flood" the classroom with high-interest illustrated story books, in the target language, and to train the teachers in a simple method of ensuring that the pupils interact with the books frequently and productively. This paper will outline the rationale for the approach used in these projects, the research findings on its effectiveness. In each of the studies cited, the pupils have been learning English as their second language, but there is good reason to assume that the principles adopted would be equally applicable in other languages.
The Book Flood strategy, which is used in each of the projects described in this paper, draws on many of the components of a distinctive child-centred approach to literacy teaching, developed over many years by New Zealand teachers. Some refer to it as a "whole language" approach; others as a literature-based curriculum, using real, interesting books, rather than graded readers.

Sylvia Ashton-Warner (1963) was one outstanding teacher who started this movement. She pioneered the language experience approach to learning to read and write. She tried to "reach inside" her children's minds, and encouraged them to write their own messages, based on their own emotions and experiences. She then gave them a powerful incentive to read their written statements to others, and to learn the language of their own statements. They remained in charge throughout the program. Her work had international influence, and has been adapted in most junior classrooms throughout New Zealand and in several Third World countries.

A later development was the "Shared Book Experience" or what is now referred to as "Shared Reading". This is usually attributed to Don Holdaway (1979), an innovative Auckland teacher and researcher, who recognised the important language benefits of listening to a good story. In brief, Shared Reading is an extension of the bedtime story - in the classroom. The teacher selects a suitable book (or poem), generally a "Big Book" with text and illustrations enlarged, so that all pupils can see it clearly. Teacher and class discuss the cover, the title and some of the illustrations, and wonder about what is to come. The teacher then reads it to the class, pausing briefly on occasion, to clarify or discuss further. The story is re-read several times over the next few days, with selected follow-up activities, such as acting the story, drawing a favourite part, re-writing it with different characters, discussion about the characters and focused study of words, letters and punctuation.

The children join in the re-readings, where they can, so that they feel they are really sharing the book, without being tested and found wanting. Under these enjoyable circumstances, they gradually learn the language of the book, and so build up a resource to enable them to learn by themselves the natural word sequences, the vocabulary, the spelling, and the sound-symbol correspondences they need for further reading. They are getting maximum exposure to good quality language and processing it actively.

Local research (Elley 1985) shows that New Zealand pupils who have shared reading more often, make rapid gains, and develop more positive feelings about books.

A third feature of a typical New Zealand program is that of reading stories to children. Like Shared Reading, it is a time for enjoyment, a time to broaden pupils' horizons, stimulate their imaginations and expand their vocabularies. New Zealand primary school teachers normally do this every day. There may be some discussion, but there are not the pupil follow-up activities of Shared Reading.

Again there is New Zealand research support for the benefits of story reading aloud (Elley 1989), and this has been reinforced by similar studies in Israel (Feitelson 1986), Fiji (Ricketts 1982) and the USA (Morrow 1991), amongst others. Like Shared Reading, it gives pupils valuable practice at listening to the sounds and rhythms of language, and creates positive feelings about books. It greatly increases "comprehensible input" in the language.

A fourth feature of a balanced New Zealand program is independent or silent reading. For many teachers, this is the key to learning to read. Many avid readers can, and do, teach themselves to read by reading. The opportunity is often denied to children when programs emphasise the bits and pieces of reading, rather than whole contexts, with simple cues from pictures, syntax, repetitive phrases, rhyming and the meaning. In many reading programs elsewhere, the control of learning is taken almost completely out of children's (and teachers') hands. Children get too little time to try things out for themselves, to solve their reading problems in real contexts, and to make mistakes and correct them. Again, there is much research to show the benefits of silent reading, and it readily finds a place in Book Flood projects.

Other components of a balanced reading program include paired reading, where children read to each other and help each other in pairs, and guided silent reading, where teachers take a small group through a story or chapter, a page at a
time, alternating silent reading with oral questions, predictions and discussion.

Finally, there is a key role for children's own writing in a typical New Zealand program. Initially, teachers can write for children. Then they write with children, and ultimately children will write by themselves. With good models, and regular practice, for real writing purposes - to communicate with a sick child, or give thanks for a school visitor, or send a message to a parent - pupils soon see the links between their reading and their writing. Children's writing is an integral part of language experience and Shared Reading activities and deserves a special emphasis in book-based programs.

All of these components - language experience, shared reading, story reading aloud, independent reading, paired reading, guided silent reading and writing, can contribute fruitfully to a Book Flood project in Third World countries. All are calculated to increase exposure to good language, and ensure that children process it. However, the typical teacher in these countries is often struggling with the language of school instruction, and has had little experience in handling sophisticated methods. Therefore, the majority of our studies have emphasised Shared Reading, with good quality books. Shared Reading has the advantage that it provides good language models, creates enjoyment, focuses on meaning, and provides ample opportunity for pupils' talking, listening, reading and writing. In this sense, it is a whole-language strategy, and it can usually be practised successfully by teachers of modest education, after only a two-day workshop. It has played a major role in each of the studies described below.

Not all books are suitable for Shared Reading. For beginning pupils, the most successful are those that have simple, patterned language, with natural dialogue and familiar vocabulary, with attractive illustrations and a good story line. As the readers gain in competence, the books should become harder and longer, but retain the stress on enjoyment. In some studies, the researchers have used as many as 250 different titles per class. In others, good results have been obtained with less than 100. The actual number is probably less important than their suitability and what is done with them. If pupils are not prepared to read and re-read them, the Book Flood strategy will lose much of its effectiveness.

Book-based programs have been widely used in New Zealand over three decades, with much success and enthusiasm. We are now witnessing the evidence of their success in Third World countries, where literacy levels are low, and pupils are expected to become literate in a language, which they rarely use at home, and where books are far from plentiful.

THE FIJI BOOK FLOOD (1980-1981) (Francis Mangubhai)

Pupils in Fiji schools in the South Pacific are first taught to read and write in their mother tongue, which is usually Fijian or Hindi. In Year 3, they have some of their instruction in English, and from Year 4 onwards they are expected to learn mostly in English. The majority of primary schools have very few reading books, and since English is spoken very little in the pupils' homes outside the main centres, their exposure to English is very limited outside the classroom.

At the time of this study, the prevailing method of teaching children English in Fiji, and in most of the islands of the South Pacific, was an audio-lingual method, known as the Tate Oral English Program. Briefly, this program required pupils to learn the structures of English orally first, and then consolidate them in reading books which were carefully controlled with respect to their vocabulary and structures. Although the program was popular with many teachers, because of its neat standardised lessons, there was growing evidence, from surveys of achievement, and parental opinion, that standards of English were very inadequate.

After conducting a number of pilot studies relating to these concerns, Elley and Mangubhai (1983) set up a Book Flood project in eight rural schools, in order to investigate the effects of an alternative approach to that of the Tate Program. More specifically, the hypothesis to be tested was that when Year 4 and Year 5 pupils in eight rural schools were exposed to an abundant supply of high-interest, illustrated reading books, and encouraged to read them every day, they would improve their English language skills faster than a comparable group of pupils in four control group schools, who continued with the Tate Program. The rationale behind this hypothesis was that pupils will readily acquire new language from a major increase in the amount of comprehensible input in the target language. This effect was to be achieved by the repeated reading of suitable books which were expected to be enjoyable for the pupils. Half the pupils were to be taught through the Shared Reading method, which entailed repeated chorus reading of the books, under teacher guidance, followed by activities which had the children actively engaging in the language of the books - acting, talking, reading silently and reading aloud. The other half of the pupils were to have a less active silent reading
program. The teachers displayed and promoted the books in the classroom, and read stories aloud to the pupils, but most of their contact with the books was to be through daily silent reading - the sustained silent reading approach. Both reading programs occupied about 30 minutes per day, in place of the structured drills of the Tate Program.

The books used in the eight schools were purchased by the researchers, mainly from book publishers in New Zealand and Australia. The majority were simple high-interest stories, with supportive illustrations. Many were favourite nursery rhymes and universally popular stories about animals, and children in many cultures. No local children's literature was available at the time of study (1980-1981). The books were distributed to the teachers in batches, throughout the project, and teachers displayed them in their classrooms.

To prepare the teachers for the project, those from schools adopting the Shared Reading approach were given a three-day workshop on the method. This was taught by a specialist adviser from New Zealand, with the assistance of the two researchers. The teachers using the Silent Reading method had no special workshop. However they were given written suggestions on how to promote the books, read aloud to the pupils and organise silent reading sessions. Control Group teachers were given a one-day workshop on the Tate Program, to refresh their knowledge and enthusiasm for it. The overall design of the project is given below.

### Design of Book Flood Project

<table>
<thead>
<tr>
<th>1980</th>
<th>February</th>
<th>March</th>
<th>Apr-Oct</th>
<th>November</th>
<th>November 1981</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Book</td>
<td>Pre-tests</td>
<td>3 day Workshop</td>
<td>250 books supplied to</td>
<td>Post-tests</td>
<td>Follow-up tests</td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td></td>
<td>Year 4 &amp; 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silent Reading</td>
<td>Pre-tests</td>
<td>No Workshop</td>
<td>250 books supplied to</td>
<td>Post-tests</td>
<td>Follow-up tests</td>
</tr>
<tr>
<td>Group</td>
<td></td>
<td></td>
<td>Year 4 &amp; 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Group</td>
<td>Pre-tests</td>
<td>1 day Workshop</td>
<td>Usual program</td>
<td>Post-tests</td>
<td>Follow-up tests</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No extra books</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The project began in February 1980, when over 500 pupils in the twelve schools were given a short reading pre-test. The results of this test were used to help select schools and subsequently to estimate gain scores for the pupils at the end of the first year. Workshops for teachers were held in March, and the first books were distributed then. The researchers visited the schools about once every two months, to monitor the teachers and to distribute more books. It is important to note that no extra time was spent on English by the Book Flood Groups.

### Evaluation of the Impact of the Books

In November, eight months after the project started, the pupils in the eight Book Flood schools were thoroughly assessed with tests of reading, writing, listening comprehension, speaking and use of English structures, and the results were compared with those of pupils in the Control Group schools on the same tests. Twelve months later, in November 1981, all groups were again administered a comprehensive set of language tests, to establish whether the changes
observed in the first year were persistent. Testing was carried out by a team of assessors, recruited mainly from the Ministry of Education and the University of the South Pacific, and trained by the researchers.

The test scores were analysed several ways, but all showed a clear, consistent pattern. The two Book Flood groups showed much larger improvements than the Control Groups, who were using the Tate Oral Program, with the accompanying readers. For instance, on the Year 4 reading comprehension test used in the pre-tests, the Shared Reading group and the Silent Reading group had both improved their reading levels by 15 months by November of the first year, after the project had been running for eight months. By contrast the Control Group pupils had improved, on average, by only six and a half months. At Year 5 level, the Shared Reading group improved by 15 months, the Silent Reading group by 9 months, while the control groups showed less than 3 months' growth. In listening comprehension and English structures, the trends were very similar. The results for oral language and writing again favoured the Book Flood groups, but the differences were not large enough to be significant.

In the second year, the Book Flood groups appeared to have increased their growth by even more, and the effects of their improved reading had clearly spread to writing, and to other subjects of the curriculum. Every language test used - including reading comprehension, cloze, listening comprehension, vocabulary knowledge, writing, English structures - showed highly significant differences. The effect sizes ranged between 0.76 and 1.18 for the seven language tests used. Further details can be found in Elley and Mangubhai (1983).

During 1981, the Fijian pupils in Year 6 took an external examination, known as the Fiji Intermediate Examination. Analysis of the results of this examination showed that the Shared Reading group scored well above the expected levels for rural schools (around 45-50%), with mean scores of 64% in English, 58% in General Studies (Social Studies and Science) and 55% in Mathematics. Interestingly, the effects appeared to have spread to the vernacular language as well, because the same group obtained a mean score of 58% in Fijian Language. The means for the Silent Reading group were slightly lower, all falling between 54 and 59%. By contrast the Control Group's mean scores fell between 41% and 46%, except in Fijian Language (54%). The Shared Reading group actually doubled its expected pass rate in English for small rural schools, and many more of their pupils were thus able to find places in preferred secondary schools.

Unexpectedly, there was little difference between the overall mean scores for the Shared Reading and the Silent Reading groups, on most tests. However, a class by class analysis revealed, amongst other things, that the pupils who gained most were those whose teachers followed the Shared Reading program as intended. A few teachers had extended absences or were transferred, and some did not display or use the books as diligently as others, and their results served to pull down the mean scores of the others. By contrast, the one Control Group teacher who read aloud to her class daily, on her own initiative, showed above average results for her class. All other Control Groups had below average scores.

Discussion

The hypothesis to be tested, that a greatly enriched reading program would improve the pupils' English language growth, was clearly supported by the evaluation. Pupils who were exposed to a large supply of high-interest illustrated story books, and given activities that ensured that they actively processed the text, daily, produced an unusually rapid rate of growth.

What was most striking was the superior achievement of the Book Flood groups on the tests of English structures. The Control Groups, ostensibly, devoted more time to the deliberate teaching of these structures. The Book Flood groups spent less time on such activities, but improved at a faster rate. Apparently, much of their learning of these structures was incidental, while processing extended prose.

Initially, the effects of the extra reading were greatest in the receptive modes - reading and listening. In the second year, however, these effects spread to writing and vocabulary, to science and social studies, and even to mathematics and the vernacular language. An analysis of the children's writing style was also revealing. When Year 6 pupils wrote about a village, using pictures as their stimuli, the Book Flood groups typically wrote in complete sentences, with varied
vocabulary, and few spelling mistakes. For example, two Book Flood pupils, who had the modal score, began their stories as follows:

1. "One day, Tomasi's mother was washing clothes beside the river, Tomasi's father was drinking yagona under a shady tree, Tomasi was cooking the food beside their house, and his brother was carrying buckets of water. . ."

2. "One day when Luke's mother was washing and the men were drinking yagona, Luke was boiling the water. . ."

By contrast, typical writing efforts in the control groups showed clumsy word sequencing, many fragment sentences, and much lack of agreement in verb forms. Spelling too was very weak. For example,

Is ther was the women in the tree...
One day morning there were a house any village
There boy Seru is make the tea

Similar problems were observed in the open-ended English structures test.

Overall, there was little doubt that the Book Flood experience gave a huge boost to the children's development. They enjoyed the books, they developed favourites, which they read often, and their school work generally improved. While the teachers in the project schools clearly favoured an extension of the project, the Ministry had no funds to provide such a rich supply of reading material to other schools. In this connection, it is worth noting that the average price of the books used was only about USD1.00 - in 1980 prices. It was the considered opinion of those who participated in the project that the specified number of 250 books was more than was required to achieve the desired effect. This was a question which further studies of the same kind might be able to shed light on.

THE SINGAPORE REAP PROGRAM (1985-1989) (Warwick Elley)

In 1985, the Singapore Ministry of Education embarked on a similar Book Flood project in 30 primary schools at Year 1 level. The program was designed by Singapore educators, with assistance from the present senior author, and had many features in common with the Fiji study. The project was called REAP (Reading and English Acquisition) and was described as "an integrated whole language approach", using Shared Reading, Modified Language
Experience approach, and a Book Flood. The Language Experience component was added to enable the young pupils to engage in writing from the outset. In this method, pupils have a vivid, unusual experience - in the classroom or on a class visit - and are then encouraged to talk about it, draw it, and then write a short statement about it (with help from an adult). This statement is usually something that they are proud enough to read to others and readily learn.

Teachers in the selected schools were trained in short workshops, in the Shared Reading and Language Experience Approach, and were regularly visited and helped by staff from the Ministry and the Institute of Education. The Book Floods consisted of some 60 books per class, plus an additional 150 books per school for independent silent reading later on. A number of "Big Books" with enlarged print were also purchased, while some teachers prepared their own. The senior author was invited to serve as external consultant to the Ministry, and visited Singapore often to help advise on training, monitoring and evaluation.

It should be said that many Singapore teachers were initially sceptical about a program that appeared to put so much emphasis on enjoyment, rather than hard work. There was concern that it would not help pupils pass their examinations. However, once the REAP program was under way, surveys of teacher opinion were consistently extremely positive. They liked the approach, and did believe that their pupils were learning English effectively this way. The pupils, too, liked the reading books and participated eagerly in the activities designed to maximise their processing of the print.

Evaluation of REAP

Pretests were conducted at the outset, using individual tests of basic reading and English skills, on a carefully selected sample of 256 pupils in the 30 project schools, and a comparable sample of 256 pupils from a similar set of 30 control group schools. These pupils were taught English by one of two traditional audio-lingual programs, which emphasised regular structured drills, extensive use of phonics and workbook exercises. At the end of the first year, the progress of these groups of pupils was contrasted on individual and group tests of reading and language. On group tests of reading and writing, the REAP pupils were significantly ahead on all subtests. On the individual tests they performed better on most of the tests.

The Minister of Education was impressed, and the project was forthwith extended to 60 schools in 1986, and to 132 schools in 1987. As more positive evaluations were obtained, it was eventually extended to all schools, over the first three grades, and became part of the regular curriculum by 1990.

REAP was evaluated at many points, and in many ways. Of the 65 language test comparisons made, over three years, comparing the REAP pupils with the Non-REAP groups, 53 showed significant differences favouring the REAP pupils, and most increased over time. National Examination results for the REAP pupils were also positive, and a follow-up analysis done in 1991, six years after the program began, showed continuing improvements.

It is also relevant to note that Singapore pupils performed very well in the recent IEA survey of reading literacy, conducted in 32 countries (Elley, 1992). Despite the fact that nearly 80% of the pupils had English as their second language, they achieved results in English reading that put them in the highest achieving group of 10 countries and well ahead of any other country which was tested in a second language. Most Singapore pupils are now literate in two languages. A book-based reading program has clearly been helpful for Singapore literacy levels.


The most recent large-scale Book Flood project that the authors have evaluated systematically has been located in Sri Lanka. Here, pupils first learn to read and write in their mother tongue, Sinhalese or Tamil, and English is taught as a second language, starting at Year 3. English is used extensively in universities, tourism and trade, but is not spoken in many homes, and remains a second language through primary and secondary school. Thus, English plays a lesser role in Sri Lanka than in Singapore or the South Pacific. It should be noted that it is taught in schools by specialist English teachers.
Following a survey of book provision in Sri Lanka schools in 1994, by International Book Development (IBD), UK, it was recommended that a major campaign be instituted to increase the supply of library books in the country's schools. Wendy Pye Ltd, a children's book publishing company in Auckland, New Zealand, agreed to donate 4000 books for a pilot project in 20 primary schools and to train their English teachers to use the Shared Reading method, and the associated kinds of activities that had been used in the other successful programs. Warwick Elley and Brian Cutting served as external consultants, and worked closely with IBD and with the National Institute of Education in Colombo. Two other New Zealand teachers assisted with teacher workshops and monitoring of the project. The main aim of the project was to investigate the impact of an abundant supply of high-interest illustrated books (from Wendy Pye's "Sunshine" series - including Sunshine, The Magic Box and Galaxy books) on the English language development of the pupils in the 20 pilot schools. The organisers also monitored the management and care of the books and the associated costs of provision and training.

In March 1995, National Institute of Education staff (NIE) pretested the English reading skills of Year 4 and Year 5 pupils in 40 schools, half urban and half rural. Twenty smaller schools with low achievement levels and no libraries were selected for the pilot project, and ten similar schools were identified as a control group. The English teachers in the project schools were given a two-day workshop, late in March, designed to train them in the Shared Reading method and associated activities (acting, rewriting, preparing big books, discussing, etc), and 25 books were distributed to each school. Subsequently, two more one-day workshops were conducted, in June and September, to extend the teachers' skills in story reading, questioning and pupil writing activities, and in book care and loan systems.

Each school was monitored once per month by NIE staff to check on the use of the books, to assist with instruction and to distribute more books.

Between March and September 1995, the project teachers received 100 books, to be used with their Year 4 and Year 5 pupils, but they were restricted to only 15-20 minutes of reading sessions each day. The official English curriculum still had to be covered for the end-of-year divisional examinations, on which pupils' promotion depended. Thus the number of books used in Shared Reading lessons was rather limited during the first few weeks. Most teachers used only two per week. Later, however, when a loans scheme was introduced, children had exposure to many more books. There were other problems, however. Absenteeism ran at about 20%, and the schools were closed for two months due to the Civil War in Sri Lanka. This closure meant that the pupils were exposed to the books for slightly less than five months, and the end-of-year evaluation had to be postponed from November to January - when most of the pupils had had three months without much contact with the books. In a country where English is not used in pupils' homes, this was expected to be a major disadvantage.

Meanwhile the Control Group pupils continued with their normal English program of 40 minutes per day, working systematically through a textbook which focused on vocabulary, grammar, and communication skills - with regular workbook exercises. For cooperating in the project, these schools were each donated a set of 25 books by Wendy Pye at the end of the evaluation.

Evaluation of the Sri Lanka Pilot Project

At the end of January 1996, all Year 4 and Year 5 pupils in the 20 project schools and the 10 control group schools were tested on a pre-trialed series of English tests, as follows.

Year 4

1. Reading Tests

Matching of pictures with words, phrases or sentences. Sentence completion exercises.
2. Listening Comprehension Tests

Matching pictures with sentences read aloud. Listening to unfamiliar stories, read twice, and responding to questions.

Year 5

1. Reading Tests

Similar to Year 4 tests. Silent reading of continuous prose, with comprehension questions.

2. Writing Tests

Writing sentences to describe a series of pictures showing the antics of a group of naughty pigs who had escaped from their pen. Model sentences were provided.

3. Attitude Scale

Forced choice questions about favourite activities, preferred school subjects, numbers of books read, etc.

In addition, each teacher and principal was interviewed to obtain information about book usage, access and management. Teachers had also completed an anonymous questionnaire on their attitudes to the project at the June workshop.

The tests were administered to the 1600 pupils in their classes by staff of the Institute of Education, who were trained to do so by the researchers. Half the schools were in Colombo and half were in Kegalle, a rural district some two hours' drive east of Colombo. Marking, recording, and analysis were carried out by the test administrators and researchers. Writing tests were marked twice independently, on criteria of coherence and content, with some credit for quantity and correct spelling. Where discrepancies of more than 1 mark out of 10 were detected, they were re-marked by a third person.

Figure 1

Reading - Year 4

Percentage Gain: Pre-test to Post-test
Figure 2

Reading - Year 5

Percentage Gain: Pre-test to Post-test
Reading Test Results

As the reading tests were almost identical to the pre-tests, it was possible to compare the mean gain scores of the pupils in the project schools with those of the non-project schools, for both grade levels. Figure 1 shows that the overall growth of Year 4 pupils in the project schools was approximately 11% in both Colombo (urban) and in Kegalle (rural) schools, but less than 4% in the control group schools. The pupils who had access to the books had progressed at three times the rate of the non-project pupils. The pattern for Year 5 was very similar. The project pupils had improved by 9-10%, the control groups by 3% (see Figure 2).

More revealing was a breakdown by individual schools. Figure 3 shows the Year 4 mean gains for each of the 20 project schools, alongside the overall control group mean. The teachers in Schools 2, 3, 5, 13 and 14 clearly produced much larger gains, while those in Schools 1, 4, and 10 were low enough to decrease the overall average for the project schools by a substantial amount. It is not difficult to explain these three lower means. The teacher who taught Year 4 in School 1 was unable to attend any of the workshops; the teacher for School 4 left during the school year, and her replacement did not attend workshops; the results for School 10 were seriously affected by the fact that the school was on the verge of closing, due to falling rolls. A simple interpretation of this figure is that the distribution of books, without teacher training in their optimum use, is unlikely to be beneficial.

The Year 5 graph tells a similar story (see Figure 4). In this case, however, the teacher of School 1 achieved excellent results, much superior to her Year 4 colleague - who had had access to the same books, but did not receive training. The Year 5 pupils of School 10 could not be conveniently reached for testing as they had moved on to other schools in January. The low test scores obtained by pupils in School 17 were attributable to an elderly teacher, on the verge of retirement, who admitted that she had exposed her pupils to only 30 of the 100 books.
Writing Test, Year 5

Figure 5 shows the overall mean scores for the writing test administered to the Year 5 pupils. Many of the pupils in both groups had difficulty writing coherent sentences at all, as the level of exposure to good text had been more restricted that the planners had hoped. Nevertheless, the mean scores for writing clearly favoured the project schools in Colombo, while those of Kegalle were still well ahead of those of the control group. Once again, a few of the project schools with staffing problems, lowered the overall averages.

One interesting feature was that no school performed well in writing which did not also perform well in reading. A follow-up analysis showed, further, that virtually no student achieved a score higher than 5 points (out of 20) in writing, who did not achieve highly in reading. Apparently, reading ability is a prerequisite for writing ability in a second language.

Figure 3

Reading Year 4: Percentage Gain: Pre-test to Post-test
Project Schools in Relation to Mean of Control Group Schools

Figure 4

Reading Year 5: Percentage Gain: Pre-test to Post-test
Project Schools in Relation to Mean of Control Group Schools
Figure 5

Year 5: Means for Writing
This relationship was clarified further when a closer study was made of the best writing samples of project pupils, with the best samples from the control schools. The sentences below (see box) show that Project students P1, P2, P3 and P4 were writing clear and coherent sentences, with words produced in the correct sequence. By contrast the control group students, C1, C2, C3, C4 and C5 were writing words that were relevant to the pictures, with appropriate choice of content words, but had real difficulties with word order and grammar, difficulties which are apparently not assisted as much by the present English curriculum as by a diet of regular reading.

Sample Sentences from the Best Writing Students

Description of Picture 2

Project Schools

Student P1: "The pigs are eating the man's bananas. The man is very angry..."  
Student P2: "The pigs ran into the shop, and took the bananas..."

Control Group Schools

Student C1: "This pigs has a bananas eating the pig..."  
Student C2: "The pigs eating bananas..."
Description of Picture 4

Project Schools:

Student P3: "The pigs are eating the things in the fair and the manager is very angry..."

Student P4: "The pigs are eating vegetables and fruits..."

Control Group Schools:

Student C3: "Is the market vegetables eat..."

Student C4: "Now we are going to a shoping to house in his man. Wahat are you doing now pig..."

Student C5: "In the pigs maket come a things eating..."

Listening Comprehension: Year 4

The listening test results (see Figure 6) revealed a similar pattern to those of the reading tests, although the contrast between project schools and control group schools was not as clear-cut. Fourteen of the project schools exceeded the mean of the control group, and the reasons for the lower achievement levels of the remainder had little to do with the quality of the program. Most had staffing problems, or failed to implement the program as planned.

Figure 6

Listening Comprehension - Year 4

Percentage Gain in Relation to Predicted Mean
Attitudes to Reading: Year 5

Assessing the attitudes of children with group measures is notoriously difficult. Nevertheless an attempt was made with a set of forced-choice questions to determine which activities the pupils enjoyed, relative to reading, and which school subjects they preferred. Analysis of these ratings, combined with responses to a question on the number of books read in the past week, generated a quantitative index of attitude to reading. Figure 7 shows that the project schools, in both Colombo and Kegalle, produced mean scores for attitudes clustering around 5 points (out of 10), while those of the control groups fell mostly between 3 and 4. While it is unwise to claim too much for these figures, they were consistent with the observations of the Institute staff, and the teachers, that the pupils developed a keen interest in the Wendy Pye books, and enjoyed reading them.

Survey of Teacher Opinion

In the June workshop, project teachers were asked to complete an anonymous questionnaire about their opinions of the program. The responses to this questionnaire proved overwhelmingly positive. All 30 teachers agreed that the training sessions were successful and most felt that their pupils were learning English faster as a result of the program. Over 90% of them felt that all Sri Lanka pupils should have a program like it. Unsolicited comments stressed the positive attitudes of the pupils to the books and to English in general.

Conclusion

The Sri Lanka Books in Schools Pilot Project has confirmed, in only five months, what the earlier studies in the South Pacific and Singapore took much longer to demonstrate: that an abundant supply of high-interest illustrated story books can have a strong impact on children's language growth, provided that teachers ensure that the children interact with the books daily and productively. The contrasting figures for teachers who implemented the program effectively in relation to those who did not show that books alone are not the answer. There must be a training program for teachers as well,
even if it is only a brief one of two or three days.

Literacy levels in Third World schools need a major boost. The Book Flood approach is one promising formula to bring about such a boost. The Sri Lanka program was not expensive. Books purchased in bulk reduced the cost to something in the order of USD400.00 per school, for 100 books, plus a short training course and occasional monitoring. The cost of ignoring the problem is surely much greater than this, in the long term.

Figure 7
Means for Attitudes to Reading

BOOK-BASED LITERACY PROGRAMS IN SOUTH AFRICAN SCHOOLS (Cynthia Hugo)

Over the past 16 years, READ Education Trust, an independent organisation, based in Johannesburg, has been working to improve reading levels in black schools throughout South Africa. READ is funded by donations from the private sector in South Africa and from foreign donors. Its basic aim is to improve the language competence and learning skills of disadvantaged pupils, using a book-based approach similar to those described above. English is taught as a second language in most schools throughout the Republic, although it is only one of eleven official languages. It becomes the language of learning for the majority of students in secondary and tertiary education.

READ has established a nationwide network of eleven regional centres, each with its own coordinator, staff, regional committee and classroom resources. The READ staff select schools, distribute books and wall-charts, train teachers, principals and librarians in the selected schools, and make regular monitoring visits to check on the implementation of programs in schools. They also promote the wide use of books in the community by conducting "motivational
Main Features of the READ Approach

The program that operates in the majority of READ schools, between Std 1 (seven-year-old children) and Std 6, could be briefly summarised as follows:

1. Schools apply to join the program, and once selected, agree to allow their staff to attend courses, to implement the program to the best of their ability, and to welcome READ staff to their schools for monitoring visits.

2. A set of 60 high-interest, good-quality books is placed in a box library in each classroom, and another 60 are made available in sets of six identical titles, for group reading sessions. Books are purchased from many countries, and are classified into fiction, non-fiction, and reference books.

3. Teachers and principals are trained in a series of short (1-3 day) courses to make maximum use of the books. The courses cover such topics as reading aloud, shared reading, shared writing, group reading, and silent reading.

4. Teaching procedures are learner-centred and activity-based. Pupils participate actively in story reading, acting the stories, discussing them, and carrying out related writing activities. Pupils become familiar with the language of the books, which is used to enhance vocabulary, syntax and understanding.

5. An outreach strategy has been adopted to extend the program from READ schools to neighbouring schools.

6. READ has also expanded its program into secondary schools, where it provides books to establish libraries, and courses to train librarians.

7. Recently, READ has contributed to Training College Courses at the pre-service level, so that more beginning teachers are able to implement READ style programs.

Evaluation

1. To evaluate the teachers' implementation of the program, READ coordinators visit the schools, observe lessons and rate them against a detailed check-list about teacher organisation, planning, questioning, pupil involvement, etc.

2. The program has been widely rated by teachers and principals in the project is highly successful in making their pupils more fluent readers and confident users of English. Attendance records and enrolment figures in READ schools have risen steadily, and pupils who have been through READ schools achieve above expectation at secondary school. Some recently conducted formal evaluations of pupil achievement have also been very positive.

3. External consultants have made many positive comments about the quality of the instruction and the materials used, and drawn favourable comparisons with successful programs in other countries.

Challenges Ahead

READ has achieved much with dedicated professionals and voluntary funding. But there are 30 million blacks in South Africa, and approximately half have been estimated to be functionally illiterate. In a new apartheid-free
democracy, education is seen as a major force for breaking into the cycle of disadvantage. One challenge is to attract more aid, and to extend a successful movement.

2. READ needs to persuade government to incorporate READ components into school curricula, and provide assistance to tackle the problems on a wider scale.

3. More extensive formal evaluations, such as those conducted in other book-based programs, need to be carried out to provide hard evidence of success for attracting further funding. Some preliminary investigations, conducted early in 1996, showed marked benefits for READ pupils in both reading and writing ability, and other more extensive studies are currently underway.

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Warwick B Elley, Emeritus Professor of Education,
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Singapore REAP Program (1985-1989)

1. In 1985, the Singapore Ministry of Education set up a book-based program to improve English levels in primary schools. It contained three elements: Shared Reading, Modified Language Experience and a Book Flood.
2. The REAP program was started in 30 schools (Year 1) and spread to all schools (Years 1 to 3) in five years.
3. Evaluations on language tests were consistently positive, in relation to non-REAP pupils. Of 65 comparisons made, 53 showed significant differences favouring the REAP pupils. Teachers too were very enthusiastic.
4. The REAP program has since been extended to Brunei and Malaysia.


1. In 1995, the Sri Lanka National Institute of Education set up a pilot project in 20 schools, with assistance from International Book Development (London) and with funding and books provided by Wendy Pye Ltd, New Zealand.
2. One hundred books were donated to English classes in Years 4 and 5, and teachers were trained in short workshops on Shared Reading and Story Reading. Schools were monitored each month for the five months of the project.
3. Teachers spent 15-20 minutes daily on reading sessions.
4. Feedback from teachers and principals was very positive.
5. Post-tests showed that project pupils improved in reading at three times the rate of control groups. Results for writing, listening and attitudes were similarly very positive.
6. Variations between schools confirmed the importance of training, and proper implementation.

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