

SCHOOL-BASED READING INNOVATION PROJECT

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IN 2006 AND 2007, a School-based Reading Innovation Project was carried out in a neighbourhood primary school with the aim of mapping out the reading instruction programme in the school, comparing it against international standards, and introducing innovations that would enhance it. The findings of the project revealed that reading instruction in the selected school lacked some fundamental components of a goodw reading programme. Implementation of innovation procedures over the 2 years showed that there was an improvement not only in teacher development but also in the students' reading and comprehension abilities. The research experience gained at this school can also be utilized in other Singapore schools seeking to enhance reading instruction.

BACKGROUND

One of the main aims of Singapore's *English Language Syllabus 2001* has been to prime students to become readers who will be able to "respond creatively and critically to literary texts, [and] relate them to personal experience, culture and society" (Curriculum Planning and Development Division [CPDD], 2001a, p. 5). The Ministry of Education's (MOE) *Guide to the English Language Syllabus 2001* also states that primary school reading programmes should provide pupils with enjoyable reading experiences (CPDD, 2001b).

The above objectives clearly suggest that the MOE's vision for reading instruction in Singapore is in alignment with international notions of good reading instruction (Devine, 1986). But to what extent has this been achieved in schools?

KEY IMPLICATIONS

- A shift of teacher practice in reading instruction is needed to encourage students to comprehend text at a deeper and more critical level.
- This shift in practice requires a negotiation of school culture and a scaffolding of teacher development.
- Teacher "buy in" is critical for the success of a school-based reading instruction programme.
- Changes should be customized to the needs of the school and weaved into its existing programme, rather than a total revamp.

Initial research projects carried out by the Centre for Research in Pedagogy and Practice (CRPP) seemed to suggest that there were major shortfalls. Observations of reading lessons in schools (Lin, 2004) have shown that they are mostly an exercise in information extraction; students are not encouraged to wander beyond the text and explore alternative answers. Students are also not taught comprehension strategies, encouraged to read critically, nor prompted to question what is purported in the texts. Many programmes have had limited success in fostering the love of reading among students, resulting in students having to be coerced to read (Wolf, 2005).

These findings signalled the need for an in-depth study evaluating the state of reading instruction in Singapore. A School-based Reading Innovation Project was therefore proposed.

The aims of the project were: (a) to give a detailed description of reading instruction as it is implemented in a school in Singapore, and (b) to evaluate it according to international standards. The project also aimed to implement innovation procedures that would enhance reading instruction, in negotiation with the school. Subsequently, the effectiveness of the innovations on teacher development and students' reading and comprehension abilities was evaluated.

RESEARCH DESIGN

The project school was selected based on two criteria: (1) its receptiveness to the objectives of the project, and (2) the socioeconomic diversity of its student population.

Participants

Eighteen teachers were recruited for the project: 9 teachers each from the Primary 1 (P1) and Primary 2 (P2) levels. These teachers had been working collectively as a team to design the SEED (Strategies for Effective and Engaged Development of Pupils in Primary Schools) curriculum.

A total of 270 lower primary students participated in the project. Out of this group, the reading progress of 80 P1 students was mapped over a period of 2 years.

Of these 80 students, 35 of them were reading below their age level (the *Lively* readers), 27 were reading at their age level (the *Merry* readers), and 18 were reading above their age level (the *Happy* readers).

Project Procedures

1. Collection of baseline data to map the nature of reading instruction in the project school.
2. Collection of baseline data on the reading and comprehension abilities of students.
3. Presentation of the findings to ensure that the data captured was an accurate representation of their reading instruction programme.
4. Discussion of the gaps in the reading instruction programme with the school.
5. Negotiation with teachers about areas for enhancement.
6. Joint planning of innovation procedures and implementation via workshops, lesson planning, lesson observations and conferencing.
7. Evaluation of the innovation procedures on both teacher and student development.

Instruments Used

To document existing classroom procedures and to subsequently evaluate the innovation procedures implemented in the school, the following instruments were used:

1. Ethnographic notes, video recordings and transcripts of reading lessons, to assist teachers in engaging in reflective practice and also to document the nature of reading lessons.
2. Coding instruments to code the nature of reading instruction before and after the implementation of the innovation procedures.
3. PM Benchmark Kit 2 (Nelley & Smith, 2002) scores to map the reading and comprehension abilities of the students at intervals of 6 months over a period of 2 years.

Data Collection and Analysis

Teachers

Baseline data was collected of the 9 P1 teachers as they carried out a unit of SEED lessons. They were evaluated on the basis of (1) a read-aloud period, (2) a shared book approach (SBA) period, and (3) the

reading period. Post-innovation data was collected after the innovation plans had been implemented.

To determine the teachers' development over the course of the project, the pre- and post-intervention data were evaluated by three independent coders who were trained to evaluate classroom videos according to the coding instruments set. The lessons were rated according to a 5-point scale: 0 (*Not applicable*), 1 (*Nil*), 2 (*Fair*), 3 (*Good*), and 4 (*Excellent*). The three coders rated the data independently. The coded data was then subjected to statistical analyses so that patterns of shifts in classroom practices could be discerned.

Students

The 80 P1 students had their reading and comprehension abilities mapped at 6-monthly intervals over the course of the 2 years, using the Benchmark Kit.

The tests measured the students' ability to decode, comprehend and retell the text. The difficulty levels of the tests were progressively increased. To determine the students' progression in reading and comprehension, the pre-test scores were compared to the post-test scores.

RESULTS

Teacher Development

Read Aloud

An examination of reading aloud in the pre-innovation period showed that most teachers scored ratings of 1 (*Nil*) to 2 (*Fair*) for most of the components of the read-aloud exercise. However, results for the post-innovation period showed a significant improvement, indicating that the innovation procedures significantly improved the ability of the teachers to conduct read-aloud lessons effectively.

Shared Book Approach

Similarly, the pre-innovation data for the SBA lesson showed that the teachers generally did not conduct their lesson according to the fundamental principles of the SBA. Almost all of their scores hovered around ratings of 1 (*Nil*) to 2 (*Fair*). However, once again,

the overall post-innovation scores for SBA showed a significant improvement.

With the implementation of the innovation procedures, the teachers became more knowledgeable about the essential principles of SBA, and this was evident in their practice.

Reading

For the instruction in reading and comprehension, the pre data revealed that the teachers had an average rating of 3 (*Good*) in phonics instruction but fared poorly in all other components. However, the post-innovation results showed a significant improvement in practice on the whole.

Students' Progress

Figure 1 shows that the average decoding scores from the Lively and Merry groups increased dramatically between Tests 1 and 2. The scores then plateaued out between Tests 2 and 4. The scores for the Happy group dropped slightly between Tests 1 and 2, but also plateaued out thereafter.

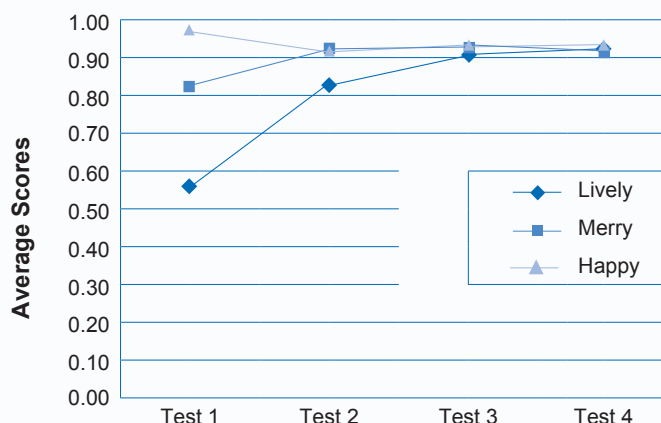


Figure 1. Average decoding scores over time.

The retelling scores showed a different pattern over the four tests, as can be seen in Figure 2. Average retelling scores increased for all three groups from Test 1 to Test 2, but dropped subsequently in Test 3. However, the scores rose again in Test 4.

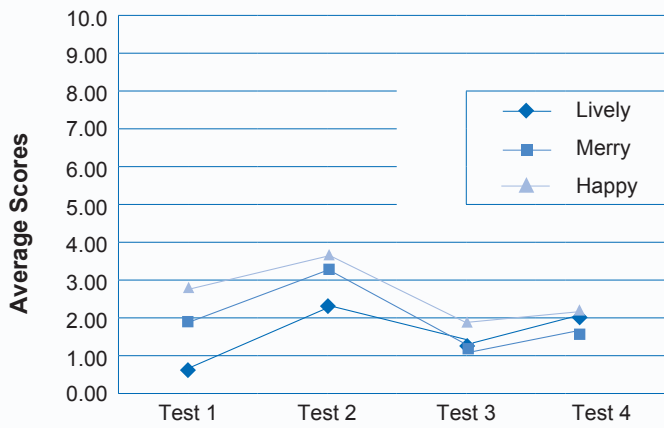


Figure 2. Average retelling scores over time.

As seen in Figure 3, the Merry group of students showed an improvement in comprehension scores as they progressed from Tests 1 to 4. Happy students maintained their results, while Lively students showed a drop in scores from Test 1 to Test 2 but an improvement from Tests 2 to 4.

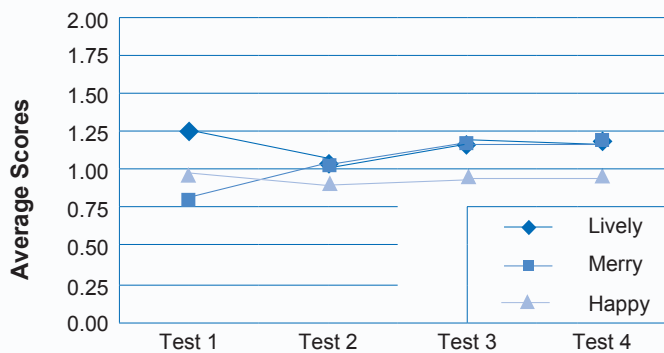


Figure 3. Average comprehension scores over time.

DISCUSSION

Teacher Development

The results show that the School-based Reading Innovation Project was generally successful in bringing about a significant shift in teacher practice in reading instruction. This shift, though not substantial, is significant as research indicates that it takes about 5 years for shifts in practice to take place. What then are some of the factors that contributed to the positive teacher development shown in this project?

One of the first factors is that there was “buy in” for the project. The school and its teachers were looking to improve reading instruction. As such, there was great commitment to the project. Added to this was that the project was customized to the needs of the school and the personal development needs of the teachers (Hargreaves, 1998).

A third factor was that the project did not seek to revamp the existing reading instruction programme in the school. Rather, it aimed to weave in changes while retaining the original configuration. This was well received by the teachers as the curricular changes were not overwhelming. And since the teachers were working as a team, the shift at the curricular level was manageable as the burden did not fall on only one teacher to develop resources for the entire year.

According to Taylor, Pearson, Peterson and Rodriguez (2005) and Cochran-Smith and Lytle (1999), in a successful teacher development programme, teachers need to be given content knowledge as well as pedagogical content knowledge. This was one of the key factors that contributed to the success of the project. In addition, a scaffolded approach to teacher development (Cazden, 2001) was taken.

Another key feature of the project was that conferencing sessions were conducted to surface teachers’ beliefs, social histories and biographies. Where there were conflicts with the changes, resolutions were found. This was important because understanding teacher beliefs and reconciling their beliefs with the materials being disseminated are essential for success in improving classroom materials (Almarza, 1996; Johnson, 1994; Kagan, 1992).

A shift in school practice requires negotiation of the school culture (Finnan & Levin, 2000; Groundwater-Smith & Dadds, 2004; Grundy & Robison, 2004; Hargreaves, 1995). This was certainly the case in this project. At various stages of the project, discussions had to be held with the school management so that the teachers’ development could be facilitated.

Students' Reading and Comprehension Abilities

When the decoding scores of the students are examined (see Figure 1), we see an initial increase from Test 1 to Test 2 and then a plateauing of the scores. This should not be interpreted as a deterioration in performance, as it is important to keep in mind that the texts were becoming more difficult.

Where retelling scores are concerned, there was a dip for Test 3 before the scores rose again in Test 4 (Figure 2). This dip in scores could be attributed to two possible factors: a lack of familiarity with the content of the text, and the increased difficulty level of the text. This is especially plausible given that the Benchmark Kit has not been normed in Singapore.

For comprehension, it may be argued that all three groups showed improvement on all the tests. Though the Lively group scores dipped between Tests 1 and 2, this was inevitable given the fact that the group comprised of students who were delayed readers.

And while the results might give the impression that the comprehension scores of Happy readers were relatively unaffected by the enhanced reading instruction programme, this is clearly not the case when the texts' difficulty levels are taken into consideration. The readers maintained their scores even though the difficulty level of the texts increased over time. On the whole, these scores are commendable given that the duration of the project was only 2 years and the first year was spent revising the curriculum.

CONCLUSION

On the whole, the School-based Reading Innovation Project was had a positive impact on teacher development, reading instruction, and students' reading and comprehension abilities.

Although the project was carried out in only one neighbourhood school, the results here and in other CRPP projects indicates that there is scope for the project to be replicated in other schools that have similar problems with reading instruction.

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