

## Curriculum Implementation in Early Primary Schooling in Singapore<sup>1</sup>

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**THIS ONE-YEAR PROJECT WAS** an investigation into the ongoing implementation of recent policy initiatives that influence pedagogy, curriculum innovation and instructional practices in Singapore. The investigation covered Primary 1 and 2 core subjects: English, Mother Tongue and Mathematics. It included the investigation of local conditions which impact the work of policy developers and implementers. The goal was to develop a more complete understanding of the specific, local challenges and processes for top-down policymaking. The findings show that in some ways Singapore is quite successful in terms of top-down policies. However, there seems to be less success with bottom-up innovation. School administrators and those teachers who are designated with responsibility for disseminating and implementing a specific policy are crucial actors in policy implementation and innovation processes.

### INTRODUCTION

In 1997, *Thinking Schools, Learning Nation* (TSLN) signalled a shift in education in Singapore. As part of the TSLN vision, the Ministry of Education (MOE) initiated and fostered greater autonomy at the school level, particularly in regard to curriculum development and implementation. Subsequently, *Teach Less, Learn More*, introduced in the Prime Minister's National Day Rally speech in 2004, emphasized the need "to improve the quality of interaction between teachers and learners" (MOE, 2005b, para. 3) to encourage students to learn more actively and independently.

This is in keeping with a drive toward innovation and enterprise for national development and education (e.g., see Ng, 2004;

### KEY IMPLICATIONS

- The key role of school administrators and teachers designated with responsibility to disseminate and implement policies ("school policy managers") might be missed if policymakers and researchers focus only on teachers and classrooms.
- School-based initiatives can be very effective in the local context. However when coupled with the first implication, it seems likely that there will be considerable variation from one school to another based on the leadership provided in the school.
- These two implications, taken together, suggest that "school policy managers" should always be included in professional training and research endeavours focused on policy initiatives.

Zulkifli, 2008). Specifically, schools are encouraged to find their own path to improve the quality of teaching and learning while working within the national curriculum.

There have been many reports internationally showing that hopeful reform agendas founder in their attempts to implement and sustain curriculum innovation (e.g., Cohen & Ball, 2000; Fullan, 2007). This may be due to the complex nature of implementation processes (Hargreaves, 1994; Marsh, 2007). Prior research has also shown that school communities are challenged to negotiate the tensions of existing practices and “newer” policy agendas (e.g., Alexander, 2001; Honig, 2006; Lefstein, 2008).

In Singapore, a variety of initiatives impacting lower primary have been introduced by MOE in recent years, including *Strategies for Engaged and Effective Development*, or SEED (2007); the *Strategies for English Language Learning and Reading* programme, or STELLAR (2008a); and a *More Responsive and Engaging Mother Tongue Language Curriculum* for Chinese (2006), Malay, and Tamil (2005a). In addition, there have been syllabus revisions for English Language (2010), Math and Mother Tongues (2007)<sup>2</sup> as well as other initiatives such as *Strategies for Active and Independent Learning*, or SAIL (2004) and the use of *Pedagogy, Experience of Learning, Tone of Environment, Assessment, and Learning Content*, or PETALS (2008b) intended to influence primary school education from Primary 1 to 6.

Most recently, the Primary Education Review and Implementation (PERI) Committee submitted a proposal aiming to increase the quality of education at the primary level by (1) balancing the acquisition of knowledge with skills and values, and (2) through the provision of support structures, that is, investing in a quality teaching force and enhancing the infrastructure in schools (MOE, 2009).

Within the context of so many proposals for educational change—emphasizing less reliance on formal, summative assessment with increased use of informal, formative assessment; more individualized instruction; greater learner engagement; more independence in learning; and more school-based curriculum innovation—to what extent do schools and teachers enact these initiatives? What are the processes which enhance or constrain implementation processes in the local context?

## RESEARCH DESIGN

The study incorporated a multi-method approach, including distinct qualitative and quantitative components. The qualitative component included case studies at two schools. Two research assistants “followed” a Primary 2 form teacher (one at each school) through 2 weeks of teaching the same group of students: 1 week in Term 3 and 1 week in Term 4. The case studies included interviews with teachers, school administrators and parents, as well as “drawing-and-telling” sessions with students (Wright, 2010) to elicit multiple perspectives. The quantitative component included 80 observations of Primary 1 and 2 lessons at 10 schools, using a structured coding scheme (Silver, Pak, & Kogut, 2011), with 23 follow-up interviews for a subset of those observations.

The case studies were particularly useful for better understanding of the multiple layers within schools (students, teachers, school administrators, parents); the coded lesson observations were especially useful for providing an overview of common practices across schools, grades and subjects.

## KEY FINDINGS

There was clear evidence that in Singapore, national policies and initiatives *do* influence classroom practice. This was evident in the high similarity of pedagogical practices across subjects, the relatively uniform infrastructure adaptation, and the universal concern for examinations.

However, there were also tensions as teachers found that existing structures (e.g., high-stakes examinations) sometimes countered newer initiatives (e.g., for student engagement through more group work or greater use of learning centres). As one teacher pointed out when discussing the pervasive influence of examinations despite pressures from other initiatives:

Because all will go back, in the end all will go back to sitting there, to take exams without complaining. Uh, so this is our challenge, also students’ challenge. Is it right? Because for me, for me, my exam and my lesson are exactly the same, is that right? So to sit here properly.

It was equally clear that national policy is *mediated* at the school level with designated

school administrators as policy actors/leaders or “school policy managers”. Teachers were aware of the initiatives, or at least some aspects of them, and were largely willing to try to co-operate with the initiatives. Again, there were some tensions as teachers found, for example, that more active learners might require different classroom management strategies.

So they, *the principal or the MOE* doesn't want us to sit in rows like this. Um. So we'll try our best to make them move around. So one advantage of moving about is that they will like this very much. Then its disadvantage is, very noisy, bad classroom management. This is what I have always been exploring. (Primary 1 teacher)

On the whole, there were strong centralizing forces but little evidence of *policy initiation* or *curriculum innovation* at the class level by individual teachers: reform efforts are school-based, not teacher-based.

However, teachers did take up opportunities to initiate changes related to classroom management, materials selection, and introduction of various suggested activities, and when they talked about these decisions, they sometimes referred to current policy initiatives (as above).

Student voice and beliefs were also considered, at least to some extent. It was evident from student comments that children see schooling holistically: study and play; in classrooms and out; individually, with friends and with teachers. Examples of suggestions made by children include:

- “When we go into the classroom, there are many adventures”
- A “spell room” with displays of different words in Chinese, Malay, Tamil and English, and an “invent room” for students to invent new things
- A white board so the teacher can explain things to the children and a telephone booth in case the teacher needs help
- A library “for them to study”

On the one hand, many children desired more time and space for play, running and exercise and a range of sports. On the other hand, children consistently commented on academic matters including wishing for more computers in classrooms and for physical settings that were both aesthetic and useful (e.g., an eco-garden for science study as well as a restful place during recess).

## IMPLICATIONS

### *For Policy*

National educational policies travel relatively well through the system in that they are largely accepted by schools and classroom teachers; sometimes being seen as less flexible than intended. The degree of flexibility is influenced by the school's interpretation (or the interpretation of the school staff members who are responsible for disseminating and implementing a specific policy). Policymakers might want to think about how to best work with school policy managers to encourage the desired reform.

### *For Practice*

Teacher efforts at innovation generally targeted small-scale adaptations which were intended to mesh with MOE policies. There was little evidence that teachers saw themselves as policy actors in their own right. Instead they tended to see themselves as an important part of a cohesive, national implementation strategy with opportunities for innovation mostly in lesson activities and resources. This may tend to support uniformity in education. However, it works against a current goal to have more individualized education, and, to some extent, it contradicts the current push for “Innovation and Enterprise” throughout all levels of the system (cf. Shanmugaratnam, 2003).

When professional development was coupled with new initiatives, it was seen by teachers to be quite helpful. This would seem to support school-based professional development and a community of practice approach to curriculum innovation (e.g., Coburn & Stein, 2006) which encourages teachers to take on more extensive innovations, targeting student learning needs.

## NOTES

1. The final report for this project is available online at <http://hdl.handle.net/10497/4453>
2. Complete subject syllabuses can be found at <http://www.moe.gov.sg/education/syllabuses>

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