

## Comprehending Reading Comprehension: An Intervention in P4 Reading

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### KEY IMPLICATIONS

1. Classroom interaction is at the heart of educational quality, and changes in classroom interaction rely on the development of people, not programmes.
2. This study shows that the way teachers interact with students can be changed, but these changes take time—two to three years at a minimum.
3. Collaborative efforts within schools can be very fruitful; however, without mentoring (through Professional Learning Communities or by external mentors) and a longer-term commitment, it seems unlikely that changes would be sustained over the long term.

### ABSTRACT

Prior classroom observations and teacher interviews revealed that teachers consistently use highly structured and teacher-centered strategies for teaching reading comprehension. These strategies do little to encourage critical thinking or keep students engaged. This 3-year collaborative project was undertaken to assist teachers in understanding and using open-ended discussion in reading comprehension

lessons. The intervention was found to be highly successful in terms of teacher uptake and mastery over the strategies introduced. In addition, findings suggest that key features of the intervention can be sustained, unlike short-term interventions which might have initial uptake but lack of maintenance or further development. It seems likely that the flexible, collaborative nature of the intervention was important for maintaining the project throughout the 3-year time period.

### INTRODUCTION

The purpose of this project was to follow-up on a prior project which investigated the use of Questioning-the-Author (QtA) (e.g., Beck & McKeown, 2002; Beck, McKeown, Sandora, Kucan, & Worthy, 1996) with negotiation for meaning (NfM) (e.g., Pica, 1994) in Singapore Primary 4 (P4) reading lessons (OER 29/08 RS)<sup>1</sup>. Prior classroom observations and teacher interviews revealed that classroom teachers in Singapore primary schools consistently use highly structured and teacher-centered strategies for teaching reading comprehension. These strategies might be effective for test

<sup>1</sup> The impact of negotiation for meaning on reading comprehension among Singapore primary students (OER 29/08 RS). See <http://www.nie.edu.sg/research-projects/impact-negotiation-meaning-on-reading-comprehension-among-singapore-primary-students>

preparation, but do little to keep students engaged or to encourage critical thinking (Silver, Png, Raslinda, Foong, Huynh, & Kogut, 2009). In contrast, QtA actively encourages critical thinking, along with reading comprehension, while opening up classroom interaction to include NfM. Therefore, a 3-year collaborative project was undertaken to assist teachers in understanding and using QtA and negotiated discussions. The intervention also intended to lead to sustainable, school-based teacher development through introducing different “generations” of teachers year-by-year and by encouraging the first generation (Gen 1) of teachers to act as mentors and leaders to the second generation (Gen 2).

1. How do teachers understand reading comprehension in the local, <sup>2</sup>primary school setting (i.e., what do teachers understand reading comprehension to be and how do they understand the development of student reading comprehension)?
2. In what ways do teacher understandings of reading comprehension change through participation in a long-term (3 years) professional development project? Specifically, in what ways do teacher understandings change at different points of time (1 year, 2 years, 3 years) and when engaged in different roles (trainee, trainer, observer, evaluator)?
3. How successful are the different stages of the intervention (Direct Instruction, Reflection & Adaptation, Lesson Study) in changing teacher classroom practices for reading comprehension?

## RESEARCH DESIGN

The intervention included three stages with two “generations” of teachers: Direct Instruction (DI), Reflection & Adaptation (R&A), and Lesson Study (LS). During these stages, the teachers worked collaboratively with the research team and each other to critique and plan lessons, teach the planned lessons, receive feedback,

and engage in post-observation reflective interviews. Teachers also prepared two written reflections each year, focused on their teaching, and completed one questionnaire annually to provide background information and comments on the intervention itself. Student tests were conducted three times each year, at the beginning, middle and end.

Analyses included investigation of teacher implementation of the strategies taught (QtA and NfM), evidence of teacher understanding of the strategies and of reading comprehension in general using a neo-Bloomian taxonomy proposed by Anderson and Krathwohl (2001), and evidence of “teacher concerns” (which emerged out of the analysis of teacher understanding). Student tests were scored to show evidence of change, if any, in reading comprehension.

## KEY FINDINGS

Changes in teachers’ beliefs about and understandings of reading comprehension can be important for their pedagogical practices and possible changes in those practices (e.g., Fang, 1996; Paris, Wasik, & Turner, 1991). Findings from this project show that initially, teachers understood reading comprehension to be based on discrete skills such as “scanning” and “getting the main idea”. They also mentioned exam preparation. Development of student reading entailed instruction toward specific skills and exam preparation. After the intervention teachers had a broader view of reading comprehension to include “interpretation” and “understanding of author intent”.

As above, teacher understandings did change during the intervention. However the exact periods of changes in teacher beliefs cannot be determined. Instead, analysis of teacher practices showed uptake of the features of QtA (especially initiating queries and discussion moves) at all stages of the intervention. Uptake of negotiation was also found at all stages of the intervention; however, it tended to lag behind uptake of QtA and seemed to be influenced

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<sup>2</sup> The original title and research question referred to “P4”. However, data were collected from grades 3–5 and findings refer to all three grades.

by additional DI related to negotiation as a pedagogical strategy. Analysis of Teacher Understanding and Teacher Concerns also showed that teachers' understandings changed throughout the intervention. Examination of the results for Gen 1 and Gen 2 do not indicate particular influence of a specific stage. Rather, they suggest changes over the long term as teachers continued to work with the strategies, the research team and each other.

Findings from the study suggest that all stages of the intervention were successful in that teacher uptake of the strategies increased and the strategies were used with increasing mastery. In addition, as above, teacher understanding and the types of teacher concerns expressed showed increasing understanding of the strategies and how they might be used in the local context over the course of the study. The findings do not suggest that a particular stage was more beneficial than others. Instead, teacher comments on the study suggested that each of the stages had its own merits and participation in the different stages was beneficial. For example, when Gen 2 teachers began their participation (January 2012), the research team suggested that Gen 1 move into mentoring/ leadership. However, the Gen 1 teachers strongly recommended that the research team initiate the project for Gen 2 teachers with DI—repeating some of what had been done with Gen 1. Later, Gen 2 teachers agreed that the DI was helpful. Similarly, the teachers commented that the reflections (RA stage) helped them to see things in their lessons that they would not have seen otherwise and that working together with colleagues in the lesson study was helpful for sharing ideas and building up their confidence.

## IMPLICATIONS

### For Policy

Classroom interaction is the heart of educational quality, and changes in classroom interaction rely on the development of people, not programmes. There is substantial evidence that the way teachers talk to and with students impacts learning (e.g., Hattie, 2009; Mercer & Hodgkinson, 2008; Nystrand, 2006; Soter, Wilkinson, Murphy, Rudge, Reninger, &

Edwards, 2008; Van den Branden, 2000). This study shows that the way teachers interact with students can be changed, but these changes take time. Professional development to foster changes in classroom discourse and teacher–student interaction requires a substantial commitment from teachers and mentors, over a number of years. Therefore, interventions which are serious about changing classroom discourse patterns must be given years to develop with strongly supportive professional communities.

This leads to a second implication—intensive interventions of this type may be difficult to implement on a large-scale at multiple sites. However, it is possible that some aspects of the intervention can be “workshopped” for incremental professional development. For example, the teachers' comments that they found the DI stage—with reading of research articles, discussion and demonstration—to be useful suggests this could be taken up as shorter term intervention. However, without mentoring (through PLCs or with external mentors) and a longer-term commitment, it seems likely that ideas introduced in workshops would not be sustained over the long term.

### For Practice

Implications for practice are quite clear—teachers in Singapore primary classrooms can adopt more open-ended discussion strategies to enhance reading comprehension instruction. In addition, these strategies can be adapted to fit within the cultural expectations, instructional time frame, and syllabus requirements of the Singapore educational system. Working together with colleagues facilitates learning of the strategies and assists in maintaining professional development efforts over time.

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