beliefs in the mathematics classroom. Specifically, there was a need for curriculum policy to look into how we, educators, could promote ‘positive’ mathematical beliefs amongst our students. Finally, there was a need for teachers, who encouraged collaborative work in mathematics classrooms, to be aware of the existing group dynamics, and consistently monitor and make necessary changes in groupings. It was hoped that this consistent monitoring would maximise students’ collaborative interaction which might lead to success in learning mathematics.

References


Collaborative Research: Developing a Community Of Learners to Understand the Home Literacies of Kindergarten Children with a View to Informing Literacy Pedagogy in Kindergarten

Gillian Potter

Introduction
This project drew together in a collaborative partnership, 40 field-based researchers in 20 kindergartens in Singapore and two university-based researchers from the National Institute of Education, (Drs Gillian Potter and Celina Kwan). Its key objectives were to:
• facilitate teacher research for professional development and change,
• forge collaborative links between university and field researchers.

It facilitated teacher research in early years literacy development with a view to helping teachers to more fully understand the literacy experiences and skills of preschool children, the roles and expectations of parents and the implications of these for pedagogy.

Through the use of semi-structured interviews constructed by the teacher and university researchers together, the project set out to answer the following questions:

1. What kind of literacy activities are engaged in by the children and families at home?
2. What kind of literacy activities are deemed to be important by the parents?
3. In what language do these activities occur?
4. How do mothers and fathers perceive their roles in assisting their children to develop literacy skills?
5. How do parental responses correlate with SES, ethnicity, gender of child, age, education level of parents, number of siblings in the family, working status of mother?
6. How can teachers’ practices better respond to the literacy proficiency or literacy needs of the children.

Research Process
A series of meetings between the teacher researchers and university-based researchers were arranged. These meeting were conducted within a professional development framework and after discussions the teachers generated the questions to ask parents and children. Semi-structured interview schedules were subsequently designed to enable the gathering of information about home literacy practices and demographics so that the university researchers could explore relationships among variables.

The teacher researchers also provided data through a survey on their working contexts, their feelings about teacher research and their perspectives on their involvement in the project. In addition they completed sheets on ‘Implications for Literacy Curriculum’ and ‘Reflections and Visions.’ From these, insight was gained into the effect that the project had on the teachers and their practices, given that part of the mission of this project was to develop a professional community of learners.

The analyses undertaken of the interview data were both qualitative and quantitative with the latter being done with SPSS. The former was done in the grounded theory style.
that enabled categories and themes to arise from the data itself.

Results
Our professional community of researchers found that the majority of the parents engaged in literacy activities with their children and favoured the completion of assessment books and computer usage over story reading and everyday literacy activities. Less than 25% took their children to the library. Over 75% of the children spent between 2-4 hours daily, watching TV and playing on the computer; this was higher among families with working mothers. Parents believed that it is important for kindergartens to formally teach reading and writing and supported the obtaining of higher levels of professional qualifications by the teachers. The parents also felt that research in literacy development is important and contributed to the improvement of teaching methodology.

It was interesting to note that parents' understandings of literacy and its learning were quite limited; schooling and pedagogy constrained their conceptions of literacy engagement. This project was cast within a sociocultural framework where literacy was defined more as Discourse speaking, reading and writing as social practices and products of specific groups of people. Such literacy could be seen in the discursive practices of the families and yet those practices were not valued by the very people who produced them. Without doubt, the parents saw literacy as desirable and part of their "identikit" which classes them as educated, successful and recognizable as such; it was possible to see the intertwining of literacy with status and identity construction. Yet, the notions of academic literacy were perceived as the only valuable literacy. Parents in this study did not believe that young children learn literacy through immersion in their social and cultural world.

The Teacher Researchers as a Community of Learners
The data collected from the teacher researchers about their participation in the research enterprise indicated that despite the time constraints, they felt professionally enriched by meeting and talking with others from a variety of backgrounds and experiences. They said that they found it particularly enriching to see the whole process of a research project and to view things from different perspectives. They commented that the project gave them the opportunity to interview parents to find out about the children's home environment. This, they said, gave them an insight into the expectation of parents and helped them to plan for the curriculum that best suited the children. It also heightened their awareness of the literacy activities in which the parents engaged with their children at home. Some of the teacher researchers said that the research enabled them to work hand in hand with the parents and children. They felt that a parent-teacher bond was created. They said that they gained insight into the perceptions and attitudes of parents and children — I've never taken the time to do this before, said one.

In relation to whether teacher research could make a difference to curriculum content, all of the teacher researchers said they believed it could. Some of their verbatim comments were:

With our increased awareness and exposure, curriculum can be developed and fine-tuned to be more effective for all children.

It gives the teacher an in depth idea of what activities to plan for children and what the strengths and weaknesses are of the children in their care.

Yes, but I think there needs to be much more collaborative teacher research to make a big difference. It's very important for us to be involved.

These teachers indicated considerable commitment to research and awareness of its potential to assist curriculum change. As a result of their engagement in the research, their focus moved from "pre-established curriculum" to children at the centre of a dynamic and responsive program. They spoke of the relevance of the new information gained through research to their own pedagogy and expressed, in part, a confidence to change given their research data. An advocacy for more teacher research was evident.

The power of collaborative teacher/university research partnerships proved to be great in developing a community of learners to understand the home literacies of kindergarten children with a view to informing literacy pedagogy in kindergarten.

Attentional Efficiency and English Performance
Kerry Lee

Introduction
Attention is a central aspect of most information processing theories. Success in learning and most memory tasks are contingent upon our ability to achieve and maintain an alert state (alerting), during which we focus selectively on the to-be-remembered material (orienting). When multiple memory traces are available, attention is again required to assist in deciding on the correct response (conflict resolution). Posner and Petersen (1990) argued that three neuro-anatomical networks are responsible for these functions. This is supported by recent neuro-imaging findings. The alerting, orienting, and conflict resolution networks are found to be largely distinct, with focal points in the fronto-parietal/thalamus, bilateral superior parietal, and the anterior cingulate respectively (Fan et al., 2001).