

## Data, knowledge, action: Exploring sustained shared thinking to deepen young children's learning

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### Intro / Project description

Through this TLRI research, we explored teachers' engagement in sustained shared thinking (SST) in their interactions with children and the frequency with which it is used to promote children's learning. We also explored the potential of data-informed teaching, using a range of data tools, to extend or increase the use of SST to enhance children's learning. The study was conducted through exploratory case studies focusing on the experiences of teachers and children within two kindergarten settings. By the end of the project, teams reported that they had gained a great deal of information about their own practice, SST, and children's learning; and that they felt more confident in data use.

### Aims

This research project had three aims. Specifically, it set out to investigate:

1. the capacities, skills and dispositions required by teachers to use authentic, observation-based data effectively.
2. how data-informed teaching influences teachers' engagement in sustained shared thinking in their interactions with children.
3. the characteristics of sustained shared thinking and the conditions that promote or impede these interactions.

### Why is this research important?

Sustained shared thinking (SST) is a pedagogical strategy strongly associated with high-quality early childhood education and is an area of pedagogy in which new data tools and systems may provide useful insights. SST has been defined as "an episode in which two or more individuals *work together* in an intellectual way to solve a problem, clarify a concept, evaluate activities, extend a narrative etc. Both parties must contribute to the thinking and it must develop and extend" (Siraj-Blatchford et al., 2002, p.8).

### Key findings

#### **Sustained shared thinking (SST)**

- SST interactions and other positive learning interactions (PLI) occurred less frequently than other the teacher-child interactions that occurred each day (this is consistent with the international and national literature). Children's individual experiences of SST were varied.
- The amount of time a child spent in the presence of a teacher was positively correlated with the number of SST interactions or PLI a child experienced.
- SST interactions were differentiated from PLI by the duration and quantity of learning foci embedded within the interaction.

#### **Intentional teaching**

- Teacher intentionality resulted in notable changes in teams' use of practices that supported SST and PLI over the course of the project. For example, teachers sought to plan for and support each other to create and maintain SST interactions when they occurred.

#### **Data-informed teaching**

- Initially, teachers did not see themselves as 'data users', however, with support teacher confidence with data tools and data use grew. Teachers reported using data had been a positive and valuable experience.
- Multiple data sources (each providing unique sets of information) supported teams to build a comprehensive picture about a child's learning and experiences when combined with teachers' existing knowledge and understandings, including those gained from families.
- Access to graphed data and specific information about effective teaching practices motivated teams to identify focus areas and develop action plans to support team implementation of SST-associated practices.

#### **Implications for practice: *Intentionality plus data can create positive outcomes***

- Sustained shared thinking (SST) interactions are powerful. Teachers can use a range of teaching strategies to connect with children and support their learning in play-based and child-centered ways. Intentionality, planning, and coordination among team members enhances opportunities for SST and PLI.
- Data are powerful. When used in supportive and empowering ways, structured observation-based data tools can provide insights into children's learning and teachers' teaching that could not be obtained without the focused lens to guide what is observed. Using a range of data tools can help illuminate expected and unexpected aspects of teaching and learning interactions.
- In the present study, teaching teams observed that the wider the range of teaching strategies they considered (i.e., intentionality) and the more they knew about children (i.e., data) the better able they were to adjust and differentiate strategies across a range of diverse learners. When teachers work toward SST and PLI with the use of supportive data there is strong potential for all children to benefit.

#### **Our partners:**

Makino and Linton Kindergartens; Lynda Hunt, Ruahine Kindergarten Association; Vicki Gifkins, Massey University; Dr. Karyn Aspden, Massey University, Professor Claire McLachlan, Federation University; Associate Professor Sue Cherrington, Victoria University of Wellington and Dr. Tara McLaughlin Massey University.

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