

# Preparing a budget and playing with numbers

Child: Lute

Teacher: Karen

Date: 29 March

		Examples or cues	A learning story
Belonging Mana Whenua	<b>Taking an Interest</b>	Finding an interest here – a topic, an activity, a role. Recognising the familiar, enjoying the unfamiliar. Coping with change.	<p><b>This morning a group of children and I were looking through catalogues. The children were selecting equipment that they would like for their outdoor area. (We were applying for a grant.) They had great delight picking and choosing, and recorded their choices by drawing pictures to send with our grant application. I went to get a calculator to add up the cost of the children’s choices. When I returned Lute had been busy writing letters on the blackboard.</b></p> <p><b>“I did my sister, my nana, my dad, my mum, my name, ‘Lute’, and my grandma,” she told me as she pointed to the words she had written. I continued working with the group of children. We added up the cost of the equipment. I got called away to take a phone call and when I returned I couldn’t find the calculator anywhere. I searched under all the papers under the catalogues and asked the children to help me look. We hunted everywhere. “Where could that calculator be?” I asked the children.</b></p> <p><b>Then I looked over to Lute. She was taking no notice of the other children and me. It was as if she was oblivious to her surroundings. She was very busy. She was pressing keys and watching the numbers come up on the screen of the calculator, reading them aloud, and then recording them onto her blackboard. Lute wrote the numbers in the same form they appeared on the calculator screen. When she had finished writing them on the blackboard she took my pen and copied onto paper what she had written on the blackboard. Lute was very proud of her writing and spent a long time writing numbers.</b></p>
Well-being Mana Atua	<b>Being Involved</b>	Paying attention for a sustained period, feeling safe, trusting others. Being playful with others and/or materials.	
Exploration Mana Aotūroa	<b>Persisting with Difficulty</b>	Setting and choosing difficult tasks. Using a range of strategies to solve problems when ‘stuck’ (be specific).	
Communication Mana Reo	<b>Expressing an Idea or a Feeling</b>	In a range of ways (specify). For example: oral language, gesture, music, art, writing, using numbers and patterns, telling stories.	
Contribution Mana Tangata	<b>Taking Responsibility</b>	Responding to others, to stories, and imagined events, ensuring that things are fair, self-evaluating, helping others, contributing to programme.	



### Short-term review

Lute has a passion for writing: she is experimenting with numbers and letters. Lute has an understanding that numbers and words can be recorded and read.

### What next?

Encourage Lute's literacy and numeracy skills through different media – the blackboard, whiteboard, magnetic letters and numbers, counting in dance and movement games.

### What's happening here?

The teacher illustrates the use of a calculator, then temporarily loses it as one of the children takes it over for a purpose of her own.

### What aspects of noticing, recognising, and responding to mathematics learning does this assessment exemplify?

Two events are illustrated here, both of them valued enough to be documented. The teacher records Lute's interest in the calculator, and she notes that Lute "was as if ... oblivious to her surroundings" when using it. Now that this story has been documented, other teachers (and Lute's family) can notice and recognise opportunities to strengthen Lute's interest – in both writing numbers and in using the calculator.

### What does this assessment tell us about mathematics learning (using a *Te Whāriki* lens)?

This exemplar documents the participation of the children in an enterprise of great importance: applying for a grant for equipment for their early childhood centre. They belong to and are engaged in a learning community with connections to the world outside the centre

(the market – represented by the catalogue – and the funding providers). *Te Whāriki* emphasises using mathematics in activities that have meaning and purpose for children. It also has the learning outcome "Children develop the expectation that numbers can amuse, delight, illuminate, inform, and excite".<sup>19</sup>

### How does this assessment exemplify developing competence with mathematics?

In this assessment, a group of children and their teacher are participating in a real-life mathematical activity. They are working together on the budget for an equipment grant. The children choose what they want from the catalogue, and the teacher uses a calculator to add up the cost of their choices.

Lute writes the names of her family on the blackboard nearby during a halt in the budgeting enterprise. She then borrows the calculator to press keys, watching the numbers come up on the calculator screen, reading them out loud, and writing them down. She is developing competence with the symbols (numbers) of mathematics and with a mathematical tool (the calculator).