

Development of Counting Skills

Counting Skills (ACARA)

- read stories from other cultures featuring counting in sequence to assist students to recognise ways of counting in local languages and across cultures
- identify the number words in sequence, backwards and forwards, and reasoning with the number sequences, establishing the language on which subsequent counting experiences can be built
- develop fluency with forwards and backwards counting in meaningful contexts, including stories and rhymes
- understand that numbers are said in a particular order and there are patterns in the way we say them
- understand that each object must be counted only once, that the arrangement of objects does not affect how many there are, and that the last number counted answers the 'how many' question
- use scenarios to help students recognise that other cultures count in a variety of ways, such as by placing one pebble in a bag to represent one object (for example to count the number of cattle).
- use subitising as the basis for ordering and comparing collections of numbers

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When learning to count students will progress through a number of stages as outlined below:-

Immature counting

The student may use their own repeated sequence e.g. 1,3,5,7,8, before learning the conventional sequence.

Rote-counting

The student possesses a knowledge of number names in sequence but may not be able to point to objects while saying them.

Point Counting

One-to-one correspondence is demonstrated but the student may not understand the value of each number as 'how many' objects are in a group.

Rational-counting

All principles of counting are exhibited. Other counting strategies should be included once rational counting to 20 has been mastered.

Counting on

The student can begin counting at any number. Counting on is a useful strategy for addition and exposing number patterns.

Counting back

The student can count back from any given number. Counting back is a useful strategy for subtraction.

Skip counting

Students can count in twos, fives and tens. This exposes number patterns and provides readiness for multiplication and division. Skip counting on and back provides a good base when working with money.

The two major counting skills are **Rote-counting** and **Rational-counting**. In learning early number, Rote-counting is necessary but not as important as Rational-counting, which is the goal.

Rote-counting is essentially the 'sing-song' memorisation of the number sequence as seen in television programs such as Sesame Street. It is not the most important type of counting but it is necessary in building a foundation for Rational-counting.

Rational-counting is the ability to give each object only one number name and understand that the last number name given represents the total number of objects being counted. Rational-counting is the most important counting skill and is the goal for learning early number.