Sequencing

Sequencing
Chris Joyce (2008)

Sequencing involves organising things into a chronological or logical order.

Students can sequence

- statements
- pictures
- numbers
- patterns.

Students can demonstrate a sequence by

- organising picture cards
- organising statement cards
- drawing a series of pictures or patterns
- writing a series of statements
- completing or drawing a flow chart
- completing a number line.

When to use

Sequencing is useful for assessing students' understanding of the links between events or ideas, for example:

- the development of a plot or character
- observations (e.g., a life cycle, moon phases)
- the logical order to write instructions (e.g., a recipe, planning a fair test or statistical investigation)
- identifying patterns (e.g., ordering numbers from biggest to smallest).

The knowledge or skills being used include:

- recall
- logical thinking
- visual perception
- mathematical knowledge
- vocabulary knowledge.

The theory

- Sequencing is a tool that helps students organise ideas, information, patterns, or unfolding events.
- As they order things, they need to be looking for evidence to support their decisions. The sequence they put together provides evidence of their thinking processes.
- Sequencing provides a framework for considering cause and effect.

How the strategy works

As students carry out sequencing activities they have to think about the logical order of events or patterns. This can provide evidence of:

- their comprehension of aspects of written text

- whether they can link pieces of information
- their ability to recognise patterns.

What to do

- Provide statements, pictures, patterns, or numbers that can be ordered into a logical sequence.
- Put on cards or cut out so students can move them around to experiment with the order.
- Ask students to put in order. The instructions should clearly describe the order expected, such as first to last, biggest to smallest, brightest to darkest.
- Ask students to justify their decisions.
- An alternative is to use a worksheet and number each item. Students put the numbers in the correct sequence. However, this is more difficult for students of all ages.

When interpreting the sequence, look for:

- the logic used to order the parts
- choices made where an alternative is viable
- the degree of correctness. Has one incorrect response influenced other responses?
- whether students can justify their decisions
- the language used when students describe the sequence (e.g., *text connectives* (see Thinking about how language works) such as 'To begin ...', Secondly .... ', In conclusion ...').

Limitations

- Too many items can make the task too difficult for students.
- Inability to use the language of sequencing may compromise students' ability to describe or recognise a sequence or justify their sequence.

Adapting the strategy

A more difficult alternative is to ask students to identify and describe sequences occurring in a piece of text. This is especially challenging when events are not described sequentially. Students can

- write their own statements in order
- draw a series of pictures or cartoons, e.g., as a storyboard
- draw or complete a flow chart.

Examples of ARB resources that use sequencing

There are many sequencing activities in the ARBs. Below is a selection modelling different ways this strategy can be presented.
To find other resources that involve sequencing use the keywords *sequenc(ing)* or *order*(*ing*) in your search.

Some examples of resources that ask students to use sequencing are:

ARB resource	Context	Presentation
Ordering weight	Weight	Order measurements lightest to heaviest
Decimal places	Decimal numbers	Arrange cards

Science

ARB resource	Context	Presentation
The best mopper upper	Planning A Fair Test	Order statements
The beech forest III	Events In A Beech Forest	Order statements on cards
Which is hardest?	Hardness	Order objects from hardest to softest

English Support material
Thinking about how language works provides more in-depth information on connecting
and tracking ideas in text.

Resource List

- Life cycle of a frog
- Delicious Steamed Kai
- Copper sulphate
- Copper sulphate solutions
- Lunch at a Japanese School
- Which is hardest?
- How we hear
- Waterfalls
- Erosion
- Pond weed experiment
- Planet years
- Life cycle of the kākāpō
- Life cycle of the white butterfly
- Life cycle of a butterfly
- Life cycle of the Harrier Hawk
- Paradise Ducks' life cycle
- Ordering weight
- Alphabetical order II
- Alphabetical order
- A tale of two donkeys
- Wheels
- The best mopper upper
- A canoe story
- A pumpkin story
- Building a deck
- The beech forest III
- Shoes for the King
- The Missing Socks
- The Lion and the Mouse