

Why are brainstorming webs useful?

*Brainstorming is a technique used to encourage quick and creative thinking. As a group activity it allows ideas to be pooled and knowledge is constructed socially (Mercer 1995). It is an exploratory strategy which allows students to engage with a topic, bring their own knowledge to bear and take risks with ideas by avoiding self-editing too early in the process. This allows them to express both 'good' ideas, which might lead to fruitful avenues of enquiry, and 'bad' ideas, which may be discarded later. Allowing all ideas to be exposed provides an opportunity for critical thinking and group evaluation.

With regard to reading comprehension, brainstorming is most useful as a pre-reading strategy. It can be used to activate prior knowledge, make connections with new learning and track the acquisition of new knowledge across a sequence of work.

How are they used?

There are several brainstorming techniques that can be used:

- listing all ideas on a given theme or subject
- clustering ideas (which can follow after listing)
- invisible writing (typing ideas with the computer screen turned off-discourages self-editing)
- questioning (notes are made in response to quick fire questions about who, what, where, why, how, when)
- observation (notes in response to sensory prompts e.g. what does it look like? what does it taste like? etc.)
- argument (notes about the pros and cons of an argument)

Typically, students might be given a short time to make as many responses to a given question as possible. Questions should be open ended and might include:

- **What do you know** about fairy tales?
- **What ideas do you have** about what makes a good story?
- **Are zoos a good thing?** List as many arguments for and against as possible.

This is followed by a collective sharing of ideas which are incorporated in the brainstorm map.

For instance, prior to Reading Anthony Browne's 'Zoo' a question might be posed: 'ARE ZOOS A GOOD THING?'

Brainstorming maps are revisited during reading and after reading so students can evaluate and refine their thinking.

Charette Procedure

The Charette Procedure is useful if you are conducting brainstorming sessions for students who already familiar with brainstorming, and on occasions when you want to explore more than one facet of a topic.

1. Organise the class into small groups
2. Each group given a different aspect of the topic or a question to focus on.
3. Students are given a short period for individual brainstorming
4. Each group selects a recorder to write down the group ideas.
5. Reporters visit each group to present their ideas – this step is repeated until the reporters have visited each group
6. The groups revisit their ideas, incorporating and building on ideas from the other groups
7. Finally, the reporters feedback to the class

Activity

Think about a time when you have used brainstorming activities with your class.

- What are the merits and weaknesses of brainstorming?
- What needs to be considered to make brainstorming work well?
- Are there any changes you will make if you use this technique in the future?

Top Tips for effective brainstorming:

- Accepting students' ideas without criticism or judgement
- Avoidance of teachers imposing their own ideas
- Not privileging ideas that are present in a text

- Not dismissing ideas that don't fit with the text
- Build in sufficient opportunities for critical reflection and evaluation

Footnote: * The term 'brainstorming' rather than more recent alternative 'thought shower' is used here because it has been in use since the 1890s and Epilepsy Action state 'Our view is that it depends upon the context: if the word is being used to describe a meeting where participants are suggesting ideas, then its use is not offensive to people with epilepsy.'