

Concept Maps

Concept maps can be useful for a range of purposes: consolidating understanding of concepts, planning ideas for an essay, committing concepts to memory for exams, and so on.

The key difference between concept maps and mind maps is that concept maps identify relationships between things, whereas mind maps only capture associations between things. You would use a mind map, for example, to remember to take things on a holiday (food, clothing, kitchen items, car-related things), with each concept being a separate item. You would use a concept map to diagram the causes and effects of the Asian currency crisis, or the sequence of events that lead to the 9/11 terrorist attack. Concept maps are more sophisticated than mind maps and require careful planning.

Principles

- 1. All concept maps must be concise, containing only sufficient information for your purpose.
- 2. Concept maps must convey a singular idea. This idea must not be lost among congested information or clutter.
- 3. They must explain the idea conveyed, not merely describe it. If only a description is needed, words will suffice. Maps must show explanatory connections, which can be causal, cause-effect, directional, definitional, or other kinds of connections.
- 4. They must be balanced. Maps with connections that are unequal reflect a selective understanding of a topic.
- 5. Concept maps must be appropriate for the intended audience. Choose terminology that the audience understands the message of the map within seconds. This helps memory retention as well as understanding.

Concept map example: pregnancy induced hypertension



(Source: https://groups.diigo.com/group/mucreehiwa/content/concept-map-of-pregnancy-induced-hypertension-10431781)





Making a concept map

Follow this a staged process to create your own concept map:

- 1. **Devise a focus question**, e.g., *What are the causes and effects of hypertension?* Simplify the question to a word or phrase and place it in a box. This becomes the topic concept of the map, but, importantly, it stands for a focus question.
- 2. **Make a list of key concepts** related to the topic. This is a brainstorming stage; you will not need all the concepts. Make a "parking lot" of concepts first, and then sort through them until you have the ones you need. Like the topic concept/question above, put each concept in a separate box.
- 3. List the concepts in order of importance. This might take several attempts. Ask other students: a) whether you have missed any key concept; and b) whether your list is ordered correctly.
- 4. **Draw link lines** that establish some relational connection between the concepts from top to bottom (i.e., from the key concept at the top of the map to the lower-order concepts at the bottom). Arrows can be used to show the relational connections. Use both uni-directional and multi-directional arrows.
- 5. Add cross-links between concepts i.e., from left to right-hand sides of the map. Add verbs and phrases to show relationships, e.g., "requires", "to work with", "will lead to", "involves", "due to", "is an example of", "during", "such as", "is assessed by", and so on.
- 6. Add terminal points representing concepts, or concrete examples, to complete your map.
- 7. **Review your map** to ensure it captures all the ideas you need to understand or remember.

Tools

Concept maps can be drawn on a computer using the "Insert Shapes" function of Word. Specialised software such as CMap can also be used. Another example of a concept map is provided below.



Other helpsheets available

- Argument Maps
- Mind Maps