



Thinking Systemically: An Iceberg Activity

Tackling complex social problems requires that we identify underlying causes. When working with a group, this Iceberg Activity can help participants pause and reset their thinking about underlying causes, rather than surface level problems.

Want to learn more about Pathways in Place?

See page 3

What is it?

Encouraging people to look beyond surface problems to their underlying causes can be challenging. But identification of underlying causes is necessary when trying to tackle complex social problems, like unemployment or low education attainment.^[1-3]

The metaphor of an iceberg is commonly used in systems thinking^[1,2] because it depicts what is visible above and less visible below the surface. We often focus on surface level problems at the expense of the 'deep structures' – or underlying causes – that give rise to them.

While it might be possible to address some problems by simply treating the symptoms, other problems are more difficult to address as their causes are complex and interrelated.

This Iceberg Activity encourages us to consider how problems emerge from the complex interactions between the structures of systems that are often hidden from sight.



Iceberg Activity

You will need:

- Six packets of different coloured sticky notes
- A large sheet of paper or a whiteboard
- Pens and/or whiteboard markers

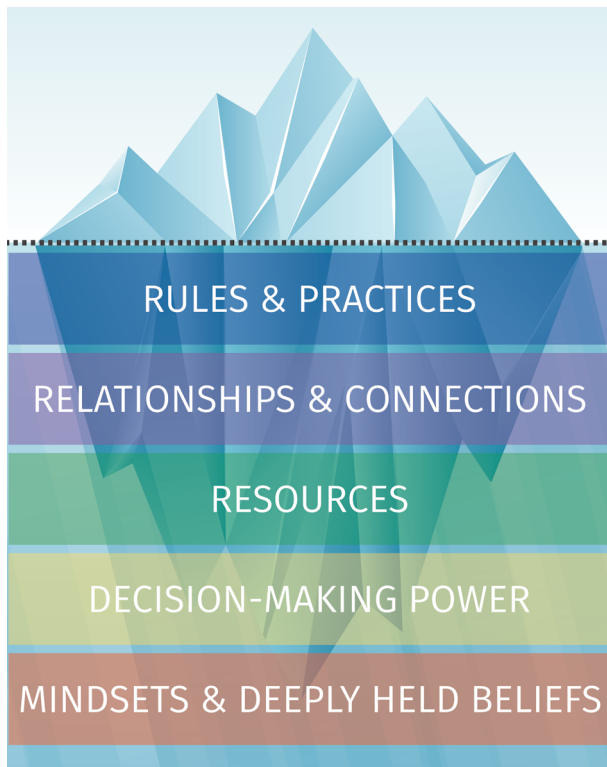


Figure 1 - Draw an iceberg graphic with different colours for each category

Draw an iceberg on a large sheet of paper or a whiteboard with a line depicting what lies above and below the surface (example in Figure 1). Position the iceberg where it will be visible to the whole group. Above the surface are the problems we encounter every day in our personal and professional lives. Below the surface are the 'deep structures' that are the underlying causes of the problem.

Step Two

Ask the group to think about a problem that they are grappling with in their personal or professional lives. For the purpose of this activity, we want problems that are both *specific* and *actionable*, in that immediate steps could be taken to resolve them.^[1]

Once the problems have been identified, write each problem down on separate sticky notes, and place them on the 'visible' part of the iceberg (i.e. above the dotted line in Figure 1).

Step Three

Next, we need to start to think through the structures of systems, and how these structures might be contributing to the problem. Ask the group to consider the underlying causes of this problem according to the following five categories:

Rules & practices – what practices, procedures or rules are causing the problem?

Relationships & connections – how are connections or relationships between people and organisations causing the problem?

Resources – how is the availability and quality of local resources causing the problem?

Decision-making power – how does the distribution of decision making power contribute to the problem?

Mindsets & deeply held beliefs – what deeply held beliefs contribute to the problem?

These categories and questions have been adapted from the systems literature ^[2,3] and reflect conditions and characteristics of systems. Ultimately, these are the targets for systems change! Make sure you give each category a different coloured sticky note and distribute the sticky notes to the group.

Step Four

Give the group approximately 15 minutes to write down the causes and then ask them to transfer their sticky notes onto the iceberg.

Step Five

Finally, this is an opportunity to reflect as a group on the range of underlying causes for the problems they have identified. The details here are not as important as the group seeing many and varied causes that lie beneath the surface of the identified problems.



What did we learn?

The Pathways in Place-Victoria University team has used this Iceberg Activity in several workshops and found it relatively easy to apply. It is suitable for people from different age groups, backgrounds and different levels of knowledge and experience.

This Iceberg Activity was also easily adapted for online workshops through the use of digital whiteboard software. It allowed people to spend time thinking about the deep structures that cause the problems they are grappling with.

As an activity, it enabled the group to warm up to the task of thinking systemically and identify some of the underlying causes of local problems that could be acted on.

References

- [1] Stroh DP. *Systems Thinking for Systems Change*. 2015. Chelsea Green Publishing, Vermont.
- [2] Kania J, Kramer M, Senge P. *The Water of Systems Change*. 2018. FSG.
- [3] Foster-Fishman P, Watson E. The ABLe Change Framework: A conceptual and methodological tool for promoting systems change. *Am J Community Psychol*. 2012. 49(3-4):503-16. [doi:10.1007/s10464-011-9454-x](https://doi.org/10.1007/s10464-011-9454-x).

Suggested Citation

Riley, T., Mowle, A., Craike, M., Klepac, B., O'Driscoll, T. Thinking Systemically: An Iceberg Activity. Methods Snapshot. Pathways in Place: Co-creating Community Capabilities. Victoria University, Victoria. 2022. <https://doi.org/10.26196/q2rc-vz68>.



© Pathways in Place: Co-Creating Community Capabilities, 2022

This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/>

About Pathways in Place

Pathways in Place: Co-Creating Community Capabilities is an innovative program of research and action that supports flourishing of children and young people. This Program is jointly delivered by Victoria University (Victoria, Australia) and Griffith University (Queensland, Australia) with funding generously provided by the Paul Ramsay Foundation.

The Program teams are each leading one of two complementary streams:

1. Early learning and development pathways (children and youth 0-15 y.o.), led by Griffith University in Logan (Queensland, Australia).
2. Pathways through education to employment (youth 15-24 y.o.), led by Victoria University in Brimbank (Victoria, Australia).



For more information contact the Pathways in Place team at:

✉ pathwaysinplace@vu.edu.au

✉ pathwaysinplace@griffith.edu.au

🌐 www.pathwaysinplace.com.au