Can we work together to identify knowledge gaps around eutrophication in Lake Erie?

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What *is* eutrophication in Lake Erie?

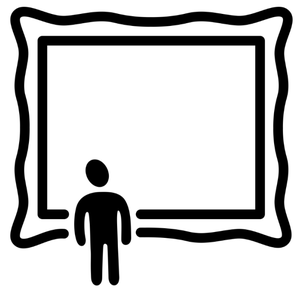
Is your view of eutrophication (and its causes and indicators) complete?

Eutrophication in Lake Erie is complex, with many interacting factors and incomplete understanding of relationships. One way to piece together the complicated picture of eutrophication and answer these questions is through

Fuzzy Cognitive Mapping

Fuzzy Cognitive Maps can help you:

Discover the big picture



Fuzzy cognitive maps can help people work through how they view eutrophication by creating flow diagrams

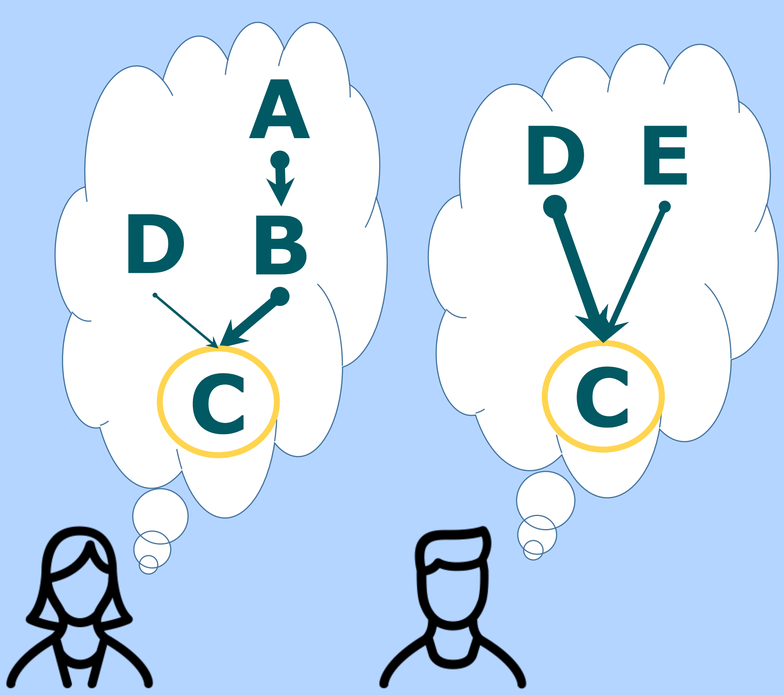
Combine knowledge

Fuzzy cognitive maps can bring together experts with different knowledge sets and allow their knowledge to 'fit together' like puzzle pieces

Identify knowledge gaps

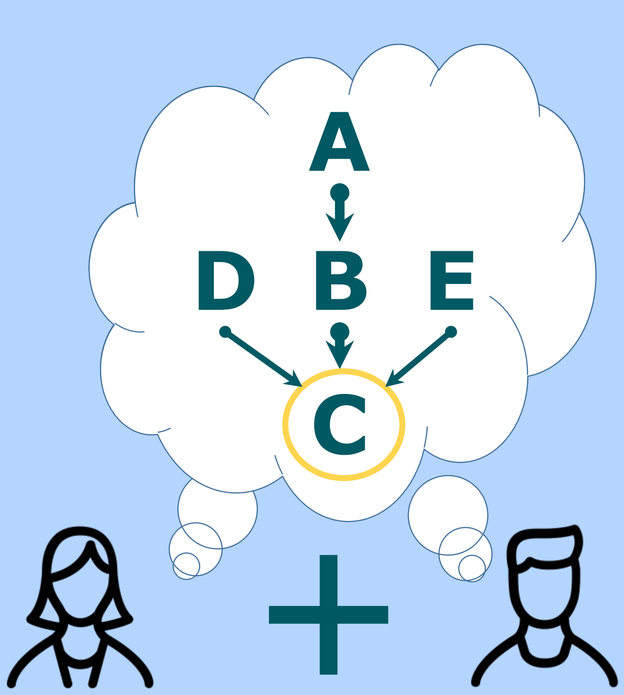
Fuzzy cognitive maps can help us see where people agree (supporting knowledge) or disagree (knowledge gaps)

Example



Two experts are interested in what controls concept **C**, and they each hold a piece of the puzzle

- Both experts visualize their understanding
- Each expert can add pieces to the map that the other doesn't know about
- Both experts agree **D** drives **C**, but disagree on the *importance* of the relationship (arrow width). The strength of this relationship could be an important **knowledge gap**



Plans: Recruit stakeholders to create an updated **fuzzy cognitive map** of Lake Erie eutrophication in **Spring 2019** (contact Jan Ciborowski: cibor@uwindsor.ca or Rebecca Rooney: rrooney@uwaterloo.ca)

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