**Instructors Guide to Using Mental Modeler in the Classroom**

This is a brief ***Instructors Guide*** to using Mental Modeler to teach Systems Thinking in the undergraduate or graduate classroom. Mental Modeler is a free, systems-based, online modeling platform that is based on Fuzzy Cognitive Mapping. Mental Modeler was developed to promote individual and collaborative systems modeling.

*Video 1 Introduction to Systems Thinking and Modeling*

<https://www.youtube.com/watch?v=6EZMtAapqCw&t=2s>

This video provides an introduction to Systems Thinking, including the dimensions and characteristics of Systems Thinkers and the way Systems Thinkers approach both tame and wicked problems.

*Video 2 Modeling for Systems Thinking*

<https://www.youtube.com/watch?v=km_0_3WYP_g>

This video provides an overview of how systems modeling can support Systems Thinking. It provides an overview of some of the common qualitative, semi-quantitative and quantitative systems modeling tools.

*Video 3 What is Fuzzy Cognitive Mapping?* <https://www.youtube.com/watch?v=HNEfGppZptU&t=99s>

This video provides an overview of the history and basics associated with Fuzzy Cognitive Mapping. It provides information on how Fuzzy Cognitive Maps are developed, what they mean, and how structural and functional dimensions of Fuzzy Cognitive Maps can be represented and understood.

*Video 4 Introduction to Mental Modeler*

<https://www.youtube.com/watch?v=UbKzyDctkrY>

This video provides an overview of how to develop Fuzzy Cognitive Maps using the Mental Modeler software. It provides an overview of the different parts of the software and demonstrates how to make a simple model. Additional resources on how to save and send Mental Modeler files can be found here: <https://www.youtube.com/watch?v=v1A_ZGO6fWk>

*Video 5 Evaluating and Improving your Model 1*

<https://www.youtube.com/watch?v=2Ct3WiZpDgY>

This video provides an overview of how to reflect on the structure (nodes and edges) and function (dynamics) of your model. It also introduces the idea of ‘parsimony’ or the idea that the best model is the one that communicates the most information in the simplest manner.

*Video 6 Evaluating and Improving your Model 2*

<https://www.youtube.com/watch?v=R3R-XYjaPGA>

This video identifies how to reflect about your model, including how to think about major “drivers” of systems change, how to evaluate models in terms of identifying ‘leverage points’ and how to evaluate model dynamics in terms of evaluating ‘trade-offs’.