



Introduction
Dr Mike Yearworth
Reader in Systems Engineering



Learning outcomes

1. Gained an appreciation of systems thinking and its application to wicked/messy problems using Problem Structuring Methods (PSMs). Also understood the difference between the hard and soft systems traditions and the advantages/disadvantages of each
2. Able to express a messy problem situation as a desired transformation using language of purpose and process
3. Can describe a conceptual system to achieve the transformation as a hierarchical process model
4. Understands how system performance can be assessed based on theories of evidence and used to direct attention for interventions
5. Appreciates the role that necessity and sufficiency conditions play in determining overall system performance
6. Can use argumentation to identify issues associated with poor performance, elicit options to resolve, and capture arguments for and against

