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| **Theory Cluster** |   |
| **Complicated Systems** | **Complex Systems** |
| Linear  | Non-linear (inputs and outputs not directly correlated) |
| Noise, tension and fluctuations suppressed  | Opportunity seen in tension, noise and fluctuations |
| Solution as external to system  | Solution as part of system |
| Adaptation is to a static environment  | Interaction with the rest of a dynamic environment |
| **Casualty Cluster** |   |
| **Complicated Systems** | **Complex Systems** |
| Simple causality  | Mutual causality |
| Designed and intended outcomes  | Adaptive and emergent outcomes |
| Deterministic | Probabilistic |
| Certainty  | Uncertainty |
| Assumed predictability  | Recognized elements of non-predictability |
| Focus on boxes  | Focus on arrows |
| Structures determine relationships  | Structures and relationships are interactive |
| **Evidence Cluster** |   |
| **Complicated Systems** | **Complex Systems** |
| Reductionism/analysis  | Holism/synthesis |
| Averages dominate: outliers irrelevant  | Outliers seen as possible key determinants |
| Classical economics ignores historical evidence because systems always tend towards equilibrium | History contains meaning of change and systems evolve in part based on where they have been |
| Measures of efficiency, fit and best practice  | Functioning of actual relationships and feedback loops (+ve and –ve) |
| **Planning Cluster** |   |
| **Complicated Systems** | **Complex Systems** |
| Convergent thinking  | Divergent thinking |
| Reductive characteristics  | Emergent characteristics |
| Decision procedure as an event  | Decision as emergent |
| Environmental scan  | Developing insights into own practice |
| Big issue needs big change  | Butterfly effect – size of change does not determine size of change |
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| Ref: http://geiselmed.dartmouth.edu/cfm/education/pdf/Article3.pdf |