

Being a Systems Thinker

This listing is adapted from *Thinking About Systems: 12 Habits of Mind* by Linda Booth Sweeney, online at: <http://www.lindaboothsweeney.net/thinking/habits>¹

Systems thinking considers the formulation, diagnosis, and resolution of issues that arise from complex forms of interaction in systems. Different parts of a system are so interconnected that if we alter one part of a system it will change other parts. Fundamentally, systems thinkers focus on wholes rather than on parts. Within the context of the whole, they concern themselves with relationships more than objects, and with networks more than hierarchies.

A Systems Thinker:

- Sees the whole: sees the world in terms of interrelated “wholes” or systems, rather than as single events, or snapshots.
- Looks for connections: assumes that nothing stands in isolation; and so tends to look for connections among nature, ourselves, people, problems, and events.
- Pays attention to boundaries: “goes wide” (uses peripheral vision) to check the boundaries drawn around problems, knowing that systems are nested and how you define the system is critical to what you consider and don’t consider.
- Changes perspective: changes perspective to increase understanding, knowing that what we see depends on where we are in the system.
- Looks for stocks: knows that hidden accumulations (of knowledge, carbon dioxide, debt, and so on) can create delays and inertia.
- Challenges mental models: challenges one’s own assumptions about how the world works (our mental models) — and looks for how they may limit thinking.
- Anticipates unintended consequences: traces loops of cause and effect and always asks “what happens next?”
- Looks for change over time: sees today’s events as a result of past trends and a harbinger of future ones.
- Sees self as part of the system: looks for influences from within the system, focusing less on blame and more on how the structure (or set of interrelationships) may be influencing behavior.
- Embraces ambiguity: holds the tension of paradox and ambiguity, without trying to resolve it quickly.
- Finds leverage: knows that solutions may be far away from problems and looks for areas of leverage, where a small change can have a large impact on the whole system.
- Watches for win/lose attitudes: knows dichotomous attitudes usually make matters worse in situations of high interdependence.

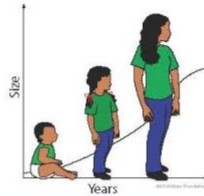
Booth-Sweeney, Linda. (n.d.). 12 Habits of Mind. Online at <http://www.lindaboothsweeney.net/thinking/habits>, accessed May 12, 2016.

Being a Systems Thinker

Seeks to understand the big picture



Observes how elements within systems change over time, generating patterns and trends



Recognizes that a system's structure generates its behavior



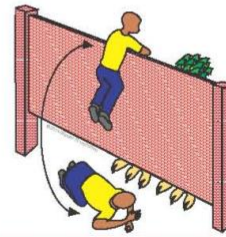
Identifies the circular nature of complex cause and effect relationships



Makes meaningful connections within and between systems



Changes perspectives to increase understanding



Surfaces and tests assumptions



Habits of a Systems Thinker



Considers an issue fully and resists the urge to come to a quick conclusion



Considers how mental models affect current reality and the future



Uses understanding of system structure to identify possible leverage actions



Considers short-term, long-term and unintended consequences of actions



Pays attention to accumulations and their rates of change



Recognizes the impact of time delays when exploring cause and effect relationships



Checks results and changes actions if needed: "successive approximation"



Second Edition ©2014, 2010 Systems Thinking in Schools, Waters Foundation, www.watersfoundation.org