Coherence and Emergence: The Magic of Distributed Systems Change

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Let's Start With a Puzzle

You have a general idea for a direction that you want to move your district. Might be deeper or more active learning, might be more equity, might be more intentional use of technology.

How can you proceed in a way that:

a) Is deeply owned by the people on the ground?
b) Allows for innovation & adaptation?
c) Is coherent, i.e. the whole is at least as great as the sum of the parts?

Consider Montessori

- Developed by Maria Montessori in the 1940s
- Children are thinkers, capable of self-regulation, deeply invested learning, and cooperation
- Organized around a series of materials which are laid out in stations.

Consider Montessori

Making Sense of What We Saw

What did you see in Montessori?

a) Is it deeply owned by the people on the ground?
b) Does it allow for innovation & adaptation?
c) Is it coherent, i.e. the whole is at least as great as the sum of the parts?

What questions or reservations do you have about using this as a model?

What is Coherence?

Coherence is shared depth of understanding about the purpose and nature of the work in the minds and actions individually and especially collectively. It is not structure; it is not alignment; it is not strategy (although those things can help).

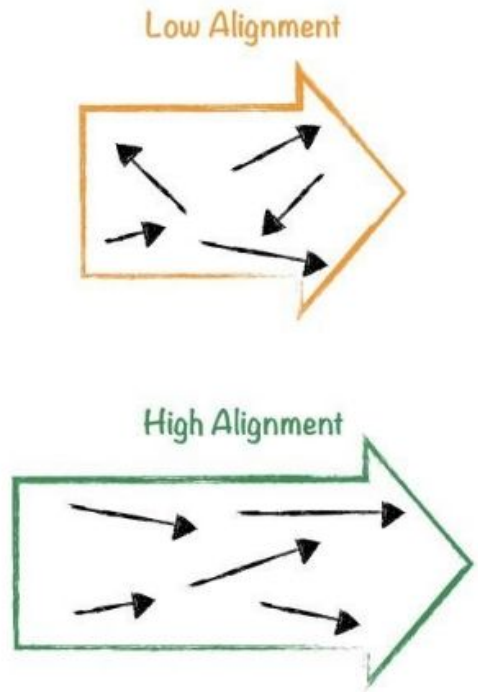
and…

Coherence making is a continuous process of making and remaking meaning in your own mind and culture.

– Michael Fullan

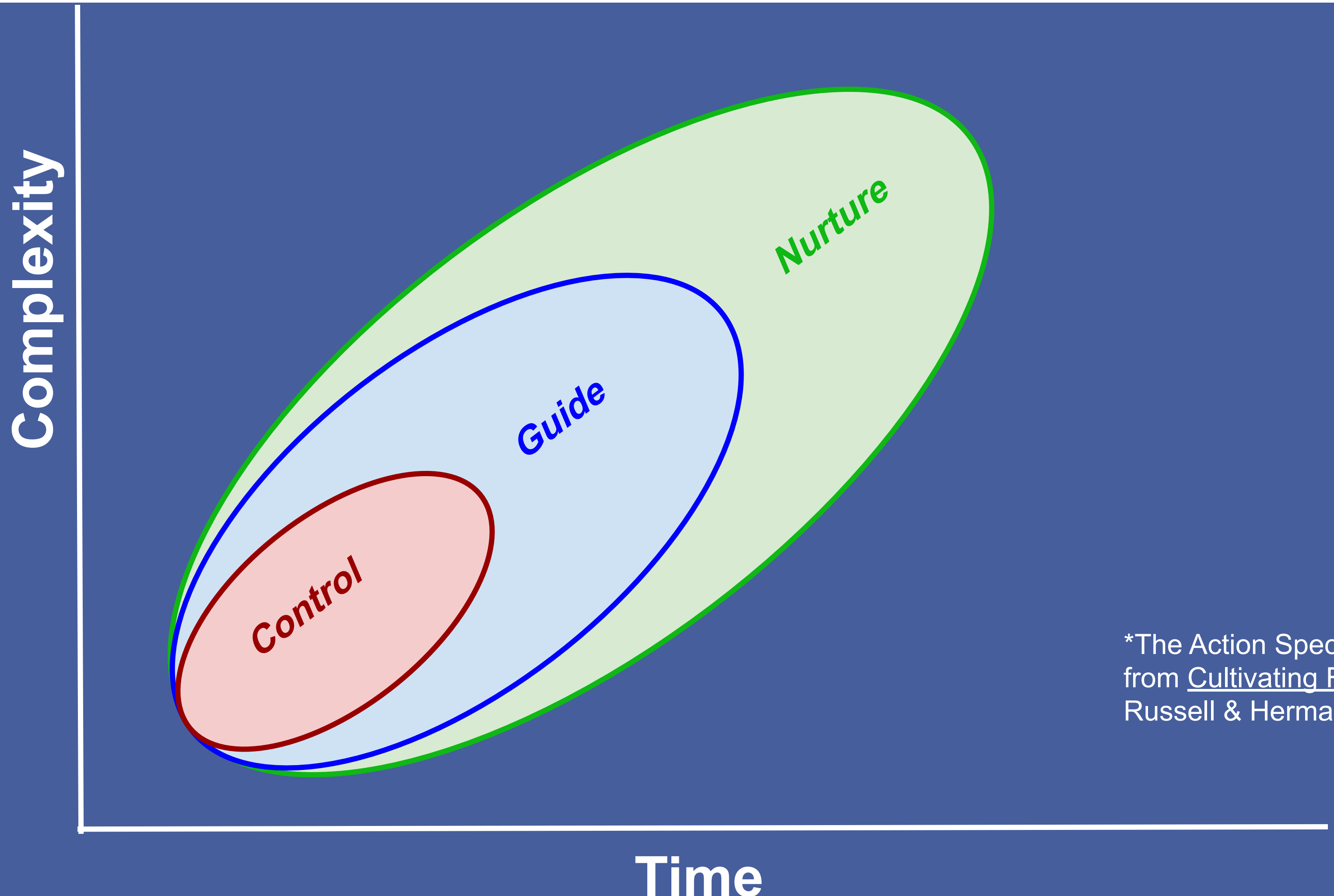
What is Emergence?

Coherence and Emergence



Peter Senge, The Fifth Discipline,

Leadership: "Control, Guide, and Nurture"*



*The Action Spectrum, adapted from Cultivating Flows, Jean Russell & Herman Wagter

Schools Are Loosely Coupled Systems: A Little Wisdom from Karl Weick

Administrators in education often act as if the schools they manage are like most other organizations they encounter. They do what most managers do: namely, try to monitor performance closely, correct deviations from standards, design routines to deal with problems, give orders, make plans and send policy memos. These managerial activities presume at least four properties for the organization being managed:

- the existence of a self-correcting rational system among highly interdependent people,
- consensus on goals and the means to attain those goals,
- coordination by the dissemination of information, and
- predictability of problems and of responses to those problems.

When conventional management theory is applied to organizations that do not have these four properties, effectiveness declines, people become confused, and work doesn't get done. That seems to be one thing that is wrong with many schools. They are managed with the wrong model in mind.

Figure 2. The management of complexity

Schools Are Loosely Coupled Systems: A Little Wisdom from Karl Weick

Schools are not like other organizations; consequently, they need to be managed differently. Much of their uniqueness derives from the fact that they are joined more loosely than is true for other organizations. For example, only a limited amount of inspection and evaluation occurs in schools. Professionals are reluctant to give one another unsolicited feedback. As a result, poor performance persists because inattention is justified as respect for professional autonomy. The goals in education are also indeterminate, which makes them difficult to use as hard standards to evaluate individual performance.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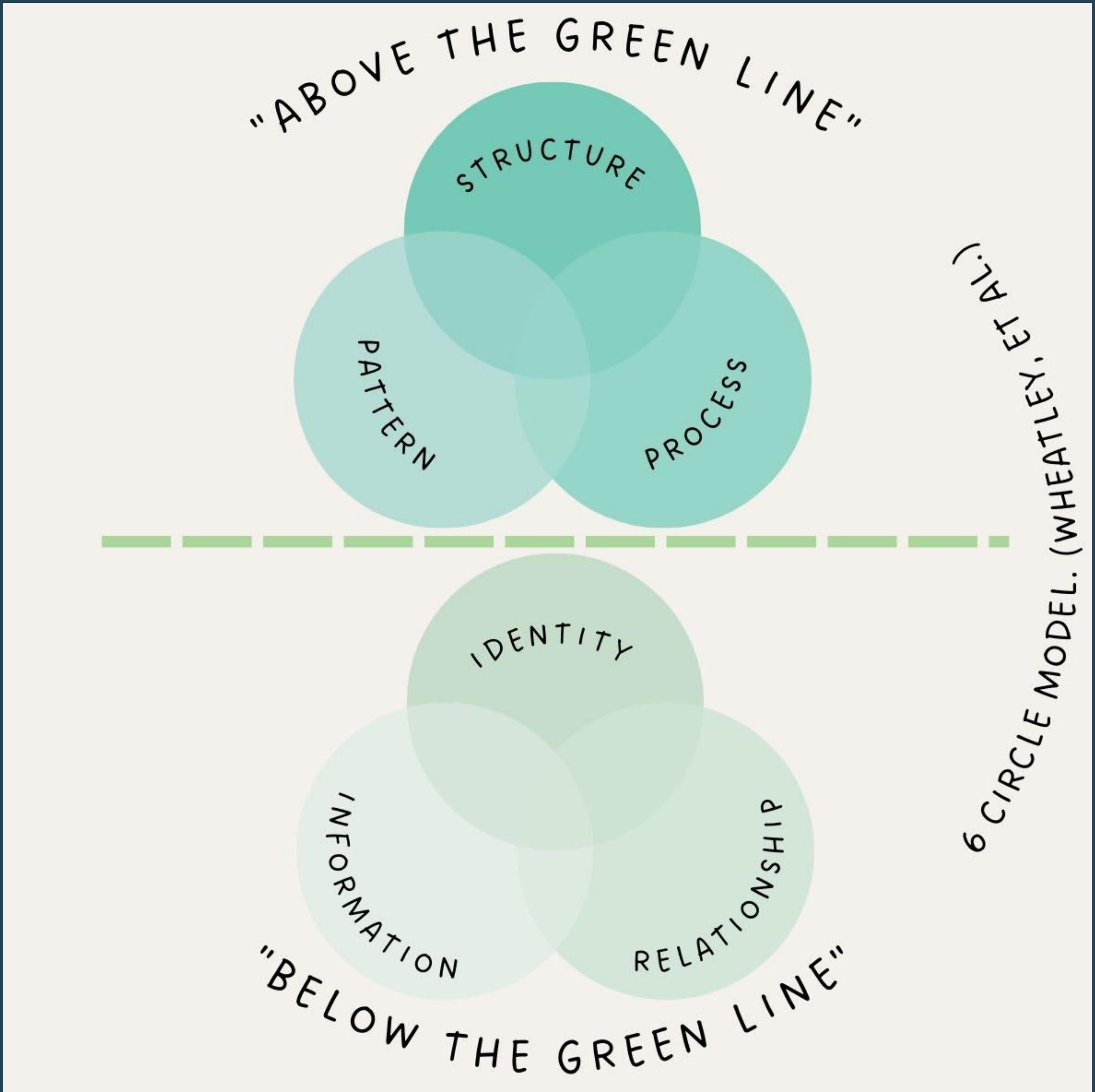
Schools Are Loosely Coupled Systems: A Little Wisdom from Karl Weick

Loosely coupled systems preserve novelty, so they are good reservoirs of flexibility. Loosely coupled systems can also adapt to small changes in an environment, especially when that environment is diverse and segmented. Departmental units that are free to vary independently may provide a more sensitive mechanism for detecting changes in the environment, and they allow the school to adapt quickly to conflicting demands.

Moreover, problems that develop in one unit are sealed off from affecting other units, local adaptation allows the rest of the system to function in a stable manner, costs of coordination are reduced, and solutions can be improvised without necessarily violating central policies and procedures.

So… How Do We Move a Loosely Coupled System?

1. Start with one on ones: Listen, listen, listen
2. Co-construct a shared vision for change that is deeply grounded in the local context and values
3. Weave coherence in every interaction (jargon-free ways of simply communicating the shared vision)
4. Build a guiding coalition (informal authority is key)
5. Empower that coalition to act locally in ways that are consistent with the overall vision (and support with resources)
6. Create many opportunities for lateral sharing
7. Create many easy on-ramps for people who want to join your movement (organizing model)


"ABOVE THE GREEN LINE"
STRUCTURE
PATTERN
PROCESS
IDENTITY
INFORMATION
RELATIONSHIP
"BELOW THE GREEN LINE"
6 CIRCLE MODEL. (WHEATLEY, ET AL.)

Returning to the Puzzle

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How can you proceed in a way that:

a) Is deeply owned by the people on the ground?
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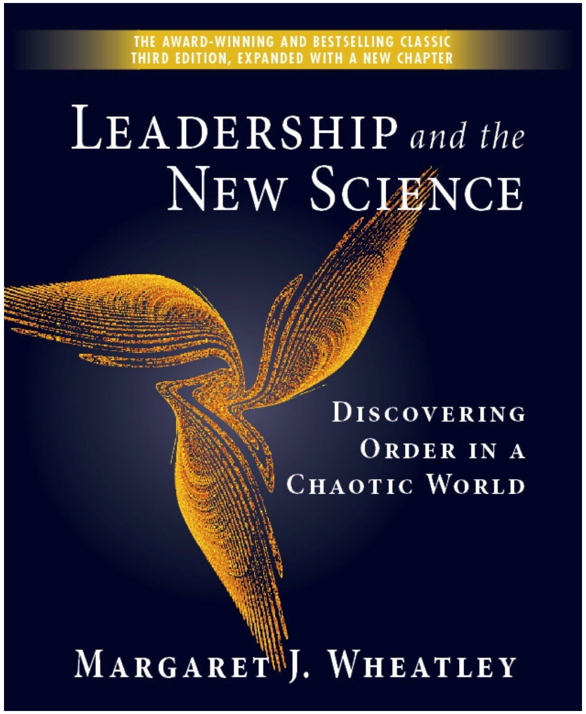
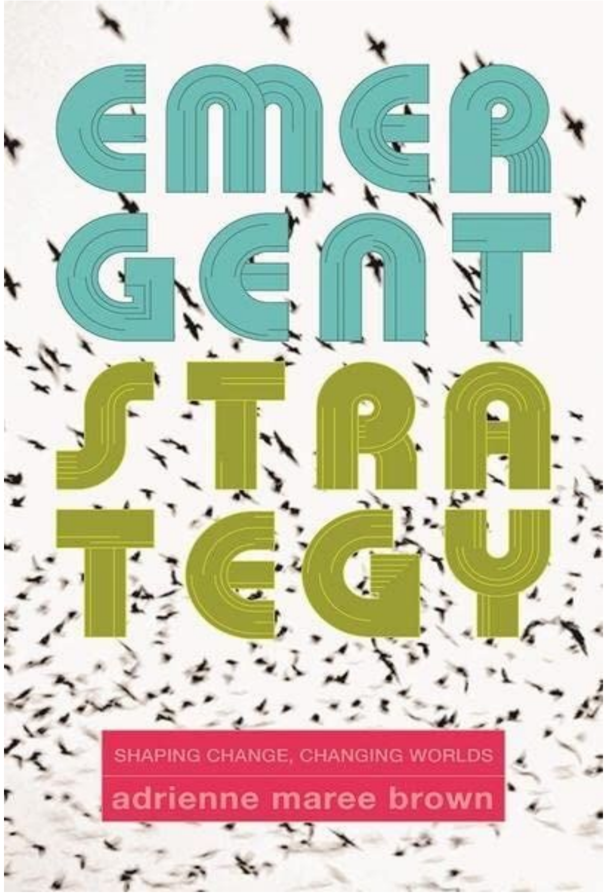
Reflect: What are you thinking differently about now about how to tackle this challenge?

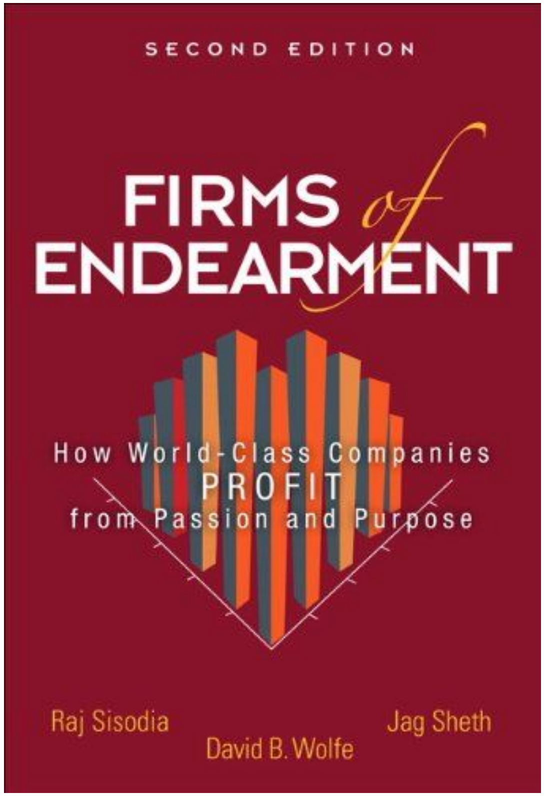
Complexity



Equity



Relationships



Questions?

Extra Stuff

A Different Way of Seeing, Relating, and Being

	Model A (The Old Way)	Model B (The New Way)
Key values	Control, rule following, impersonal relationships	Learning, innovation, flexibility, relational trust
Leadership	Hero (control)	Host (distributed)
Social organization	Hierarchical	Flat (circular)
Relationships	Shallow and transactional	Deep and vulnerable
Approach to problems	Blaming, finger pointing	Collaborating, possibility creating
Approach to equity	Performative and defensive	Distributing power and learning together
Relationship to research	Evidence-based (linear model–unidirectional)	Evidence-informed (inquiry model – bidirectional)
Approach to scale	Implement with fidelity	Networks of networks
Overall approach	Bureaucracy	Public profession

Symmetry:
What Do Adults Experience?

- Command and control
- Faddish and churning
- "Driving change"
- Batch processing
- Death by powerpoint
- Absence of trust

(20th century mode of leadership: Command and control, management by objectives, Newtonian metaphors)

Symmetry: What do Adults Need?

- Competence, autonomy, relatedness
- Agency and choice
- Opportunities to experience as adults the learning we want for students
- Below the green line: Trust and relationships

(21st century mode of leadership: Listening leader, ethic of care, below the green line, emergence, culture of rigor and joy)

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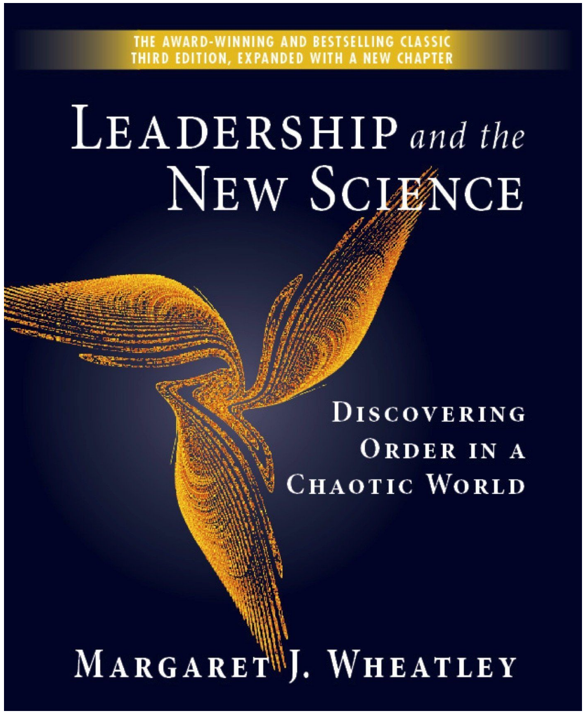

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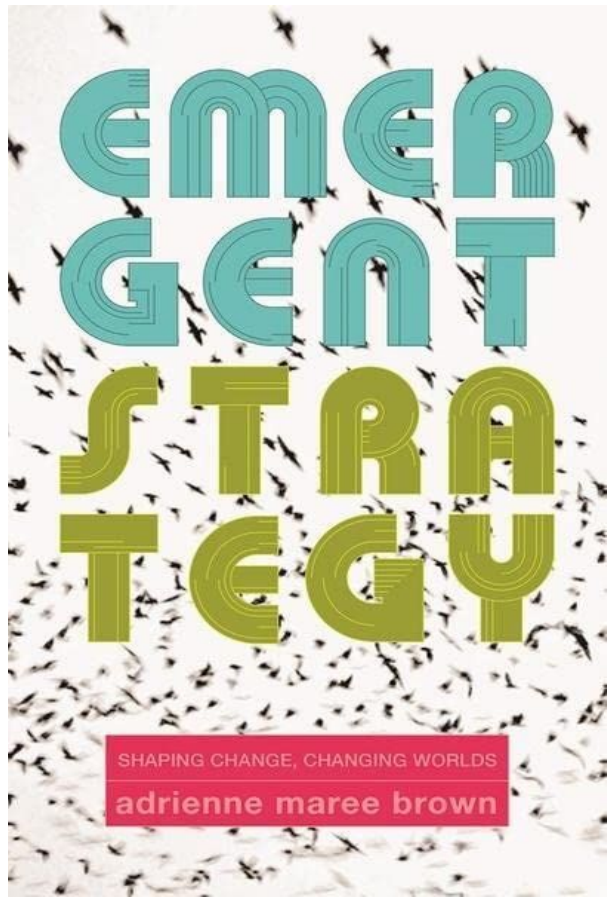
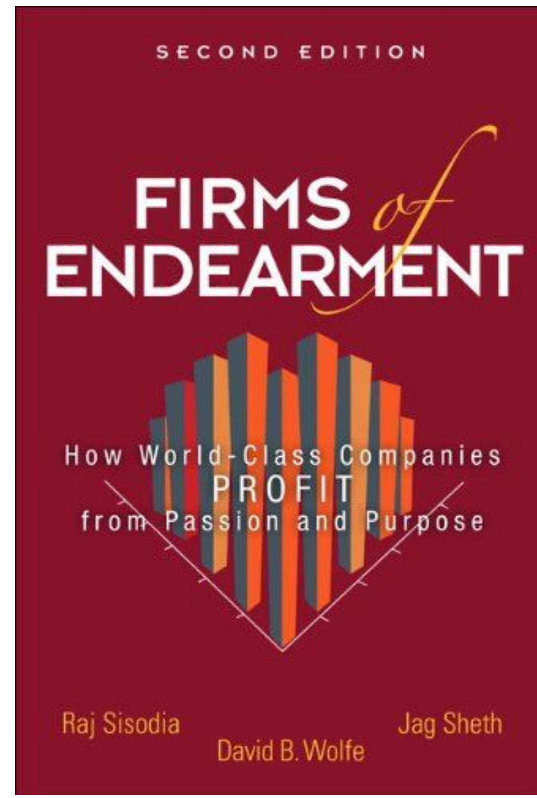


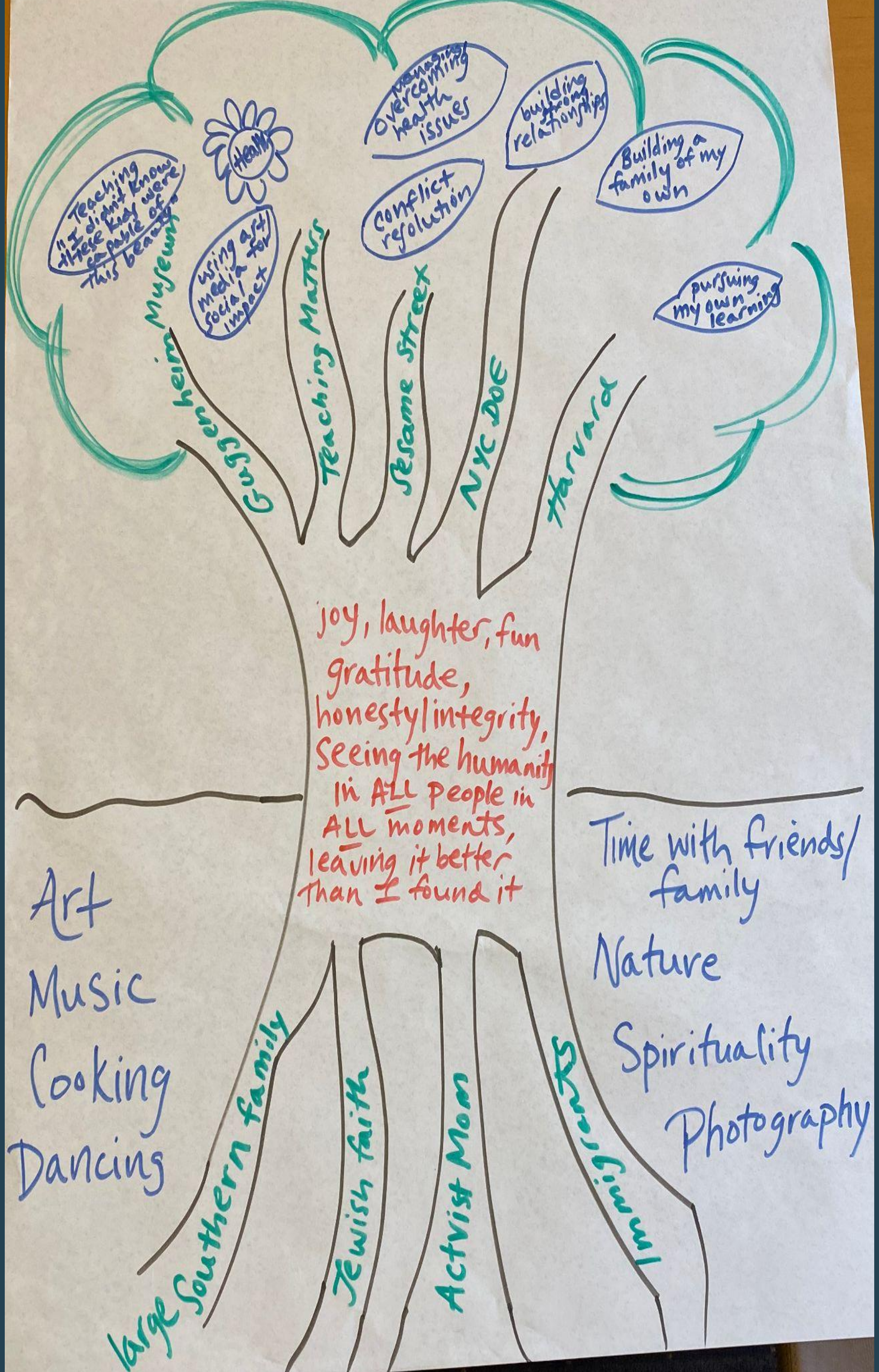
Relationships



The Deeper Learning Dozen

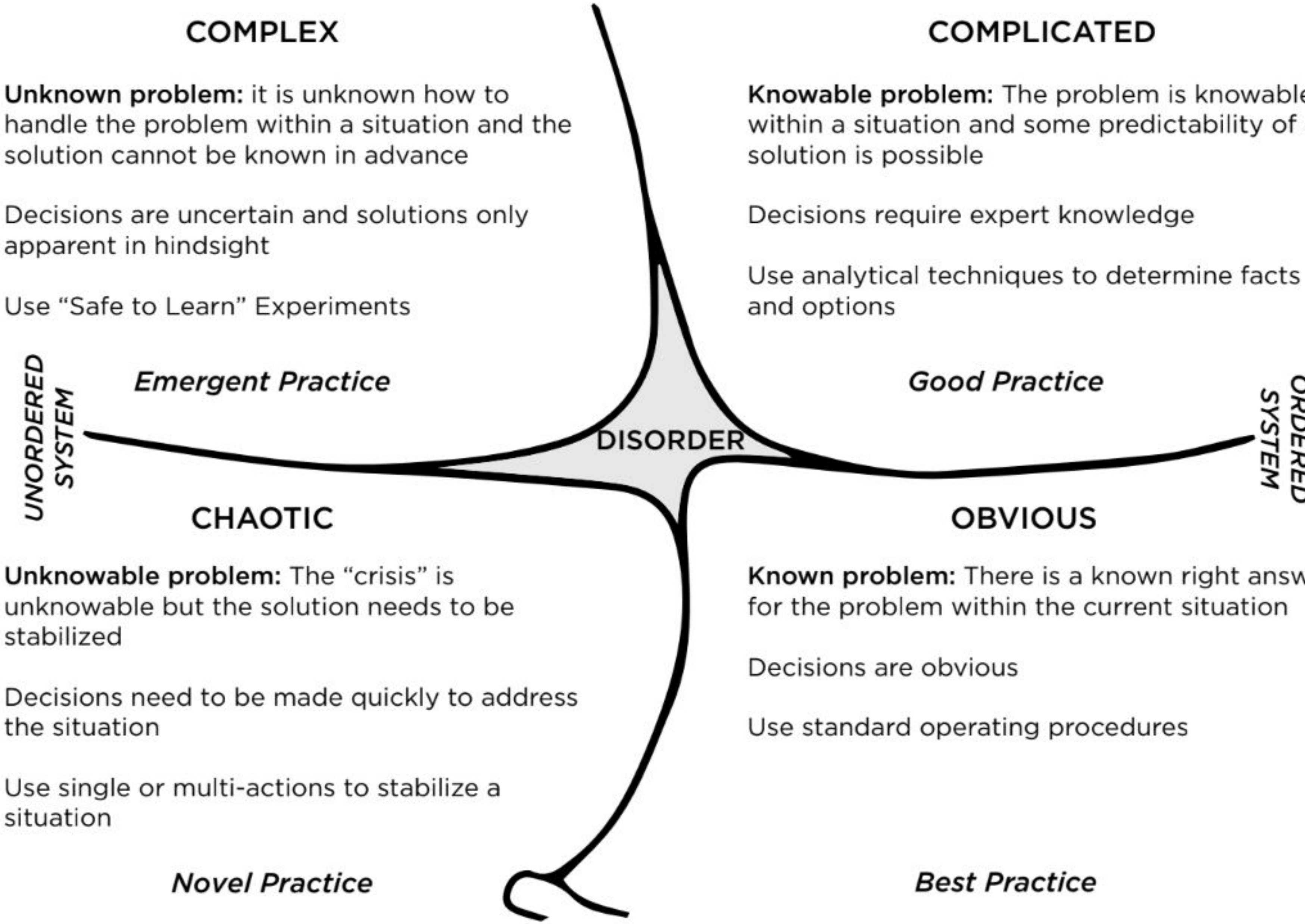
Abbotsford School District	Arlington Public Schools	Burlington School District
Cowichan Valley School District	Kentucky Department of Education	Kootenay Lake School District
Madison Metropolitan School District	Monterey Peninsula Unified School District	Nisga'a School District
Revere Public Schools	Vancouver School Board	West Contra Costa Unified School District

Performance to Learning



Building Trust

Jam Session


COMPLEX
Unknown problem: it is unknown how to handle the problem within a situation and the solution cannot be known in advance
Decisions are uncertain and solutions only apparent in hindsight
Use "Safe to Learn" Experiments
Emergent Practice
COMPLICATED
Knowable problem: The problem is knowable within a situation and some predictability of solution is possible
Decisions require expert knowledge
Use analytical techniques to determine facts and options
Good Practice
UNORDERED SYSTEM
DISORDER
ORDERED SYSTEM
CHAOTIC
Unknowable problem: The "crisis" is unknowable but the solution needs to be stabilized
Decisions need to be made quickly to address the situation
Use single or multi-actions to stabilize a situation
Novel Practice
OBVIOUS
Known problem: There is a known right answ
for the problem within the current situation
Decisions are obvious
Use standard operating procedures
Best Practice