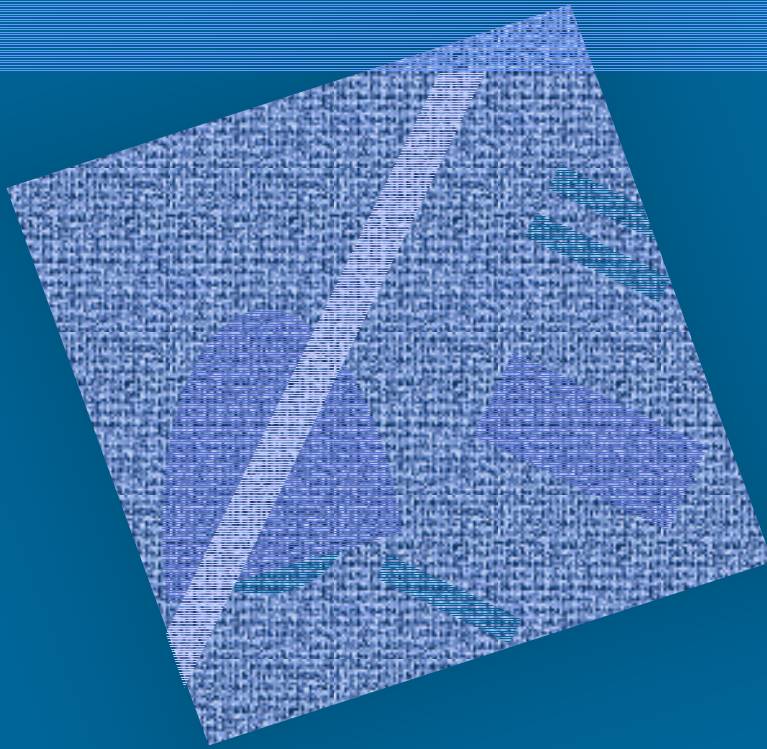# Systems Thinking/Systems Changing™

A Computer-based

Simulation for Leaders

of Learning

Prepared for

The Eighteenth International

Conference of the

Systems Dynamics Society

Bergen, Norway

by

Dr. David P. Crandall

# Note to Viewers

The slides in this presentation are intended to be viewed in conjunction with the Demonstration version of The NETWORK's Systems Thinking/Systems Changing™ simulation that accompanies them on the Conference CD. For further information, please contact:

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# Assessing your success: Levels of Change Leadership

■ The simulation provides participating teams with feedback and an evolving picture of their team's relative proficiency/success.

■ Based on:

- total number of ultimate benefits (Bennies) and
- client system's player progress to mastery and renewal stages.

■ The six levels of proficiency that can be attained are listed to the right.

## Levels

- Apprentice
- Novice
- Manager
- Leader
- Expert
- Change Master

# Today's situation:

- Schools have made large investments in technology

- Schools investment in professional development is increasing

- Technology use by adults is minimal

# Where are we heading?:

- Investment in technology will continue
- Pace of change will increase
  - Standards movement
  - High stakes testing
  - New curricula
  - Fallout from charters, teacher retirements, legislative intrusion

# New Demands on School Leaders

- **MORE EMPHASIS ON**
  - Leading/Managing
  - Curriculum
  - Instruction
  - Assessment
  - *Learning*

- **LESS ON**
  - Administration

# A learning organization can . . .

- Change how it thinks and acts.
- Adapt to changing conditions.
- Do what it was never able to do before.
- Continually expand its capacity to create its future.
- Create an environment where people are continually learning how to learn together.

Senge, P. (1990). *The fifth discipline.* New York Doubleday.
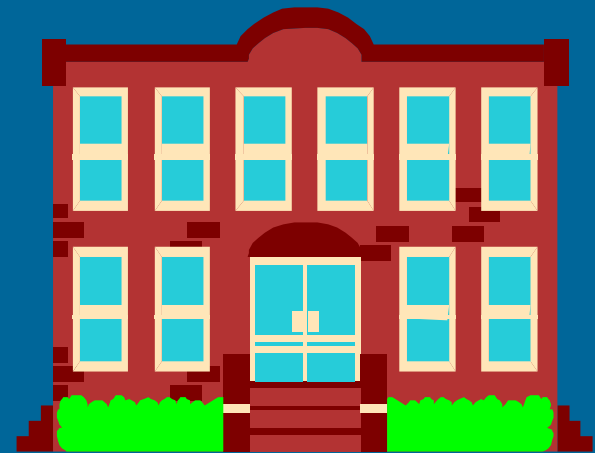
# People change, not organizations: Planning for Change

- **Innovators**
- **Leaders**
- **The Majority**
- **Resistors**

# Stages of Change

- **Awareness:** I am not concerned about the change and am not taking action. I need information to develop my interest.

- **Preparation:** I've information about the change and how I'd use it, but am worried about how it will affect me. I need help getting organized and developing new skills.

- **Practice:** I am spending all my time learning how to think and do things differently. I'm concerned about doing a good job. I need support to take risks and feedback (data) to help me solve problems and master the new approaches.

- **Mastery/Integration:** I'm comfortable with the new practices and integrated them into my daily activities. I'm looking for ways to increase my knowledge and skills. I need leadership and feedback to encourage this. I'd like to coordinate more with my colleagues to make things work best.

- **Renewal:** I have new plans I want to implement that will improve outcomes. I need current data and help planning and building support for my new ideas.

# Change Types:
## Innovators - Trailblazers
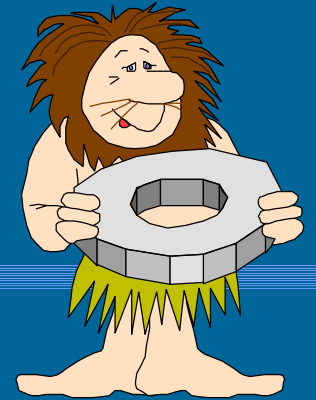
**Change Characteristics:**
- Like change, any change
- Small % of people
- Outside the mainstream
- Provide energy for change

**Change Strategies:**
- Involve them early
- Share your vision of change
- Include them in activities
- Use their energy
- Talk to them

**In your school?**

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# Adopter Types:
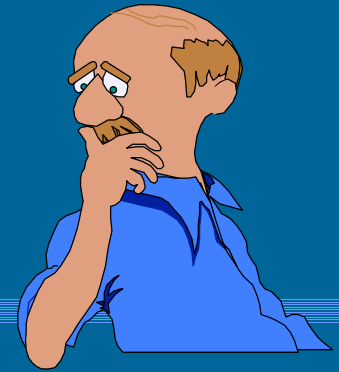## Leaders - Pioneers

## Change Characteristics:

- Open to change, but they consider the effects first
- Small % of people
- Not necessarily administrators
- Provide direction for change

## Change Strategies:

- Talk to them early
- Seek input/opinions
- Give them responsibility
- Keep talking to them

## In your school?

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# Adopter Types:
## The Majority - Stay-at-Homes

### Change Characteristics:

- Cautious about change
- Large % of people
- Look to their leaders first
- Will move with the group
- Concerned about their ability

### Change Strategies:

- Get leaders' support first
- Involve in group activities
- Support their efforts to change
- Confirm change as policy
- Use pressure as needed

### In your school?

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# Adopter Types: Resistors
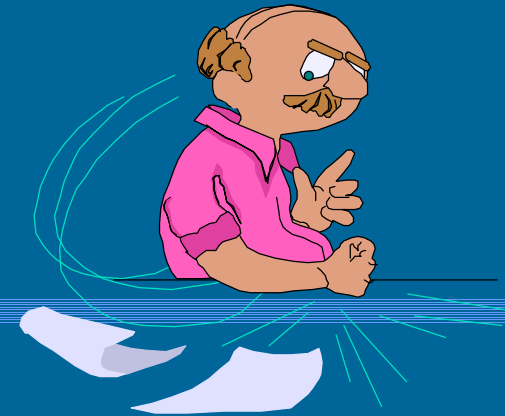
## Change Characteristics:

- Resist almost any change
- Small % of people
- Are not leaders
- Others do not follow them

## Change Strategies:

- Resistance is natural
- Talk to them; assess response
- But don't waste energy
- Involve selectively in groups
- Don't confuse with other types

## In your school?

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# Building the Learning Organization

- Systems thinking

- Personal mastery

- Mental models

- Team learning

- Building a shared vision

Senge, P. (1990). *The fifth discipline.* New York Doubleday.

# Personal Mastery

- Learning to expand our personal capacity to create the results we most desire,

- Creating an organizational environment which encourages all members to develop themselves toward the goals and purposes they choose.

Senge, P. (1990). *The fifth discipline.* New York Doubleday.

# Mental Models

- Deeply rooted assumptions, generalizations or images that influence how we understand and interact with the world.

- Must first make our mental models apparent, then question their validity.

- Mental models are surfaced by team learning

- Shared vision can challenge our mental models

Senge, P. (1990). *The fifth discipline.* New York Doubleday.

# Team Learning

- Think insightfully about complex issues and engage in innovative, coordinated action.

- Begins with dialogue, the capacity of members to suspend assumptions and "think together."

- Develops skills of groups to look for the larger picture that lies beyond individual perspectives.

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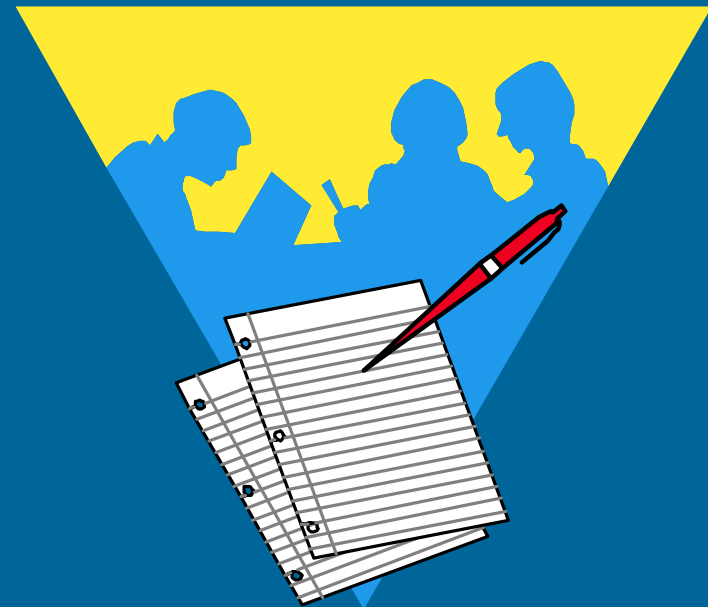
# Shared Vision

- Creating shared pictures of the future that foster genuine commitment and enrollment among school community members, rather than compliance.

- Think big, start small.

- Ambitious, challenging, shared quest -- "mission"

Fullan, M. (1993). *Change forces.* London: Falmer Press.

# Systems Thinking

- A discipline for seeing wholes,

- A framework for seeing patterns and inter-relationships among parts

- Helps us see patterns and learn to reinforce or change them effectively.



Senge, P. (1990). *The fifth discipline.* New York Doubleday.

# Components of Successful Change

- Effective Leadership

- Role of People in the Change Process

- Systems Perspective

- Understanding and using the Process of Change

# Leaders of Learning Organizations

- Designers of the learning process

- Stewards of the shared vision

- Teachers of systems thinking

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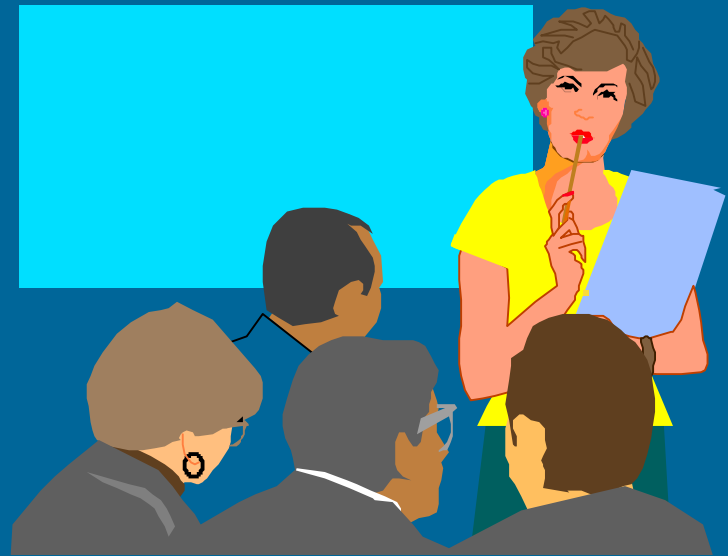
# You have to beat the path by walking it.

"There is no ready answer to the "how" question. Singular recipes. . . oversimplify what it will take to bring about change in your own situation. Even when you know what research and published advice tell you, no one can prescribe exactly how to apply [it] to your particular workplace and all the unique problems, opportunities and peculiarities it contains."

From Fullan & Hargreaves, *What's Worth Fighting for Out There*, 1998, p. 106