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Software Engineering Institute

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Tools of the Change Warrior

Change is hard, especially when you are leading.

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Overview

Why Change? It is all about improvement and thus it is always about change.

The role of TSP Coaches is to coach team members, team leaders, teams, management, and organizations through continuous improvement.

This presentation is an overview of some of the "soft" skills needed.

"I made that!"

Change Warrior Version 1.0

An Example CMM Rating Chart

Software Project Planning
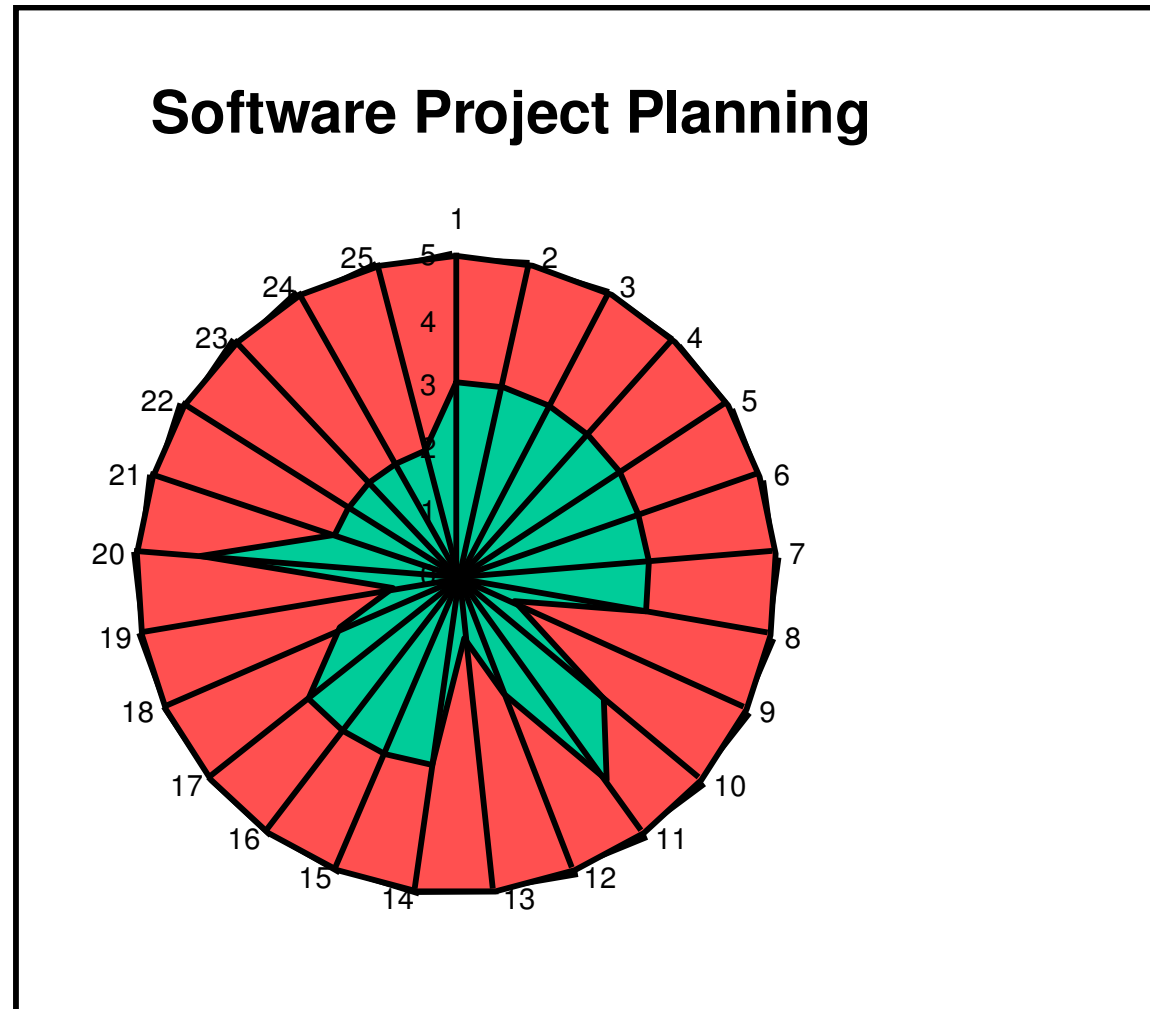
Responses
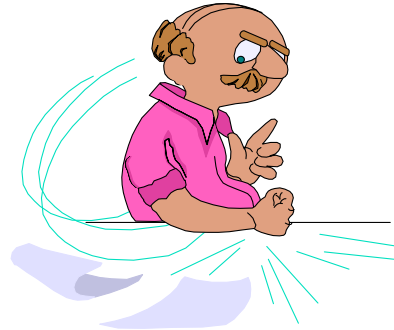
The Grieving Cycle
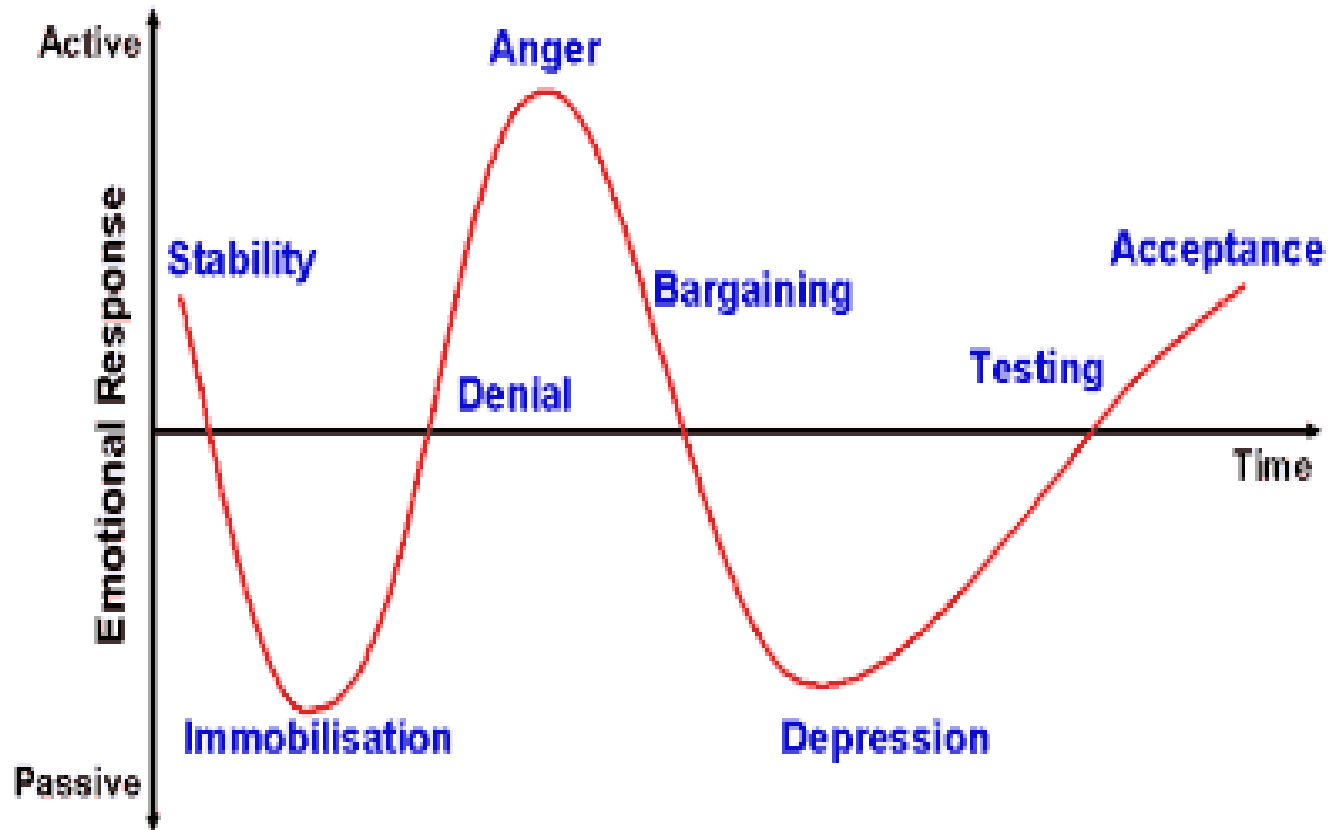
http://changingminds.org/disciplines/change_management/kubler_ross/kubler_ross.htm

Culture Change

A culture is a self reinforcing system.

A culture is a group of people sharing a "system of belief".

The longer the history, the deeper the roots of those beliefs.

Culture change is about changing how people behave.

It is changing their "minds".

PLANNING ISSUES

Examples of Known POTHOLES
- design bandwidth
- overloaded CM
- goals,reqs, design "too slow"
- known new reqs, requests coming

LACK OF INTEGRATED END TO END DEVELOPMENT PROCESS/ PLANNING PROCESS
• Participating orgs are often viewed as "not connected"
• entry /exit of phases is not understood
• There is no end to end plan (or replan)
• Existing plans don't encompass all work

ASSUMPTIONS CHANGE WITHOUT RENEGOTIATION OR REPLAN
- don't fill TBDs, SPARs come in, ...

??? lack of confidence that the process will produce the overall schedule required ??

late starts

known "potholes" are hard to steer around

Events occur in large stressful bunches (Bow Waves)

MANY PEOPLE DON"T CONSIDER "NO" OR "LATER" AN OPTION. ITS JUST "THATS HOW IT IS"

More Work with Same Resources

Design Starts Before Reqs, Code Before Design

process isn't repeatable

can't get right people together at same time

LACK OF PROCESS COMPLIANCE
• process not right
• schedule pressure

Defects happen & found late

"PROVE YOU CAN'T" CULTURE -CANNOT SAY "NO"

creates intense schedule pressure

TERTIARY EFFECTS

Management doesn't have enough time to work improvements, oversee the process.

People are in a highly fragmented work mode (interrupt driven, not very productive)

Priorities seems to constantly shift. ("Nothing is stable, even for a day.")

Planning process deteriorates; inadequate consideration of
• Contingencies/Risks • Impact Analysis • Commitments being made or missed

Marketing and engineering relationship is put under great stress.

•High Rework
•Less Feature "Richness" than desired

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PLANNING ISSUES

LACK OF AGREED TO COMMITMENT PROCESS
• entry /exit of Goal - Req - Design phases is not understood? agreed? documented

"Marketing tries to slip things in"

ENGINEERING DOESN'T TRUST MARKETING.
- changes minds
- doesn't know what customer wants

Marketing uses early ideas of release content as base for business case

marketing asks for more in attempt to get what they want

goals don't have enough detail (or detail is too late)

Marketing/engineering don't agree on when "commitments" are made

"engineering doesn't respond in time critical manner"

requirements written from slideware

"engineering doesn't divulge slips / changes until last minute"

"marketing doesn't respond in time critical manner"

reqs "late" to designers

goals are perceived differently at each stage

design responds "late" that "can't be done"

MARKETING DOES NOT TRUST ENGINEERING

implementation doesn't match original intent

TERTIARY EFFECTS

Marketing and engineering relationship is put under great stress.
Communication breakdowns.
Business case assumptions are consistently invalid.
Marketing is starting to go outside Xerox for software.
Exacerbates the other problems.

• **BUSINESS CASE ASSUMPTIONS NOT MET**

Responses

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Tool Summary 1

CMMI

Audits

Grieving Cycle

System Thinking

Culture

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TSP

Some other cool stuff…

Launch Meeting 4 Example

Team Member: *I estimate that task to take 100 hours.*

Team Leader (coming out of chair, loudly, with passion):
You're killing us!

Giving Feedback

Some elements of giving feedback that can help you be heard.

- Within yourself, if possible, remove judgment

- Concisely tell what you perceived

- Concisely tell what possible meaning you draw from your perception

- Concisely tell how you feel about that perception

- Listen

Reference: **What Did You Say? The Art of Giving and Receiving Feedback** by Charles Seashore, others.

The Response

TSP Coach: Before we review and change estimates, I want to ensure we get through the whole list.
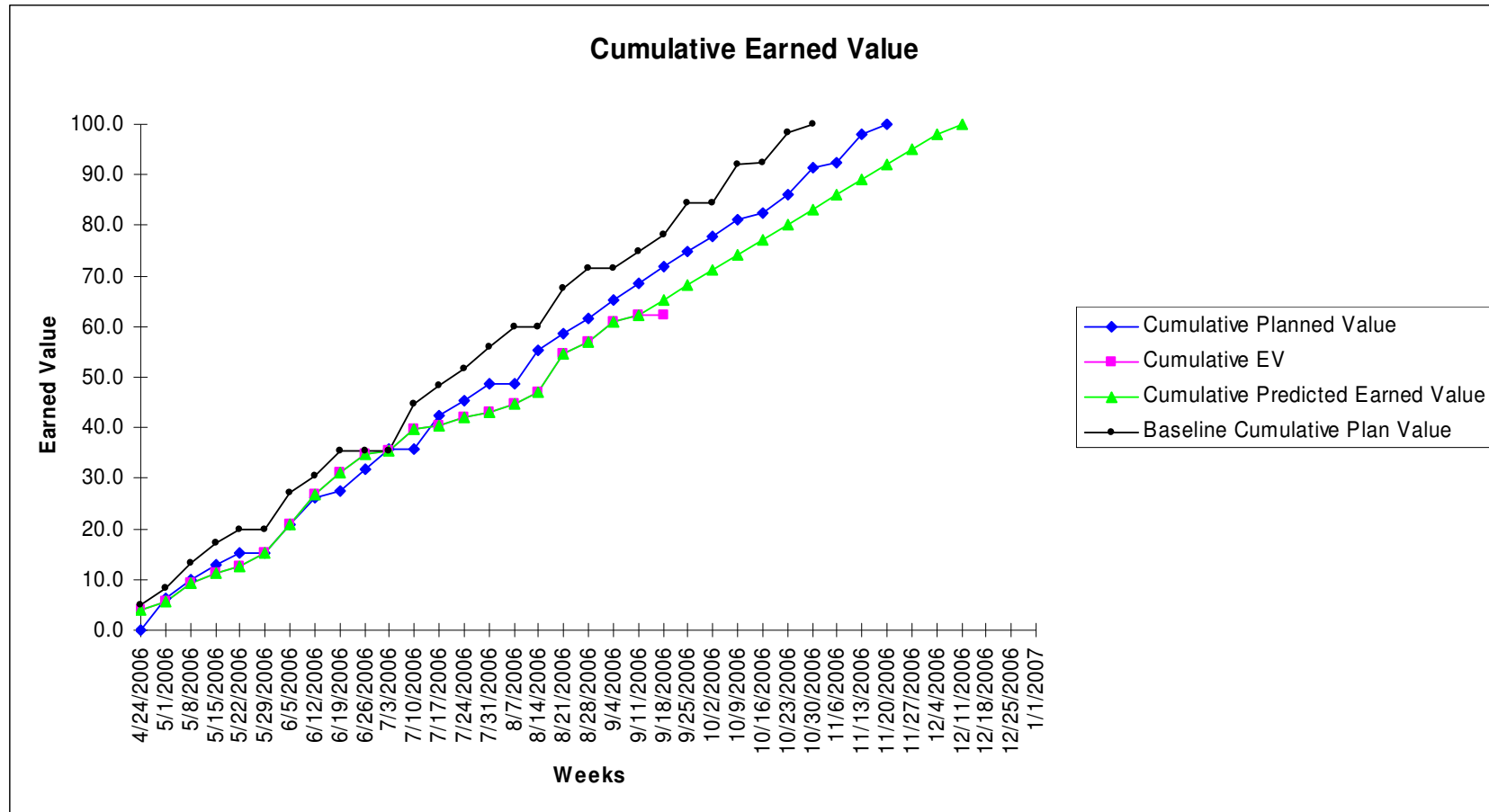
The TSP Coach waited a few minutes, until the team was going through stuff at a reasonable pace, privately took team leader out of room.

TSP Coach: The way you rose out of your chair and raised your voice made me wonder what was up for you?

TSP Coach: I would like to give you some alternative suggestions for achieving your goals. Are you open to them?

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Typical EV Chart for this Organization

Cumulative Earned Value

Legend:
- Cumulative Planned Value
- Cumulative EV
- Cumulative Predicted Earned Value
- Baseline Cumulative Plan Value

"Management works *in* the system.
Leadership works *on* the system."

Stephen Covey

Special Event with Management Team

1. "Is it okay to finish early?"

2. "Do not be as soon as possible – be as sure as possible!"

3. A plan for setting expectation

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Expectations of Excellence

1. Build a product the customer will truly appreciate.
2. Quality is key.
3. Create a plan that makes an "as sure as possible" commitment.
4. Variance Happens – understand variance and use data and process to minimize.
5. Minimize late surprises.
6. Use data to guide continuous improvement (Customer Satisfaction, Quality, Predictability, Productivity)

Tools Summary - 2

Survival Rules

Receiving and Giving Feedback
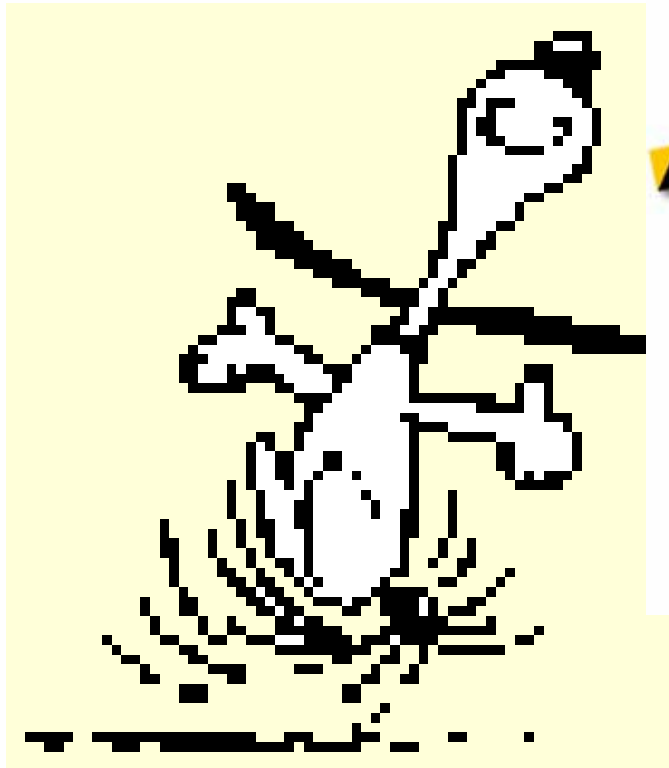
Pilots as a tool for cultural understanding

Cognitive Dissonance

Story Telling

Setting Expectations

~~Change Warrior Version 3~~
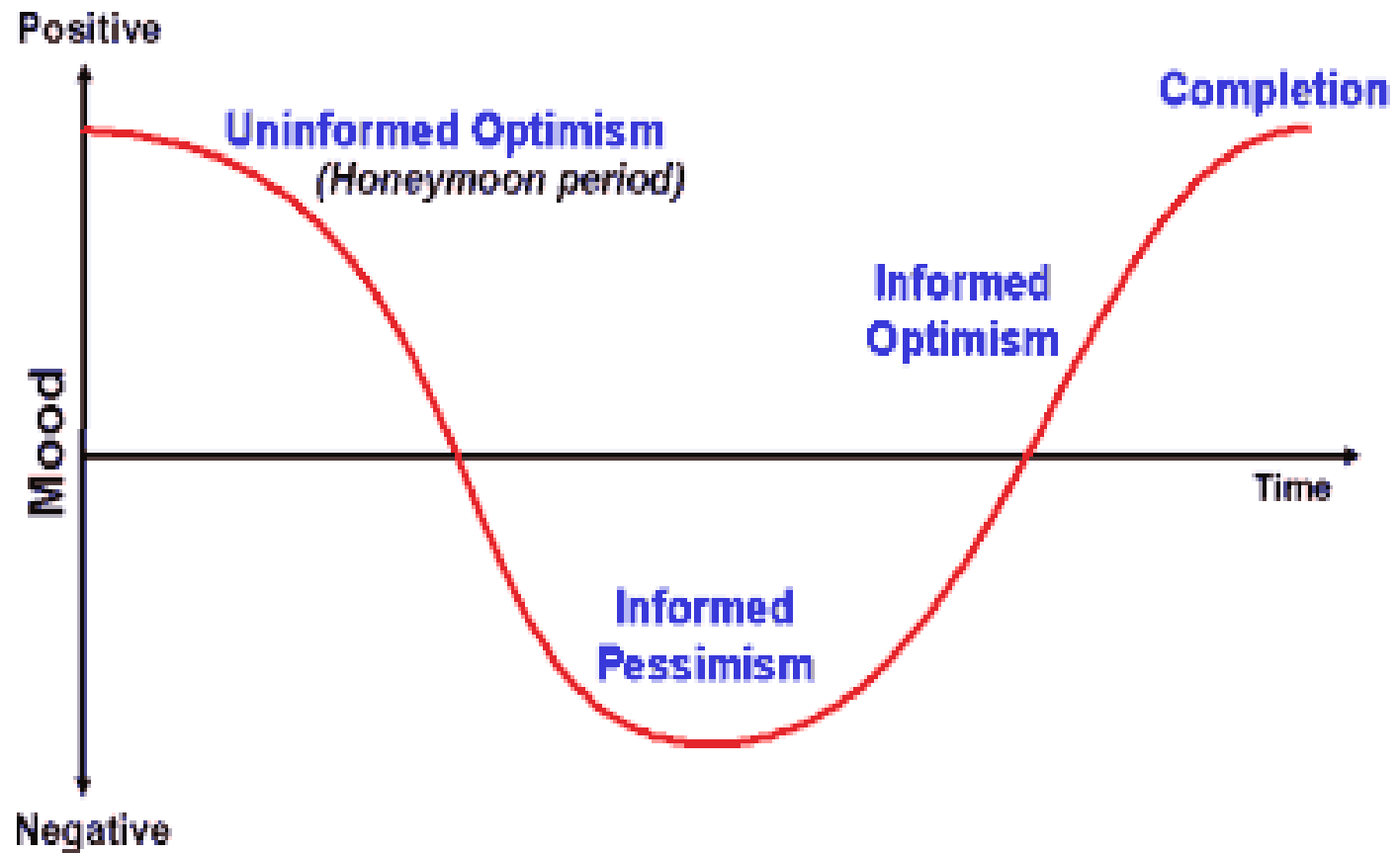# Change Wizard Version 1.0

Satir Change Model

Reference: Gerald Weinberg, Quality Software Management Volume 4

Positive Change Cycle

Proactive Tools

Framing / Re-framing

Model the Change You Want to See

Backward chaining

A Sampling of Change Tools

Sense making

Sense making
Audit
Pilots as cultural probes
Types of Teams
Mars and Venus
System Thinking

Strategies for Change

Pearl
Embrace and Extend
Model Based
12 O'Clock High
Linking Initiatives
Building Coalitions
Back chaining

Understanding Change

Change models
Grieving Cycle
Positive Change Cycle

Language of Change

Framing
Setting Expectations
Meme
Metaphor / Story Telling
Giving/Receiving Feedback
Truth telling
Socratic questioning
Appreciative Inquiry

Personal Management

Be the Change
"Circle of control, of
influence, of concern"
Courage
Compassion
Patience
Listening
Congruence

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I get up every morning determined to both change the world and have one hell of a good time. Sometimes this makes planning my day difficult.
E. B. White (1899 - 1985)

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