COPYRIGHT INFORMATION

The slides in this file are licensed under a Creative Commons Attribution license. You are free to use, copy, remix, transform, build upon and redistribute the slides in any medium or format.

The only requirement is to note the original source on each slide you use, for instance by adding “By Mike Rother” in small print somewhere on the slide.
THREE THINGS I LIKE ABOUT IK/CK

1. It's not a list of elements. It's a behavior model with practice routines.
2. It's ultimately D.I.Y.
3. It's an Open System

WHAT DOES IT TAKE TO CHANGE OUR THINKING?

- Get a piece of paper and a pen
- Start when I say “go”
- Sign your name 5 times normally
- When you are finished raise your hand
LET’S TRY JUST A SMALL CHANGE

- Change hands, to non-dominant
- Start when I say “go”
- Sign your name 5 times again
- Raise your hand when you are finished

HOW DID IT FEEL THE SECOND TIME COMPARED TO THE FIRST?

This begins to frame the task

Remember this feeling the next two days
ORGANIZATIONAL CULTURE
A self-perpetuating mindset and behavior loop

MINDSET

CULTURE

BEHAVIOR

Every time you think or do something you are more likely to do that again. You're writing 'highways' in your brain.

YOU CAN ADJUST YOUR CULTURE
You can modify a culture by getting people to practice acting differently on a day-to-day basis

MINDSET

CULTURE

BEHAVIOR

Build the culture you want, habit by habit, by practicing different ways

© Mike Rother

Toyota Kata
THERE’S AN **OVERALL, UNIVERSAL HABIT:**
THE **META SKILL OF SCIENTIFIC THINKING**

Practicing the Improvement Kata and Coaching Kata is not the solution to a problem. It's learning how to go about solving problems.

Scientific thinking is a content-neutral, universal skill for finding our way to challenging goals along uncharted paths.

We don’t know what the problems and solutions of the future will be, so it's a good idea to practice this kind of meta skill.

---

WHAT THE IMPROVEMENT KATA AND COACHING KATA ARE ABOUT

**Scientific Thinking Pattern + Deliberate Practice (with Kata)**
WHAT THE IMPROVEMENT KATA AND COACHING KATA ARE ABOUT

Scientific Thinking Pattern + Deliberate Practice (with Kata)

READ WHAT YOU SEE

IUMPING TO CONCLUSIONS

IUMPING TQ GQNGIUSIONS

The brain does this quickly and without informing us (unconsciously)
THERE YOU HABIT

OUR BRAIN FILLS IN BLANKS
Automatically, quickly and silently

We often don't notice a Knowledge Threshold because our brain is filling in blanks

WE NEED THIS COGNITIVE MECHANISM TO GET THROUGH THE DAY

But it also causes problems
Key points about Knowledge Thresholds:

1) They're hard to see, until you practice seeing them (we tend to go right through them)

2) We see farther by trying something. The Knowledge Threshold is the Learning Edge, where your next experiment should take place.

3) We don't know in advance what the result of a step/experiment will be

How to Handle Knowledge Thresholds

**SCIENTIFIC THINKING!**

Scientific thinking is a routine of intentional coordination between what we think will happen, what actually happens, and adjusting based on what we learn from the difference.

This thinking & working pattern allows us to reach challenging new goals through unclear territory
A PRACTICAL MODEL OF SCIENTIFIC THINKING

The Four-Step Pattern of the Improvement Kata

1. Challenge

2. Current Condition

3. Next Target Condition (date)

4. Experiments Toward the TC

Threshold of Knowledge

WHAT THE IMPROVEMENT KATA AND COACHING KATA ARE ABOUT

Scientific Thinking Pattern + Deliberate Practice (with Kata)
THERE ARE OTHER MODELS OF THE HUMAN CREATIVE, SCIENTIFIC PROCESS

So the issue is not the model, but how to operationalize it. That's why there are practice routines (kata) for each step!

JUST EXPLAINING A MODEL DOES NOT GENERATE NEW WAYS OF THINKING & ACTING

Hoping to create different behavior & mindset by explaining, incentives or trying to convince mostly doesn't work
WHY SIGNING WITH THE OTHER HAND FEELS ODD

The brain uses lots of energy. So it creates and prefers unconscious habits to take care of most of our decisions.

Strong Synapses
- Neural path with EASY FLOW
  - These are frequently-used highways in our brain
  - Using them is fast and easy
  - Using them costs little energy

Weak Synapses
- Neural path with FLOW RESISTANCE
  - Less-used brush-covered dirt paths
  - Using them is slow, intentional
  - It costs energy and attention

CAN YOU SEE THE ROLE OF KATA?

1. With Lean we want to change to working scientifically, according to something like the Improvement Kata pattern.
   -- however --
2. We naturally tend to stick with our current ways of doing things because they use existing neural circuits.

Build the culture you want, *habit by habit*, by practicing different ways
**INGREDIENTS FOR ACQUIRING NEW SKILLS**

Think of sports and music. With the following ingredients you can rewire your neural pathways to acquire new skills & habits.

- **STARTER KATA**
  - Structured routines for beginners
  - To practice fundamentals

- **FREQUENT PRACTICE**
  - A little every day

- **MASTERY**
  - Interest, motivation, enthusiasm (growing self efficacy)
  - “I’m getting better at this”

- **COACHING**
  - Corrective feedback
  - To ensure the Learner practices the right patterns

---

**What would happen if you practiced signing with your non-dominant hand?**

- **STARTER KATA**
  - Structured routines for beginners
  - To practice fundamentals

- **FREQUENT PRACTICE**
  - A little every day

- **MASTERY**
  - Interest, motivation, enthusiasm (growing self efficacy)
  - “I’m getting better at this”

- **COACHING**
  - Corrective feedback
  - To ensure the Learner practices the right patterns
TEACHING META SKILL IS A MANAGER'S JOB

Manager

Person the manager is dependent on

THREE THINGS I LIKE ABOUT IK/CK

1. It's not a list of elements. It's a behavior model with practice routines.

2. It's ultimately D.I.Y.

3. It's an Open System
The Improvement Kata and Coaching Kata have starter practice routines that help anyone develop scientific-thinking skills and mindset. Deliberate, coached IK/CK practice is a way of creating a scientific-thinking 'culture' in an individual, a team or an organization.

Ultimately, though, the Kata are not the important thing, but rather the skills and mindset that practicing them leaves behind.

As in music, sports and with other complex skills, you begin by practicing some fundamental Kata until their pattern becomes somewhat routine. Then you can move beyond rigidly practicing the Kata to develop your own style and focus on the sound of the 'music' you are making... as long as the basic principles & patterns of the Kata remain.

**Evolving Your Practice**

The pattern and principles of the Five Coaching Kata Questions remain
TAKE IT WHERE YOU WANT TO TAKE IT

I'm glad you're here. You're part of a process of creating and applying more scientific thinking, for achieving goals.

Only Toyota will be Toyota. Lean is great, but go beyond that and be the organization you want to be, and strive to serve customers the way you think they should be served. You'll see and hear several examples here at KataCon.

THREE THINGS I LIKE ABOUT IK/CK

① It's not a list of elements. It's a behavior model with practice routines.

② It's ultimately D.I.Y.

③ It's an Open System
IK/CK IS A NEW TOPIC AND **THERE IS ROOM FOR ANYONE WHO WANTS TO BE INVOLVED**

11 results from a quick web search last week

**Start the New Year with TOYOTA KATA**

**Two Day Toyota Kata Workshop in Vancouver on Feb 8, 2016 8:00 AM**

**WORKSHOP TOYOTA KATA. Madrid, 27 de noviembre.**

**2 Edición de taller: Lean Workshop TOYOTA KATA**

**Toyota Kata - Wax On, Wax Off (in partnership with ASQ Lean Enterprise Division)**

**Let's Get Started with KataCon!**