

TOYOTA KATA - Daily Practice for Scientific-Thinking Skill and Mindset

Toyota Kata has its origins in Mike Rother's research on Toyota's management system. It has evolved into a popular means of developing scientific-thinking habits in any individual, team or organization – beginning with some 'Starter Kata' practice routines. Starter Kata help you grow new skills and habits.

Scientific thinking is a meta skill we can utilize for achieving any goal, despite unknown paths and unpredictable territory. A *way of thinking* is hard to define, but here's an attempt. If it looks simple note that turning such thinking into a habit takes practice, just like in sports and music. Scientific thinking isn't our default mode as humans.

A definition of **Scientific Thinking**

A way of approaching goals & problems, characterized by:

1. **Acknowledging** that our comprehension is always incomplete and possibly wrong.
2. **Assuming** that answers will be found by test rather than just deliberation. (You make predictions and test them with experiments.)
3. **Appreciating** that differences between a prediction and what actually happens can be a useful source of learning and adjustment.

Be aware that scientific thinking is not the 'scientific method.' You might view the scientific method as a kind of practice routine that can help develop scientific thinking. What's important is not the methods, but the mindset they leave behind.

The two main elements of Toyota Kata are the **Improvement Kata** (which mirrors working like a scientist) and the **Coaching Kata** (which is about how to teach the Improvement Kata). There are Starter Kata practice routines for each.

Some people may naturally tend to view Toyota Kata as a problem-solving method, instead of as a way of developing an everyday scientific-thinking mindset. It's an understandable but unfortunate error that holds them back. Keep in mind that TK is a practice method, not a problem-solving method, and you can go far!

