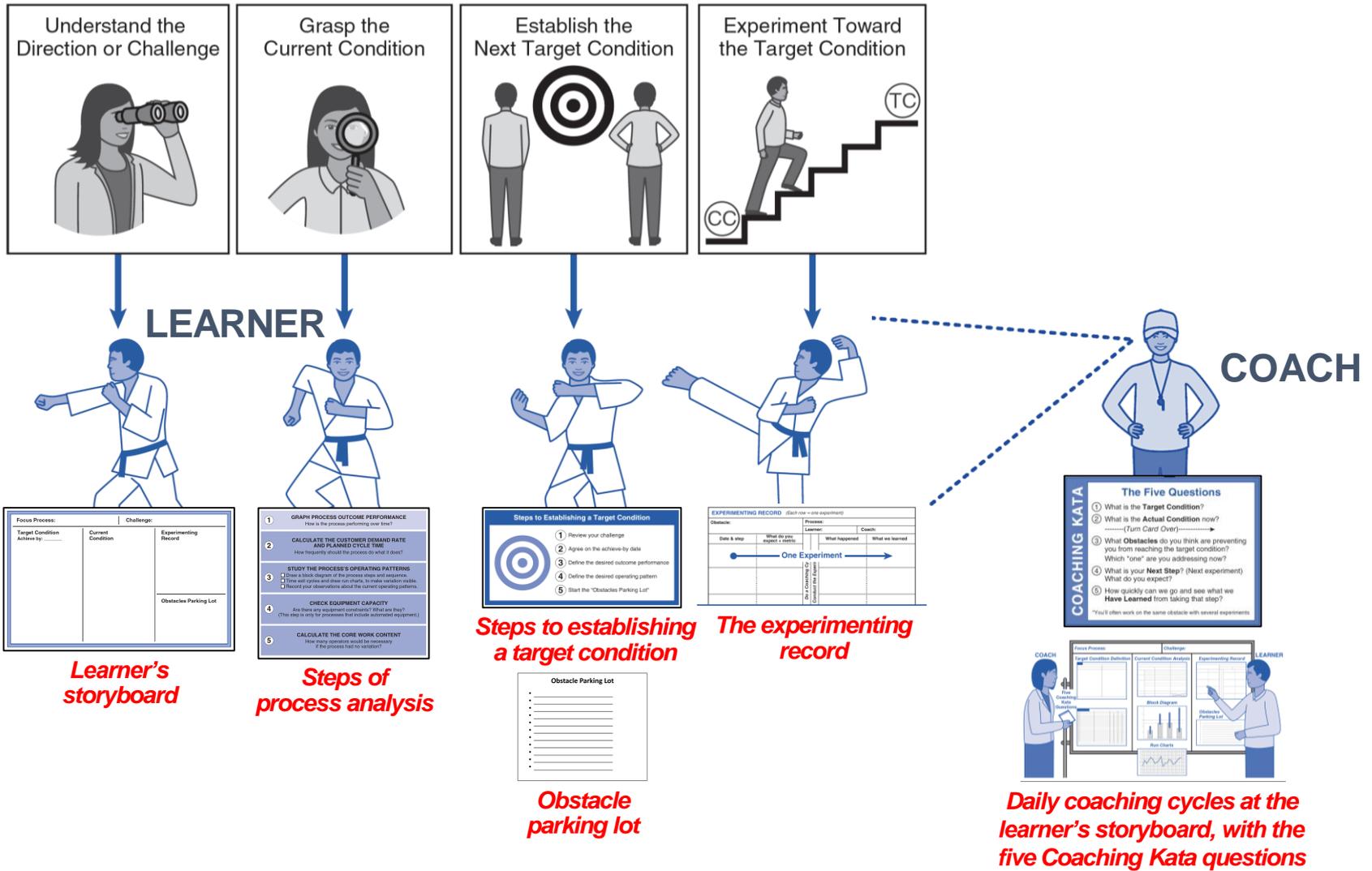


# The Toyota Kata Starter Kata



Instructions for these Starter Kata are in the *Toyota Kata Practice Guide (TKPG)*

# The Learner's Storyboard

FOR THE LEARNER

Start with this board format

| Focus Process:                               |                          | Challenge:                         |
|--|--------------------------|------------------------------------|
| <b>Target Condition</b><br>Achieve by: _____ | <b>Current Condition</b> | <b>Experimenting Record</b>        |
|  |                          | <hr/> <b>Obstacles Parking Lot</b> |

# Steps of Process Analysis

## For grasping the current condition

FOR THE LEARNER

1

### GRAPH PROCESS OUTCOME PERFORMANCE

How is the process performing over time?

2

### CALCULATE THE CUSTOMER DEMAND RATE AND PLANNED CYCLE TIME

How frequently should the process do what it does?

3

### STUDY THE PROCESS'S OPERATING PATTERNS

- Draw a block diagram of the process steps and sequence.
- Time exit cycles and draw run charts, to make variation visible.
- Record your observations about the current operating patterns.

4

### CHECK EQUIPMENT CAPACITY

Are there any equipment constraints? What are they?  
(This step is only for processes that include automated equipment.)

5

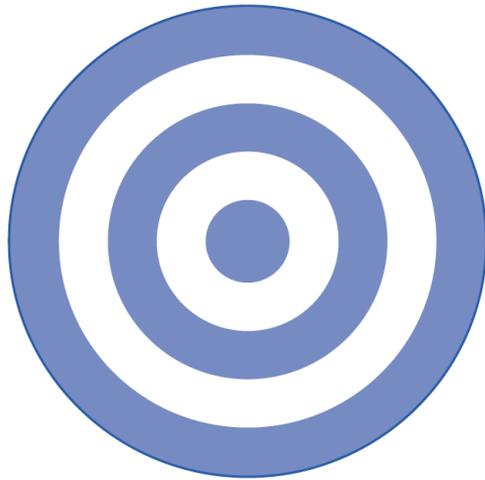
### CALCULATE THE CORE WORK CONTENT

How many operators would be necessary  
if the process had no variation?

# Steps to Establishing a Target Condition

A desired outcome and operating pattern, as your next goalpost

## Steps to Establishing a Target Condition



- 1 Review your challenge
- 2 Agree on the achieve-by date
- 3 Define the desired outcome performance
- 4 Define the desired operating pattern
- 5 Start the "Obstacles Parking Lot"



# Current Condition / Target Condition Form

FOR THE LEARNER

Cut here to post on storyboard



| <b>CURRENT CONDITION / TARGET CONDITION</b>  |  | <b>Outcome Metric</b>    |
|--|--|--------------------------|
| <b>Learner:</b>                              | <b>Coach:</b>  | <b>Focus Process</b>     |
|  |  | <b>Process Metric</b>    |
|  |  | <b>Current Condition</b> |
|  |  | <b>Date</b>              |
|  |  | <b>Target Condition</b>  |
|  |  | <b>Achieve-by Date</b>   |
| <b>1 Outcome Performance</b>                 | <b>Actual output</b>                                     |                          |
|  | <b>Operating time</b>                                    |                          |
|  | <b>Is there overtime?</b>                                |                          |
| <b>2 Customer Demand &amp; Planned Cycle</b> | <b>Requirement</b>                                       |                          |
|  | <b>Takt time</b>   |                          |
|  | <b>Planned cycle time</b>                                |                          |
| <b>3 Operating Patterns</b>                  | <b>Process steps and sequence</b>                        |                          |
|  | <b>Variation</b>   |                          |
|  | <b>Observations about the current operating patterns</b> |                          |
| <b>4 Equipment Capacity</b>                  | <b>Automated equipment constraints?</b>                  |                          |
| <b>5 Core Work</b>                           | <b>Calculated number of operators</b>                    |                          |

# Experimenting Record

FOR THE LEARNER

Use until you overcome an obstacle, then start a new form

| EXPERIMENTING RECORD <i>(Each row = one experiment)</i> |                             |   |        |               |                 |
|---|-----------------------------|---|--------|---------------|-----------------|
| Obstacle:   |                             | Process:                                      |        |               |                 |
|   |                             | Learner:                                      | Coach: |               |                 |
| Date & step   | What do you expect + metric | Do a Coaching Cycle<br>Conduct the Experiment |        | What happened | What we learned |
|   |                             |   |        |               |                 |
|   |                             |   |        |               |                 |
|   |                             |   |        |               |                 |
|   |                             |   |        |               |                 |

The scientific learning cycle is embedded in the experimenting record, to make the cycle easy to practice.

## ACTION

| <b>EXPERIMENTING RECORD</b> <i>(Each row = one experiment)</i> |                             |                        |                 |                 |
|--|-----------------------------|------------------------|-----------------|-----------------|
| Obstacle:  |                             | Process:               |                 |                 |
|  |                             | Learner:               | Coach:          |                 |
| Date & step  | What do you expect + metric |                        | What happened   | What we learned |
| <b>PREDICTION</b>  |                             | Do a Coaching Cycle    | <b>EVIDENCE</b> | <b>EVALUATE</b> |
|  |                             | Conduct the Experiment |                 |                 |
|  |                             |                        |                 |                 |
|  |                             |                        |                 |                 |

Layout of the Experimenting Record = one obstacle per form, one experiment per row. Predict what you expect and compare that with what actually happens. That's how you learn.

| EXPERIMENTING RECORD <i>(Each row = one experiment)</i>   |                             |                  |                      |  |                 |
|---|-----------------------------|------------------|----------------------|--|-----------------|
| Obstacle: <i>This is the one obstacle to the target condition that you are currently working on</i> |                             | Process:         |                      |  |                 |
|   |                             | Learner:         |                      | Coach:   |                 |
| Date & step   | What do you expect + metric |                  |                      | What happened  | What we learned |
|                   |                             |                  |                      |  |                 |
| <i>The prediction side is where you plan the next experiment and predict the outcome</i>            |                             | Do a Coaching Cy | Conduct the Experiri | <i>The evidence side is where you record what actually happened, compare that with the prediction, and record what you learned</i> |                 |
|   |                             |                  |                      |  |                 |

### Prediction Side

### Evidence Side

Written before the experiment

Written after the experiment



**It usually take a series of experiments in order to overcome an obstacle**

# The Five Coaching Kata Questions

Card is turned over  
to reflect on the  
learner's last step

## COACHING KATA

### The Five Questions

- ① What is the **Target Condition**?
- ② What is the **Actual Condition** now?  
-----(*Turn Card Over*)----->
- ③ What **Obstacles** do you think are preventing you from reaching the target condition?  
Which *\*one\** are you addressing now?
- ④ What is your **Next Step**? (Next experiment)  
What do you expect?
- ⑤ How quickly can we go and see what we **Have Learned** from taking that step?

*\*You'll often work on the same obstacle with several experiments*

### Reflect on the Last Step Taken

Because you don't actually know  
what the result of a step will be!

- ① What did you plan as your **Last Step**?
- ② What did you **Expect**?
- ③ What **Actually Happened**?
- ④ What did you **Learn**?

----->  
*Return to question 3*



A printer / copier 5Q card template is on the next two pages

COACHING KATA

## The Five Questions

- 1) What is the Target Condition?
- 2) What is the Actual Condition now?  
-----(*Turn Card Over*)----->
- 3) What Obstacles do you think are preventing you from reaching the target condition?  
Which *\*one\** are you addressing now?
- 4) What is your Next Step?  
(Next experiment) What do you expect?
- 5) How quickly can we go and see what we Have Learned from taking that step?

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COACHING KATA

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Because you don't actually know what the result of a step will be!

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- 2) What did you **Expect?**
- 3) What **Actually Happened?**
- 4) What did you **Learn?**

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*Return to question 3*

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----->  
*Return to question 3*

As your coaching abilities grow you should evolve your own coaching style, which includes adding your own questions. Of course, any additional questions should be consistent with the principles and pattern of the Starter Kata.

Begin with the Starter Kata five-question card. As you get used to the card, start adding notes and your own clarifying questions. One technique is to make a folding card as shown below. The folded card still fits in your pocket, but has space on the unfolded right-hand side to jot down notes and test your own questions. Example notes and clarifying questions are shown here, just as thought starters.

*The Starter Kata Coaching Questions*

*Example notes & clarifying questions*

|                      |  |  |  |
|----------------------|--|--|--|
| <b>COACHING KATA</b> | <b>REFLECTION</b>  | 1) What is the Target Condition?   | <ul style="list-style-type: none"> <li>• Is the target condition connected to the challenge?</li> <li>• What do you want to be happening? • No verbs!</li> <li>• Measurable? • Not 'lack of something' • Achieve-by date?</li> </ul>       |
|                      |  | 2) What is the Actual Condition now?   | <ul style="list-style-type: none"> <li>• Numbers, not opinions. • Can you show me? • How do you know?</li> <li>• How did you get the data? • Is there a run chart?</li> </ul>  |
|                      |  | What did you plan as your Last Step?   | <ul style="list-style-type: none"> <li>• What was being tested?</li> <li>• Is the PDCA Cycles Record filled in?</li> </ul>   |
|                      |  | What did you Expect?   | <ul style="list-style-type: none"> <li>• Was this written down? • Just read it!</li> </ul>   |
|                      |  | What Actually Happened?  | <ul style="list-style-type: none"> <li>• Only facts &amp; numbers. • Are the numbers written down?</li> <li>• Is there a run chart? • What is different than expected?</li> </ul>  |
|                      |  | What did you Learn?  | <ul style="list-style-type: none"> <li>• Did the Learner really reflect on this?</li> </ul>  |
|                      |  | 3) What Obstacles do you think are preventing you from reaching the target condition?  | <ul style="list-style-type: none"> <li>• Is the Obstacles Parking Lot up-to-date?</li> <li>• True obstacles (variation), not action items or lack of a perceived solution.</li> </ul>  |
|                      |  | Which <i>*one*</i> are you addressing now?   | <ul style="list-style-type: none"> <li>• Where does this problem occur? • Can you show me?</li> <li>• When does this problem occur?</li> </ul>   |
|                      |  | 4) What is your next step? (Next experiment)   | <ul style="list-style-type: none"> <li>• What is the current knowledge threshold?</li> <li>• Did what was learned in the last experiment frame this one?</li> </ul>  |
|                      |  | What do you expect?  | <ul style="list-style-type: none"> <li>• Is expectation written down? • Please read it.</li> <li>• What numerical outcome do you expect?</li> <li>• How will you measure it?</li> <li>• How many cycles do you plan to measure?</li> </ul> |
|                      | 5) How quickly can we go and see what we Have Learned from taking that step? | <ul style="list-style-type: none"> <li>• Strive for cheap and fast experiments</li> <li>• Can we run this experiment today? Right now?</li> <li>• When is the next coaching cycle?</li> <li>• Accompany the Learner if necessary.</li> </ul> |  |

Card folds here 

 **The underlying pattern of the five Coaching Kata questions should remain!**