

EXERCISE Cahoots

Purpose Have students personally experience how naturally they fall into the Innovation Cycle—when they don’t stop themselves.

Recommended with: Trail 4

Estimated time required 15-30 minutes

Key Points

Every one of us was born with the innate ability to innovate, and under the right conditions, we do it spontaneously.

We apparently have an intuitive understanding of the Innovation Cycle and how to use it.

We have been conditioned to suppress that capability.

To innovate, we need to stop interfering with this competency.

This may seem like just guessing, but it is something much more powerful.

References Gopnik, Alison, Andrew N Meltzoff, and Patricia K Kuhl. 2001. *The Scientist in the Crib, What Early Learning Tells Us About the Mind*. New York: Harper Collins.

Stauffer, D.A. (2015a), “Valuable novelty: a proposed general theory of innovation and innovativeness”, *International Journal of Innovation Science*, Vol. 7 No. 3, pp. 169-182.

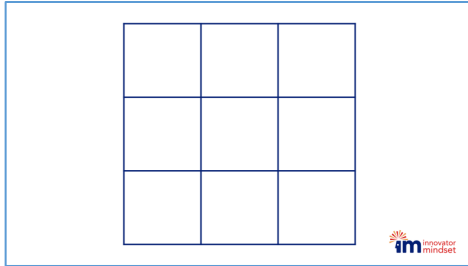
Introduction The Status Quo Cycle is something we have had to learn to use. Developing knowledge and skills requires considerable effort. We have all been taught to follow this pattern so often and in so many ways that for many of us it has become our mindset. The Innovation Cycle is different. Every one of us was born already knowing exactly how to follow the Innovation Cycle. Not only do you already know how to do it, but there are times when it is completely spontaneous. And I’ll prove it to you.

How many of you have heard the expression “in Kahoots?” It’s an old expression that means being in sync with someone, being a partner or being on the same wavelength. Today, we might say, “You feel me?” We’re going to play a game called Kahoots.

It’s really a puzzle that I want you to solve. I want you to resist the temptation to Google the solution and just play along. If anyone has played this game before and you already know the answer, please participate, but don’t give away the solution. Let’s let everyone try to figure it out for themselves.

How to Play

Use the slide with an array of nine squares on it (or draw them on a white board or flip chart).



- 1) Ask for a volunteer and have that student turn around, so they can't see the squares.
- 2) Ask another student to silently point to one of the squares (so you don't select the square and the volunteer can't see which one). With a large group, you can give them a laser pointer to use for this.
- 3) Have the volunteer back turn around so they can see the squares and tell them you want them to figure out which is the correct square.
- 4) Using a laser pointer, randomly point to various squares one by one, asking, "Is it this one?" "Is it this one?" and so forth. The volunteer should answer, "Yes" or, "No" until they either guess the correct square when you point to it, or guess incorrectly. (Do not ask them to select the square without you pointing to it.)
- 5) Repeat 1-4.
- 6) When someone solves the puzzle (by guessing the correct square), don't reveal the solution. Continue playing so that other students can also try to solve it for themselves.

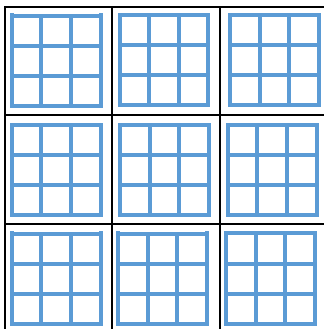
Occasionally, some student will want to blurt out the answer or make a guess without playing the game. You should politely but firmly cut them off and insist that if they think they know the solution, they should demonstrate it by playing the game and guessing correctly.

[This is how innovation works. When we trying something truly new or trying to solve a unique problem, there's no one to go ask. No one whispers the answer in our ear. We have to figure it out for ourselves.]

Solution

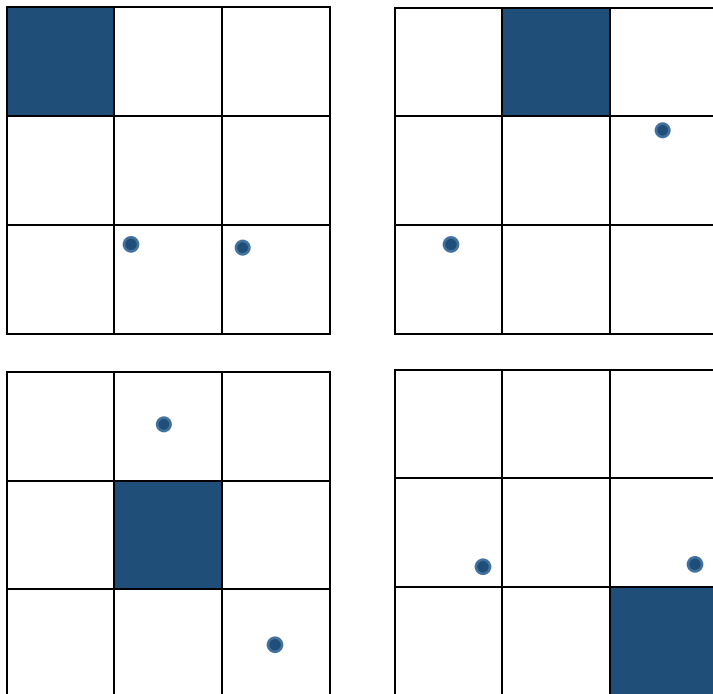
Explain the solution to your students at the completion of the exercise. It can be found online (so you probably can't extend this game beyond one class period).

Obviously, there must be a trick or signal and there is. You want to imagine all nine of the squares scaled down into each of the individual squares.



The location where you point the laser *within each square* is the clue to the location of the correct square within the whole array. So, if the correct square is the one in the lower right, you should point to the lower right corner of each square when you ask, “Is it this one?”

If the correct square is the blue one in each of these arrays, the blue dots indicate where you should be pointing within any square you select (including the correct one).



You may want to occasionally make the first square that you ask about, the correct one. This will help students realize that the clue cannot be something you do on the previous guess—a strategy that some may be looking for.

NOTE In the original version of this game—which was played with nine magazines on the floor and a yardstick—the clue was only given on the first square. That’s all that is needed if you know the trick, and it makes it very hard to detect. Your goal with this exercise is to have some of your students figure it out in a relatively brief period of time. Giving the clue with each guess will make the game go faster and more students will be likely to get it.

What to expect Like any good quiz game, everyone in the room can be playing along, watching what happens and trying to figure it out. So you can engage students in a dialogue and draw out important insights as you play. One or more students will probably catch on within the first several rounds. Or, you may have some students who have played Cahoots before. The interest level of some students will increase once they realize that there really is a possible solution and see that other students are getting

it. You can choose to explain the game to someone in advance and use them as a demonstration (or have them ready to demonstrate if no one is catching on) but that is not usually necessary.

What's the point?

Everyone who attempts to solve this puzzle or any puzzle like it uses the same strategy. (Provided they don't give up and Google it.) They will...

- 1) Size up the situation to be sure they understand the nature of the challenge—how to play the game.
- 2) Look closely to see if they can spot some clue or signal.
- 3) Begin to form hunches or hypotheses about what the solution or trick may be. They will think perhaps it's a verbal cue of some kind, a subtle gesture or some sort of sequence.
- 4) Watch as the game is played to see if in fact their hypothesis is correct.

If their hunch is incorrect, they will again observe closely, think of another possible solution and watch to see whether it works, repeating this process until they eventually discover the solution.

In other words, every one of them will be using the scientific method—the Innovation Cycle—to attempt to solve the problem. No has to tell them to do this or explain how. They already know, and researchers have found that even small babies know how to do this.

Discussion

Once students have played a few rounds, whether they have solved the problem or not, have them reflect on what is going on inside their own head.

Assert that, "Every one of you is using exactly the same strategy to solve this problem." (And they are.)

Ask various students exactly what they are doing to try to solve this problem. They may begin by saying things like "guessing" or "watching closely" but with some prompting, they will gradually begin to provide the list above. Guide them to complete that list and then point out that they have just followed the scientific method. They didn't decide to do that because someone taught them to; they just did it, without giving it much thought. They knew instinctively that that approach was what was needed.

This is supported by scientific research. Cognitive child development experts have demonstrated that babies do this almost from the time they are born, and far sooner than anyone could teach them. Every normal human being has an innate ability to apply this pattern. We are born knowing how.

Unfortunately, as we learn about the world and gain knowledge, we shift to a knowledge-based approach instead—the Status Quo Cycle—even when it is less appropriate. The reason everyone uses the Innovation Cycle so readily in a game like Cahoots, is that we quickly realize that our knowledge isn't going to be much help. We do not know the answer and we know we don't. With most of the challenges we encounter, we already know at least a little bit that is relevant (or we think we do), so we shift to that pattern.

Becoming more innovative is not about developing some new talent; it's about getting out of your own way, by knowing how to shift your mindset. So you can leverage a talent you already have—your natural genius.

Other points you can make as you play

With this kind of problem, you can't find a solution by using your knowledge.

Some of you don't like games like this. You are getting annoyed with me and you'd like me to just give you the answer. That's an indicator that you may be more resistant to an Innovator Mindset than you may realize.

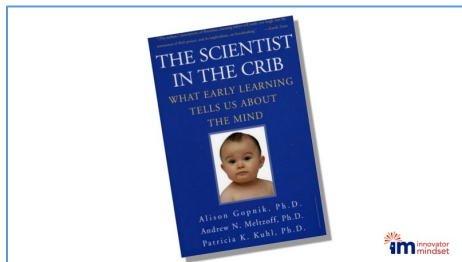
To solve problems of this type, you have to be willing to try and fail. No risk, no reward. If everyone in the room decides to sit back and watch, it becomes much harder to solve the problem.

Figuring out problems like this for yourself is really a blast, isn't it? (Ask those who solved the puzzle.) We really enjoy solving problems like this. Researchers (Gopnik et al) call this "mental orgasm." We are apparently wired to find great pleasure in making new personal discoveries, in figuring things out for ourselves.

What you are doing to try to solve this puzzle is the same thing that a successful entrepreneur, or new product developer or social innovator does to be effective and find success.

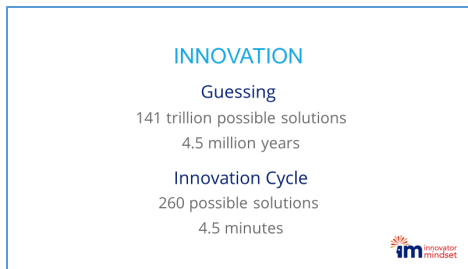
You may want to recall this simple game as you approach new challenges and ask yourself, "Is that what I'm doing? Am I observing carefully and then forming and testing hypotheses, or am I trying to rely on my knowledge?"

Optional Enhancement #1



If you like, you can use a slide to highlight the book and research by Gopnik et al, when you explain that this is an innate ability of all normal human beings.

Optional Enhancement #2



You have a slide you can use that highlights the simple math calculations that are made in the *Take Note* segment *The Universe's Killer App* on p 40 of the workbook *Developing Your Innovator Mindset*. You can use it to explain those calculations. (These calculations are covered in a little more detail in the article *Valuable Novelty, A Proposed General Theory of Innovation and Innovativeness*.)

Optional Enhancement #3



You can use the *Take Note* segment *A Genie with a Puzzle* on p 6 of the workbook *Developing Your Innovator Mindset*, as a metaphor for this kind of thinking and problem solving.