

The difference between knowing and doing on the floor.

Why certifications are often a measure of memory, not mastery.

quality assurance · skills gap · training design · lean six sigma

The newsletter for leaders who prefer verifiable capability over comfortable credentialism.



Diagnosing the Gap: When Theory Doesn't Meet Reality

I have spent years walking shop floors, from high-volume automotive plants to precision machine shops, and I have seen a recurring pattern that frustrates even the most patient quality leaders. It is the gap between a person who can pass a test and a person who can manage a process.

We often mistake "knowing" for "doing." In our industry, this usually manifests as a reliance on certifications as a proxy for capability. A team member might hold a Black Belt or have completed several weeks of Six Sigma training in a classroom. They can recite the steps of DMAIC perfectly; they can define "standard work" and explain what a control plan is intended to do. But when you walk out onto the floor, find a machine that isn't hitting its target cycle time, or encounter an operator who has developed a "workaround" because the official process is too cumbersome, those same individuals often freeze.

They have the knowledge in their heads, but they don't have the muscle memory in their hands. They know what a standard should look like on paper, but they can't see where it's failing in practice. This

isn't because they aren't smart; it's because theory is a static environment while the shop floor is dynamic. Knowledge is knowing that a tool needs to be calibrated; capability is noticing the slight change in the sound of a motor and adjusting the calibration before the first piece of scrap hits the bin. We need to stop treating "knowing" as an end state. In manufacturing, knowledge without application isn't mastery—it's just information.

The Illusion of Competence: What Credentials Actually Measure

I call this **The Certification Mirage**. It is the belief that a certificate functions as a guarantee of future performance.

When we look at a certification, what are we actually measuring? Usually, it is memory and compliance. A student proves they can follow instructions in a controlled environment where all variables are managed by an instructor. They are rewarded for their ability to recall definitions and solve "clean" problems that don't have the mess of grease, heat, or human fatigue attached to them.

Conversely, what we actually need on the floor is judgment. Judgment is the ability to take a piece of information—like a drifting Cpk value—and decide how to act when the production schedule is tight and the manager is looking for an answer *now*.

We must distinguish between these two:

- **Recall:** The ability to recite the definition of "Standard Work." (This is what certifications measure.)
- **Action:** The ability to identify a deviation from standard work and correct it in real-time without waiting for an escalation. (This is what mastery requires.)

A certificate tells you someone can pass a test on Tuesday. It doesn't tell you if they have the patience to coach an operator through a difficult changeover or the technical intuition to find out why a fixture is slowly drifting out of tolerance over three shifts. We must stop treating paper qualifications as a substitute for floor-tested experience.

Why We Accept Knowledge as Capability

The reason we continue to fall for **The Certification Mirage** is simple: it is easy to audit. It is much easier for a manager to check a box on a spreadsheet confirming someone has completed "Module 4" than it is to spend three months mentoring that same person through the nuances of a specific production line.

We often choose the path of least resistance because it feels like progress. If we can get ten people certified, we can tell our customers we have a "highly trained workforce." It looks good in a report. But this creates a dangerous situation where leadership assumes a gap is closed just because a training session ended.

The Comforting Rationalization	The Underlying Reality
"They are certified, so they should be able to handle the problem."	They have the theory, but they lack the context of this specific machine's quirks.
"We need more Black Belts on the floor to drive improvement."	We have people who can do math in a spreadsheet, but don't know how to talk to an operator.
"The training program is complete; we are ready for implementation."	The team hasn't actually practiced doing the work under real-world pressure.

We accept knowledge as capability because it provides an immediate sense of accomplishment. It feels like a win to have a classroom full of people with certificates, even if those same people can't tell you how to troubleshoot a jammed feeder at 2:00 AM on a Saturday. We are trading long-term competence for short-term convenience.

What This Skill Gap Costs: The Real-World Failures

When we rely on "knowing" instead of "doing," the costs aren't just academic; they show up in our scrap bins, our downtime logs, and our culture.

First, it leads to **The Reversion Trap**. When a certified leader doesn't have the practical skills to solve a problem on the fly, they often default back to the "old way" because that's what actually works when things get hard. They might implement a perfect technical fix on Monday, but if they don't understand how it affects the operator's workflow, the team will abandon it by Wednesday.

Second, it creates **The Escalation Tax**. Because the person on the floor doesn't have the "muscle memory" to handle common deviations, every minor hiccup becomes a major event that needs to be escalated to management. This pulls leadership away from strategy and into fire-fighting, and it frustrates the operators who just want someone with the authority—and the skill—to make a call.

Finally, there is the **Erosion of Trust**. When an operator sees a "certified" leader who can't give them a straight answer or a practical solution when a machine goes down, the operator stops looking to that leader for guidance. They start making their own decisions in isolation. You end up with a floor where people stop following the process because they know the person leading the process doesn't actually know how it works.

The Three Pillars of True Capability (A Framework)

To bridge the gap between knowing and doing, we must move beyond simple "training." We need to build capability through three specific pillars that move a worker from a classroom setting into the reality of the shop floor.

1. Contextual Mentorship

Training shouldn't end when the PowerPoint does. A certified individual should be paired with a "floor veteran" for a set period—not just as an observer, but as a partner in problem-solving. They need to see how a master technician handles a stubborn part or how a seasoned supervisor manages a tense conflict during a shift change.

2. Repetitive Practice (The Sandbox)

We must create "safe" ways for people to practice the hard stuff before it happens on the live line. This means intentionally creating scenarios where they have to troubleshoot, adjust, and fix things in a controlled environment. They need to fail in the shopped-out training area so they don't have to fail on the production floor.

3. Active Verification (The Audit of Action)

Instead of auditing for "knowledge," we must audit for "capability." This means walking the line and asking, "Show me how you would handle it if this gauge drifted by two points right now." We aren't looking for a textbook answer; we are looking to see them walk toward the machine, identify the correct tool, and explain the steps they would take.

Making Skills Stick: Immediate Actions for Leaders

If you want to bridge the gap between your team's certifications and their actual performance on the floor, start with these three actions this week:

1. **Audit Your "Expert" List:** Look at your certified leaders. Now, ask them to walk a specific part of the process that is currently causing issues. Don't let them tell you about it in an office; have them stand by the machine and describe exactly what they see happening with the material or the tool. If they can't speak plainly about the physical reality of the work, their certification hasn't translated into capability yet.
2. **Implement "Shadow Days":** For any new hire or newly certified team member, mandate three days where they do nothing but shadow a veteran on a specific high-pain point of the production line. They aren't there to learn theory; they are there to see how the work is actually done when things go wrong.
3. **Create "Action Cards" at the Point of Use:** Replace long, complex manuals with simple, visual action cards taped to the machines. These should be for common deviations (e.g., "If X happens, do Y"). This forces the user—and the leader—to engage with a practical solution rather than searching for an abstract policy in a binder.

Sustaining Skill: Building a Culture of Practice

The ultimate goal is to move from a culture of "certification" to a culture of "practice." A certification is a moment in time; practice is a continuous state.

To do this, we must stop rewarding people for passing tests and start recognizing them for solving problems on the floor. When an operator finds a way to make a tool easier to use or identifies a recurring issue that was previously ignored, that is "doing." We should celebrate those moments as much as—if not more than—the completion of another training module.

We must also bake feedback into our daily routines. During your next Gemba walk, don't just ask the operators if they are following the standard work. Ask them what part of the standard is hardest to do when things get busy. Then, give your "certified" leaders the task of figuring out a practical way to make that step easier.

When we stop treating knowledge as the finish line and start treating it as the starting point for practice, we build a team that doesn't just know what to do—they have the skill to actually do it.

Call to Action

What skills are your current certifications failing to measure? Share this diagnosis with a colleague who needs an honest look at training gaps.

Newsletter replies: newsletter@sixsigmakaizen.com · X: [@kaizen_6sigma](https://twitter.com/kaizen_6sigma)

Stay curious, stay improving,

David Rodgers

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References: Quality Magazine: Earning the Credential, Developing the Practitioner