



Getting a lean education: A penny saved is (more than) a dollar earned

BY DR. TIMOTHY D. HILL, PH.D., CLSSMBB, PMP

Lean education and training should pay for itself. You should be able to find a direct relationship between having your people trained in lean and a direct measure of savings. You should be able to see yourselves having fewer mistakes, less rework and more quality work, not to mention happier customers and employees.

But how do you get that training or education for your employees? Here are some of my “to do” items to consider when you’re looking for lean education. Be prepared to ask your prospective lean educator about the following:

- 1. How will they get to the meat of the matter?** Very often, people only provide training for the tools, are sector-specific, or have trainers that don’t have deep experience or lack expertise in training, adult education methods or methods to facilitate transfer of training. Training on the tools, if you’re lucky, will get you lean success 20 per cent of the time. People like to train on the tools largely because it’s an easy thing to do. If you want lean to have a sustainable success, you’ve got to be able to change the organizational culture. Ask your trainer about how they will build a lean culture.
- 2. How will they let your people revisit the training?** I use the Toyota “train then do” method in conjunction with a real-world value stream mapping (VSM) exercise. This involves training them on a small,

focused bit and then allowing them to experience that in the real world by doing it for themselves. There’s no “adult day care,” and I tell them to select a real problem from their workplace — one that they’d like to improve, if not eliminate.

- I will let them revisit the training when I involve them in their waste walks or their trips to the gemba (their “go and see” walks). They go to the gemba in order to get the “three reals” — the real facts, the real problem and the real situation. I “connect the dots” for them during these walk-about.
 - This is in addition to whatever cases, simulations, games, videos and other methods I bring that will let them revisit the training. I just don’t print out binders of the PowerPoint that they’ve already seen!
 - For the VSM work, I will come back every other week to supervise the delivery of their lean implementation plans. This serves two purposes: First, it allows me to refresh them on the training, and secondly, it keeps the suggestions theirs and builds the lean culture, while keeping them on the correct path for lean deployment. I practise my Toyota leadership skills, demonstrating these skills for them to follow.
- 3. How will they be able state lean savings in clear terms?** I help them to state their savings in three ways:

- The first way is for when they want to share their results and savings in their department and throughout their facility. I show them how to state their savings in footsteps saved, defects reduced, time and motion saved and so on. I show them how to state these savings and make sure that they’ve got consistency right across the whole organization.
- The second way is for when they’ve got to present to the senior team. I show them how to spell out their savings, but also in the lingua franca of senior team members — often in dollars and cents.
- The third way I show them is reserved for when they’re making a capital request. I show them how to use the A3 as a business case. Basically, they make the argument in their A3s that the problem is costing them “X” dollars per year now, but if they were able to eliminate that problem, they would be saving “Y” dollars per year, along with all of the other savings. For those who are wondering what an A3 is, it’s the one piece of paper approach to telling the story of how you will improve something.

If you can satisfy yourselves that you’ve got these few rudimentary questions answered, then you’re likely good to go. Remember that lean leaders will train during the downturn periods for their sector. In that way, they’ll be

able to ride the recovery with a strengthened workforce. As you build your lean culture, you’ll find your savings will more than pay for your employees’ lean educations! These savings will come from decreased waste, wait times, defects and the like. If you want, you could think of these savings as adding capacity to your operation or recovering time that can be applied to other processes.

Question from the floor

QUESTION: When I watch Toyota senseis, I am surprised. I expect them to follow the steps outlined in the TPS house — you know, 5S it, introduce stability and standard work up to problem solving and then put some tools to work. They don’t do it that way. What am I missing?

ANSWER: The senseis will likely tell you that they’ve been dealing with the problems in the order that they appear. I believe that your experience with Toyota senseis differs from your TPS studies because the literature typically describes a plan of implementation of lean solutions and techniques. My experience as a sensei is that we do have broad roadmaps in our minds, but these are more about changing the culture rather than training people on specific tools or a specific technique.

You’ll find that your biggest lean challenge is getting everyone’s head around basic problem-solving — getting them to understand their problems as a means of improving their processes and their work.

My experience is that the projects they pick for you are rarely to your liking. This is about what they think you should learn as opposed to what you’d like to learn. Broadly speaking, the journey is about getting people’s attention first, then “cleaning the window” or “clearing the clouds” by focusing on quality, then getting into rough just-in-time conditions, at which point the real lean work can start in the form of challenging kaizen projects. 🍁

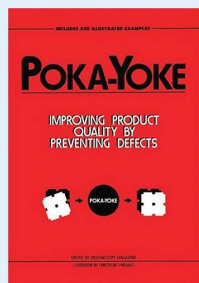
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From the bookshelf...

Poka-Yoke: Improving Product Quality by Preventing Defects
Edited by NKS/Factory Magazine

I read a review of this book that said if your goal is to eliminate your defects, then this book is for you. I agree completely. The book is aimed at supervisors and shop-floor workers, but it’s really for everyone who wants to prevent anything from going wrong. I often tell people, “if it’s predictable, it’s preventable,” and that’s the spirit conveyed in this book.

Poka-yoke, or mistake-proofing (sometimes also called error-proofing), works best if the suggestions come from those people closest to production — the employees doing the job. You can get help from engineering staff, tooling people or machine specialists, but the ideas come from those that do the work. This way you get lean buy-in, and one success often leads to another.



The book is divided into two parts. The first section uses a simple, illustrated format to summarize many of the concepts and main features of poka-yoke. The second part is comprised of some 240 examples of poka-yoke improvements. Now these are all implemented in Japanese plants, but they should serve as very good examples of innovative problem-solving for facilities here. There’s even some sample improvement forms at the very back of the book for you to sketch out your own ideas.

I’d like to see some poka-yoke examples from areas other than electronics, automotive, cameras and heavy industry — perhaps some back-office, agri-business, sales and other examples. Overall, this is a delight to read — simple but very effective.

continued from page 7 Entrepreneurship – the missing ingredient BY PAUL HOGENDOORN

An entrepreneur should never aim for anything short of success. Success is not something that is owed to the entrepreneur, but rather success is something that the entrepreneur owes to everyone that helped along the way.

To be called an entrepreneur doesn’t mean you have to have achieved success;

it means that you are able to define it clearly so that you can aim for it persistently, share it clearly, and engage others, allowing them to invest their talents and energies in support of yours. Not having that clear picture of what success looks like, and a reasonable map on how to get there, may not be critical to visionaries,

inventors, researchers, academics or people that dream of improving their world. Those are all good things to be, but added to all of those things, an entrepreneur needs to be success focused. It’s what they owe to the people that believe in them and support them, and it’s what our world needs more of right now. 🍁

Paul Hogendoorn founded TPI Associates, an organization dedicated to helping entrepreneurs and business leaders pursue their vision and build their companies. For more on this topic, visit www.tpi-3.com or contact Paul directly at paul@tpi-3.com.