

How to Evaluate Training Programs

A Guide for People Who Purchase
Training Services for their Team

By

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How to Evaluate Training Programs

Executive Summary

Too many managers have experienced sending people off for training and then being disappointed because there was no change: no change in behaviour and no change in the results of the organization. And studies support this view: the return from training can be negative when key elements are missing – and too often they are.

However, there is good news. There are training models that do result in real change, and the payoff from this kind of training can be very high. Payback in just a few months is common.

This guide sets out five questions that you can ask to determine whether the training program you are considering is going to make a difference in your workplace.

1. **Is it relevant?** The training needs to support the skills your team members need to do their job. Be specific: not “math skills”, but “able to calculate the mean of 10 numbers.”
2. **Is it practical?** Training in theory, background and “responsibilities” is useful when the task is developing policy, or monitoring legal status. But for most people, these elements should not be the focus of the training. Instead, focus on the actions and decisions your team members need to make. Help them understand what you need them to do on the job.
3. **Is it taught in a way that helps all learners?** Not everyone learns the same way. But most training is geared to one particular style of learning, which leaves most people using their weaker learning styles. Look for training that incorporated accelerated learning methods that engage the whole person.
4. **Is there a system?** It is easier to learn a system than to learn a whole group of random skills. It also helps the learning when the training itself is built on a systematic presentation of the information. Look for training that provides a framework to support the work your people do; the new skills will then make more sense and will be used more often.
5. **Is there follow-up?** People learn best when there is follow-up to see how the new skills are being applied, and providing support through any specific problems. Understand how your training provider will support follow-up once the instructional sessions are completed.

When you can answer each of these five questions positively, you can have a lot more confidence that your training investment is going to make a noticeable difference. Then training investments make sense, and your team members can make an even bigger contribution to your organization than they do now.

Introduction

1. The Emperor's New Clothes

Have you had the experience of sending someone to a training program, hoping they would learn something that would affect their behaviour, only to be disappointed? Or perhaps you have been told that the way to address an issue is with training, but in your gut you don't believe it will make any difference. Or maybe you have just been told to cut your training budget, and while you think that you really ought to be training your team, you aren't really concerned? Or have you invested in training, but seen no change in your organization's performance?

If so, there is a good reason for your reaction. Too often training doesn't have any impact.

One study showed that in certain (fairly common) circumstances the return on training is negative: if you train in certain ways, it winds up *costing* you money. Many managers have figured this out, at least intuitively, even if they can't say what makes it happen. As a result, many managers are hesitant to invest in training. Read on to learn the specific circumstances that turn your training into a money-losing activity.

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There is a child's story of the emperor's new clothes. In it, tailors come to town and persuade the king that they can weave a magical fabric, so that anyone who is wise can see it, but those who are stupid cannot. The king engages them to make a new outfit, and over the following weeks the tailors go through the actions of weaving the fabric, cutting the cloth, sewing it together, complete with test fittings. The emperor, who can see nothing, says nothing because that would mean he was stupid. Finally the day comes when the clothes are ready, and the king holds a parade to show of his new clothes. The crowd tries to stifle their giggles as the king walks the street in his underclothes. Finally, a little boy states the obvious; "But the Emperor has no clothes on."

In the training world, the trickster tailors are those who tell us over and over that we can solve our problems with more training. And if there is no result, then we just didn't do enough. The reality too often is that there is no result.

Still, training seems to be a compelling option. Surely it makes sense that if people are having trouble executing a task, that some instruction and / or coaching would improve the situation. From our early days in elementary school we have associated classroom settings with learning. And anyone who has gone on to post-secondary education has personal experience that it is

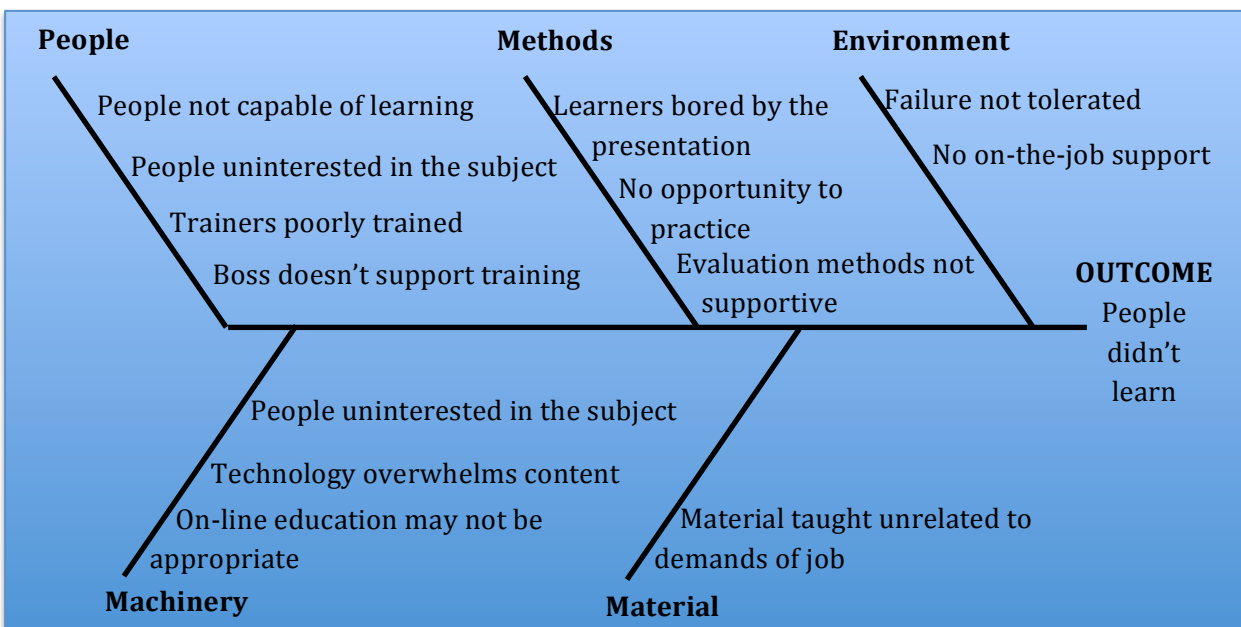
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possible to learn from teachers. And it is clear that in the world of athletics, people can improve tremendously with good training and good coaching.

But our experience in school collides with our experience in the workplace. In the workplace, if we have been lucky enough to have a company that has a training budget, there is far less connection between the instructional activity and useful learning. In a world where most training seems to have no result, it is pretty rational not to invest in training.

If we look at the situation and say, "It's not working," then we have to ask what has gone wrong. A fishbone analysis can help us understand what contributes to the unwanted results. Figure 1 shows a simple fishbone analysis of why people don't learn.

FIGURE 1: FISHBONE ANALYSIS OF WHY PEOPLE DON'T LEARN



There are many potential contributing factors that affect the success or failure of training. It would be helpful if there were some key items that you could look at that would improve the odds of your investment in training having some return. A great return would be even better!

In the next section, we introduce five key questions you can ask to understand whether training activities will deliver the outcome you want: improved performance and changed behaviour. Just as importantly, we'll explain why the cost of the training (within limits) is almost irrelevant to your decision about whether to train or not.

2. Re-Clothing the Emperor

If conventional training is like the emperor's new clothes – it's just not doing what was promised, the problem is not with all training, just some kinds of training. Just as there are very good tailors who can make a person look magnificent, it turns out that some kinds of training can actually have an effect.

This is a good thing, because organizations do need skilled workers, and it is clear that the skilled workers we have now didn't get born with those skills. It means the skills can be learned, and therefore they can be taught.

Let's think then about what a great training program should do. Here is my list:

1. Quick – it doesn't take long to master the skill
2. Accurate – the person won't make mistakes after the learning
3. Engaging – the person understands why applying the skill well matters in the world
4. Relevant – the skills should directly support the work the organization does
5. Repeatable – it shouldn't be a fluke whether it succeeds
6. Fun – well, why not? If you have to do it, it might as well be fun!

Before you give up altogether, let me say that I have been exposed to enough training that meets all six criteria, that I'm confident it can be done for any subject material. You shouldn't have to settle for less. Unfortunately, "less" is what you get more often than not.

Skilled employees are important for any organization's ability to serve customers. Great training program can help your people learn faster and with fewer mistakes, but not all of them do. How can you tell?

Here are five questions that will let you quickly and effectively evaluate any training program.

1. Are the skills relevant?
2. Is it practical?
3. Is it taught in a way that helps a wide variety of learners?
4. Is there a system?
5. Is there follow-up?

You will notice is that cost isn't one of the questions. Here's why.

There is an old saying that goes: "If you think training is expensive, try ignorance." Here are five examples of the costs that can occur when training isn't done, or isn't done well.

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1. One error on the shipping dock can easily cost a company \$1,000. Costs include returning or scrapping the product shipped, re-making the product, administrative time to trace the problem, cost of interrupting current production activities to replace the product, among others.
2. One company I worked at concluded, in 1990, that the average cost of any error in the plant was at least \$500. In 2012 dollars, that would be worth over \$650.
3. A supervisor recently told me of a situation where one of his crew was only half as productive as the others, primarily because he talked too much. That one person cost the company over \$25,000/year in lost time.
4. Lack of training in one organization resulted in one task taking over 65% more time to complete than it should have.
5. Lack of training in how to accomplish a drilling task to meet specifications resulted in the operations taking 40% more time than necessary.

As long as the training can give your people the skills to make a dent in those outcomes, it can pay for itself very fast.

My conclusion is that as long as the cost of the training (not including the person's wages) is under \$1,000 per day per person, and the training is actually effective, then the potential from improvement far exceeds the cost.

The question, then, is whether it is possible to get those positive outcomes. My stake in the ground is a loud and strong, "YES."

First Line Training has had the following results in recent training events:

- 1) \$200,000 annual savings in change over time on a machine as a result of a three-day event. Payback: 8 weeks;
- 2) Added \$3 million in plant capacity in a three-day event with no capital! Payback: less than 4 weeks;
- 3) A supervisor who identified \$35,000 in annual savings by specifying different dimensions for the raw material; and
- 4) A supervisor who reduced the time it took her to make job instructions by 15 – 20%.

Will you get results that good from every training event? Not always. But you should expect measurable improvements in weeks or a few months. And when you get those, the cost of training isn't so important. Of course, if you identify more than one company providing equivalent training, you can take the less expensive one. And of course you have budgets, but look carefully at the outcomes so you can track the value of the improvements you deliver.

Whatever you do, don't waver on the key assessment steps.

Five Questions

In this section, we present five questions you must answer if you want to pick a great training program. For each question, we'll discuss a number of key points that will help you ask the questions well. In some cases we've given you some other ways to ask the question. And there are always some practical examples to illustrate the ideas.

1. Are the skills relevant?

The starting question must always be; "Are the skills being taught relevant to the job being done by the learner(s)?" If the skills aren't relevant, then there is no way for the organization to obtain any sort of payback.

To answer this question, you need to know what skills are required to do the job. While there are entire books written on this subject, you can actually get enough insight with the following seven steps:

1. List the tasks that should be done by the person you are considering;
2. List the skills that are needed to complete each of the tasks;
3. Cross off any skills the individual already has demonstrated in her work;
4. For the remaining skills, determine whether there is already someone who has that skill and circle the skill;
5. Cross off any skills where the experienced individual has the time AND skill to instruct effectively;
6. The skills that remain on your list are skills you need to have trained by someone outside the organization; and
7. Compare the skills someone will learn from a course with the skills they need, and if there is a match, then you can go on to the next question.

*Skills taught
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payback.*

This is not a discussion about abstract skills. Every skill you are looking at should be tied to specific tasks the individual needs to do. For example, saying the person needs math skills, or numeracy is not helpful. Instead state that the person needs to reliably enter figures in a spreadsheet and needs to be able to calculate the mean value of a set of numbers, either by hand or using a spreadsheet. And perhaps the reason is that you are expecting the person to calculate the average of five measurements and adjust a setting based on the result (an actual example).

Here are some other examples:

- Supervisors need to master four key skills. They need to set priorities, instruct people on new skills and procedures, deal with performance issues and make improvements in the workplace.
- For accounting clerks, the skills will include addition and subtraction, filing, legible handwriting and comparing numbers.
- Clerks who make calls to vendors or customers will need specific customer-service skills: active listening, defusing, referring, and so on.
- People implementing software solutions need to be able to instruct new users.

Don't try to take on your whole organization at once. Start in areas where you are having challenges: frequent hires (due to seasonality or turnover), repeated errors, ongoing quality issues, etc.

Consider both the more technical skills (drilling a hole, writing a line of computer code) and the softer skills (finding root causes, defusing a confrontational situation, expressing empathy, focus on team objectives rather than individual objectives).

When you've finished addressing this question you should be able to match up the training you are considering with the skills your team needs to succeed. Then you're ready to go on.

2. Is it practical?

Now you know the training matches the skills your people need. The second question to ask is whether the training is practically oriented. One of my mentors says, "Complex is interesting; simple is usable." The corollary is "Theoretical is interesting; practical gives a payback."

A great example of this is in the area of safety training. A friend of mine was developing a course for new supervisors about their safety responsibilities. He had been given a one-day window for the training. So he was concerned about which of the many pieces of legislation and regulations he should cover in the course. Anyone who is doing supervising today knows how complex this can get very quickly. But when I asked the question, "What do you want them to do?" it became a whole lot easier. Then he was able to define four tasks that he needed new supervisors to start doing right away as part of their daily and weekly routines. The training will now focus on how to complete those four tasks. It will give only enough background and theory to let them do the tasks successfully.

*Complex is
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T. Harv Eker

Focus at this point on questions like:

1. Does the training help people get tasks completed, or does it give background?
2. Does the training help the person make on-the-spot decisions about what to do next, or does it provide a theoretical framework?
3. Does the training focus on actions or responsibilities?

Don't take this the wrong way. Theory is important: we need those experts figuring out better ways to do things. But when you are doing training for skills, the theory needs to be embedded, not at the forefront. Your learners are counting on you to have done that work, because the people you are training are not theorists.

Here's an example. If someone is using replaceable bits in a CNC milling machine, they don't need to know the science about bit angles, and insert hardness. They need to know practical ways to assess when the bits need replacement: do they look at chip size or sound or total milling time or some other indicators? Those tangible indicators help the operator make on-the-spot decisions that incorporate all the theoretical learning.

By contrast, if someone is learning how to purchase replaceable bits, then they are going to need a different set of skills that may involve them knowing more theory. But the theory should be tailored to what people will use.

Finally, it's not that we're going to ignore theory all together. Question 4 asks about the system used to present the training, and one of the points is the need to give reasons. So you may make reference to the theory as you explain the reason for doing the task a certain way.

In essence, you should expect the trainer to do the work necessary to distill theory into practice. Otherwise your employees won't get anything usable from it.

Once you have addressed this question, you'll know that the training being offered is practical enough that your team can act on what they have learned.

3. Is it taught for a wide range of learners?

We don't all learn the same way. Yet far too much training supports only a fraction of the learners.

Here's the background. Some of us learn best visually; you know the person who loves to read all the manuals, or who says, "I just need to see it." Others are more auditory; if they don't hear the words and say it themselves, what they're learning just doesn't sink in. And

others are kinesthetic; if they don't actually do something they find it very hard to remember or master a new skill.

While there are lots of different estimates of the actual mix, there is a pretty consistent agreement that kinesthetic learners are the biggest part of the population. The problem has been that most training is geared for the visual learner. The conventional image of school as the teacher at the blackboard, and the focus on textbooks as a primary source of information illustrates this.

Most people are actually a mix. But we each have a primary learning mode, a way it is easiest for us to take in new skills. And the training programs you pick should be designed to support all learning styles.

Here are some things you should look for:

- 1) Repetition (because repetition reinforces what an auditory learner has heard)
- 2) Individual and small group exercises (because they involve all the senses)
- 3) Role plays (because they involve all the senses for those participating, and visual learners have something to watch)
- 4) Games (because they engage the whole person)
- 5) Writing activities (because writing involves the body of the kinesthetic learner)
- 6) Hands-on doing of elements of the target skill (because kinesthetic learners learn best by doing)

These elements should be a major part of the learning time.

There can be some lecture-style teaching, but it should be limited; lectures are geared to visual or auditory learners but leave the kinesthetic learners out altogether.

One of the limitations of on-line training is that it is really geared for the visual learner. Unless the skill itself is a computer-based skill, it is very hard to help the kinesthetic learner through a computer.

By the time you're finished assessing this question, you'll know that the training you're considering uses a wide range of learning activities that support all learning styles. When that is true, you can be more confident that no one will get left behind.

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4. Is there a system?

There are actually two kinds of systems that need to be in place for training to succeed. The first is that skill itself needs to be framed within a system. The work needs a context. The second is that the training process itself should use a system that helps people learn and master the new skill. Both are important.

A System for the Work

I recently saw a fellow on a stage memorize fifty random digits in not much more time than was required to get the numbers from the audience. He got a standing ovation. He had a system. By contrast, our system of seven-digit phone numbers is a result of studies done about ordinary people's ability to remember a sequence of random digits. Most people can retain a seven-digit number long enough to accurately dial the number after looking up the number.

The point is that training can be far more effective when the skills are developed around some kind of systematic structure. That's what you should be looking for.

Here is an example. Most of the currently available supervisor training exposes the learner to a range of skills, but there is no structure to hang them on. Employees don't walk around with thought balloons that say what is required, for example "needs motivation," or "needs discipline." As a result, the training is often only helpful to the extent that 1) the problem is evident, and 2) that the supervisor has been exposed to that specific skill set. It is a low-percentage game.

By contrast, the Training Within Industry module called Job Relations trains the supervisor in a four-step approach to address performance problems related to people. The system it presents works well for any HR-type problem, and while it can be refined with more intensive training related to discipline or grievances or attendance, etc., an average supervisor can get reasonable results from the outset because it trains them in a system. Additional skills can fit into and support this system.

At this stage in your evaluation, you test the training program you are considering to see whether it has a system that supports it. If you find something that says, "Here are the six steps to..." or "The five-step process to ..." then you are probably on-to something. But if the training brochure only gives you a laundry list of the skills the attendee will learn, then it is less likely to be helpful.

*Training is
more effective
when it is
based on a
system.*

It isn't too critical whether the systematic approach is universally recognized or not, because all you need is for your own team to share the systematic approach, whatever it is. That said, if your team will learn a proven system that has had thousands of people use it and get results, then you are more likely to get success. And you do want to be sure that the system your team will learn also supports any standards your company has already adopted.

For example, if your company has adopted the ISO model for quality management, you would want any system your team learns to be compatible with your ISO practices.

A System for the Learning

The training also needs to use a system for presenting the information that helps people learn. One of the most powerful is the system used by Training Within Industry. Developed and refined over 3 years training almost 2 million supervisors, the TWI approach is robust and adaptable.

There are two key elements to the system.

The first is the way the job instructions are presented. Material is divided into three categories: important steps, key points, and reasons. Each is presented on its own and the result is that learners "get it." Each category has its own objective:

Important Steps	A memorable list of actions, each of which significantly progresses the work. It answers the question, "What next?"
Key Points	Lets the learner know how to achieve success, through make-or-break items, safety issues, tips and tricks, and tolerances. It answers the question, "How best?"
Reasons	Identifies the rationale for doing each step that way. It answers the question, "Why?" Here is where theory fits.

The second element is the method of repetition; people learn through repetition, but simple repetition itself is not enough. It is more complex than there is space for here, but it is enough to say that there is enough repetition in the TWI training process that people can do the job correctly from the outset.

There are other systems for training out there. However, we have not found one as simple, flexible and effective at the TWI program, and we use it as our measuring stick.

Summarizing the Systems

By the time you have finished addressing this question, you will know that the training you are considering will have a strong systematic foundation that will support your team's

activities. You will also know that the training program itself is built on a system that will help your team members learn.

5. Is there follow-up?

Most of us know someone who has made a New Year's resolution and then failed at it. It is pretty common – 78% according to one UK study. The study found five actions that are commonly linked with success: a plan with small steps, rewards for small successes, telling friends, focusing on the benefits, and keeping track of their progress.

These findings support the research done by Motorola in the 1980s. In their study of the payback from training, they found that training with follow-up on the job after the training had a return of 33:1, while training done without follow-up actually cost them money.

At its core, we are training people because we want them to do their work differently. We want someone to adopt a standard approach to a task. We want them to make different decisions about which work to do next. We want them to use a new tool or new software. Or we want them to use a different standard for what is good enough. This change in behaviour is not easy, even if someone wants to do it.

The question is where will this follow-up come from, and how will the learner be supported in doing things the new way.

The follow-up can really only come from two sources. First, whoever is the person's manager can follow up in a structured process. Second, the training program can provide support for the follow-up. That can happen in a variety of ways.

There are three common ways the trainer can support the learners:

- 1) A program of specific actions for the days following the training;
- 2) A tracking program to log progress, either on-line or paper-based;
- 3) Follow-up phone calls to provide a touch point to the team members, making sure they are on track, helping them apply the skills, and providing reinforcement for their successes.

In situations where your company is in the midst of a larger set of changes, there may well be excellent corporate support for the changes. In smaller companies, where people wear more hats, that support may be shakier. There, but also in larger organizations, outside support can have a powerful influence on adoption of the new behaviour.

*Achieving a
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happens with
follow-up.*

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Even when the tools have changed (new machinery and software) it is amazing how hard people will try to reproduce “the old way”.

While there is no question that having direct follow-up from the trainer will add something to the cost, the payback is huge. I’ve reached the conclusion that if you are not willing to invest in follow-up – either your own time, or time from the trainer – you are often better off not to bother with the training at all.

Regardless of how it is provided, the follow up is essential for your training investment to pay off. Be sure to find out from the training organization you are considering how they will support follow-up on the job.

Evaluating your options

At this point you have looked at each of your training alternatives and answered the five key questions.

1. Are the skills relevant?
2. Is it practical?
3. Is it taught in a way that helps a wide variety of learners?
4. Is there a system?
5. Is there follow-up?

If the answers to all five questions are a strong “YES”, then the training program you are considering is likely to give you real and measurable results. Of course, doing due diligence and checking references is still important.

If the training program you are considering is weak on more than two of the five questions, you should be cautious.

If you find more than one candidate who gets a good “Yes” for each question, then you can consider the cost of the training as a factor. However, my experience is that there are few training firms that can meet these standards.

If you find one, and the budget is a problem, there are two options you can consider:

- 1) You may be able to reduce the scope of the training, and train some of the skills later. There may be a subset of the skills that will get you a large part of the benefit right away. Start with a small portion of the total program, and as you reap benefits, then the gains can help fund later training.
- 2) The training provider may be willing to consider receiving some or all of the fees based on performance. While this can be hard to measure, it can be a way to reduce your up-front costs. Expect to pay a bit more overall this way, since the training company is now taking on some of the risk. But if you obtain the improved performance, then you will have the extra margin to pay for the extra cost.

If the answers to all five questions are “Yes”, then you are likely to get results.

Evaluating your outcomes

Once you have done the training, you can do one other step. See if it had any effect on the business. At the end of the day, the purpose of training is to help your business perform better. With effective training, you should see a difference in how work is being done, and a difference in your customer's experience.

You can measure the outcomes by tracking the following indicators:

1. Turnover: has it been reduced?
2. Disciplinary problems: are there fewer?
3. Productivity: has it improved?
4. On-time performance: has it improved?
5. Quality defects: are there fewer?

Of course, there are many factors that affect these outcomes, and some of these are affected by events outside the control of those who have been trained. However, if you are going to invest in training, it is worth tracking outcomes where people have received training.

Conclusion

With these five questions, you will be able to make a great assessment of your training options.

You are going to be investing a lot in your team members when you train them; not just the cost of the trainer, but also the time of your team and all the production challenges that go with having them away from their workplace. When the difference can be between a complete waste of your training dollars, and an investment with a huge and rapid payoff, it is worth doing well.

I encourage you to take the extra time to use these five questions. Give them to the companies you are considering as trainers when you make your first inquiries so they have an opportunity to respond on your terms.

When you go through these five steps, you will be able to assess whether your training dollars are likely to be spent well. Then you can watch your company's effectiveness soar.

About The Author

Hugh Alley is an industrial engineer with 30 years of experience, mostly in the manufacturing industry. As employee, consultant and business owner, he has worked in a wide range of industries from mining and steel mills to yachts, building supplies, food, electronics, secondary wood, and metal fabrication.

Prior to starting First Line Training in 2011, Hugh was Operations Manager and part owner of Alco Ventures Inc., a manufacturer of aluminum railing systems with an international supply chain and customer base. Before joining Alco, Hugh was a Senior Consulting Manager with Grant Thornton LLP's Manufacturing and Distribution practice.

Hugh earned his B.A.Sc. at University of Waterloo, an M.Sc. (Resource Economics) at Cornell University and a Master of Divinity at Vancouver School of Theology. It was there that he was first introduced to the principles of adult education. Since then he has taken many courses related to facilitation, training, train-the-trainer, and accelerated learning technologies. While working at the Workers' Compensation Board of BC he spent a year managing the staff development program, implemented programs that reduced the training time for complex jobs by 25% and reduced decision times on complex claims by 50%.

Hugh is on the Board of Directors of the Canadian Manufacturers and Exporters – BC Division, teaches in the Mechanical Engineering department at British Columbia Institute of Technology, and is a volunteer industry participant at a simulation course at University of British Columbia. He has published over 50 articles in the area of lean manufacturing, training, complex decision processes, design and supply chain management.

From the Author

Hi:

I'm Hugh Alley and I'm the President of First Line Training. Thanks for reading this e-book.

Throughout my career I found myself constantly training people. I was also pretty often disappointed by the results I got, whether it was training I took myself, or training that I purchased for my employees. A few years ago, I came across two programs that I liked. One dealt with how to train, using what are called Accelerated Learning Methods. The other provided a systematic approach to the skills needed by supervisors: the Training Within Industry program developed in the 1940s. Since then I've worked to put the best of the two together and had some amazing results.

First Line Training provides programs designed to improve the skills and effectiveness of anyone who manages other people. We offer public courses focused on the four key skills for supervisors and for a range of other related courses. In addition, First Line Training can provide customized programs for your business.

If you enjoyed this e-book, and would like to know more about training supervisors please visit us at www.firstlinetraining.ca. There you can find our blog, articles that we've found that we think are helpful, references to books and articles we think are worth reading, as well as information about our courses. You can also sign up to receive our free e-newsletter, or subscribe to our membership site where we have more in depth resources.

To your great training,



P.S. We'd love to hear your comments. Send me an e-mail at halley@firstlinetraining.ca or visit our website at www.firstlinetraining.ca where you can read our blog and join the conversation. And of course, you can review the articles and resources we have provided to help you improve your supervisors' skills and capabilities.

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