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The Seven Deadly Sins of Corporate Training Programs

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Learning Objectives

- * Identify the internal and external factors affecting professional development
- * Explore elements of successful training programs
- * Discover the pros and cons of how adults learn
- * Get a sample “training road map” that can cover many firms’ needs

Description

Are you a glutton for good training? Do you lust over other company's effective education technology? Bad training programs can leave your employees full of wrath, so don't be slothful—come check out this session that will outline the issues many companies see when building up or overhauling their own training programs. Your competitors will be green with envy when you show off your skilled employees—just don't get greedy. This session will offer firsthand experience and knowledge shared by 2 instructors who have spun up successful training programs in firms of more than 350 people and designed Autodesk authorized training curriculum, and who continue to build training programs for firms across the nation today. You will leave this class with proven strategies and best practices for avoiding sins that limit the success of training programs. This session features AutoCAD, AutoCAD Civil 3D, and Revit. AIA Approved.



Your AU Experts



Donnie Gladfelter aka “The CAD Geek” is a highly visible and respected thought leader in the CAD community. He is well known for the CAD Geek blog (www.thecadgeek.com), and he has written many articles for AUGIWorld magazine, as well as 6 Autodesk Official Press books. He has worked with the Development Team at Autodesk, Inc., to help shape future versions of AutoCAD software. Gladfelter also helps to empower CAD professionals across the world as a technical product and online manager for CADD Microsystems (an Autodesk Platinum Partner) and as a former member of the Autodesk User Group International (AUGI) board of directors.



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Working for more years than he wants to count in the architectural/engineering industry, both in production-design and currently in technology support, Jason has aimed for the simple goal of making sure people can get their jobs done in the most efficient and productive way possible. Through training, software implementation, hardware deployment, and support (throw a little programming in as well), he has worked hard to achieve this goal. Jason's most exciting achievements are when he is able to leverage new technology in a meaningful, productive, and often inexpensive way to let everyone make sure the work get done.



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The Seven Deadly Sins

I **Miracle in the Classroom**

If I send an unskilled employee to training and they will emerge an expert.

II **Classroom is for training. Workplace is for working.**

When someone sits in a training room, that is where they will learn everything they need to know. When they get back on the production floor, it's time to be profitable.

III **Teach everybody right now**

You will save a lot of time if you get everybody on staff trained in the same class, even if they aren't going to use that software for another half year.

IV **Everyone Is Trainable**

It will just take some more time to get this person up to speed.

V **The only classroom people need is work**

Knowledge is power and there is no need to share it. If people value their jobs, they will learn what they need to do to excel on their own.

VI **The "Perfect" class**

All we need is:

- The latest technology
- One kind of training
- This curriculum we made five years ago
- One class for each topic

And our training program will be a success!

VII **Establishing a Finish Line, but no Mileposts**

We can just tell our staff that they need to be experts in this when they are done.

Know Your Sinners

The purpose of training is to help grow the skills of your team. To accomplish that, it's imperative you first understand the dynamics and motivations of those individuals. While each individual is indeed unique, there are several universal truths about learners.

In a manner similar to starting a project by taking a survey of existing conditions, it's important to do the same of your learners. Without this upfront understanding of those you expect to teach, it's especially difficult to design an effective training program tailored to their needs.

Learning Styles

Most people have a preferred way of learning. That preferred way of learning is typically complimented by one or more secondary learning styles. These styles include:

- Visual: You learn well by images, pictures, and spatial organization of elements.
- Auditory: You learn well when aided by music, sound, rhyme, rhythm, speaking, or listening.
- Reading/Writing: You learn well by reading or writing the material you want to learn.
- Kinesthetic: You learn well when you can move your body, and/or use your hands and sense of touch. Writing or drawing diagrams are physical activities that call fall into this category.

Training without Reinforcement

Organizations frequently sour on the idea of training because of what's perceived as a lack of results, but what is really a lack of reinforcement. Blame for programs not living up to expectations is often cast onto the trainer and/or the individual learners. Put simply, excuses are made to make everyone feel better about an otherwise unpleasant situation. While those excuses may be true in some cases, the most common issue is the fundamental design of the training program.

Studies have shown reinforcement is among the most powerful tools one can leverage to increase retention. Without reinforcement, learners will forget as much as 50% of the material presented to them after just an hour. After two-days, up to 80% of the material presented is forgotten. By the time learners reach the one-month mark, up to 90% of the material presented to them is forgotten. If knowledge is the foundation to great training programs, reinforcement is the roof. No matter how spectacular the things you build atop the foundation, without a proper roof, the chances of that splendor remaining for an appreciable time is slim. Comparing successful training programs to those that have missed the mark, we've found reinforcement to be a universally missing element. Put simply, no matter how many of the other boxes you check with your program, success is incredibly unlikely without reinforcement.



Evaluation of Training Delivery Methods

No one curriculum type comes without concessions of some sort. Some elements are incredibly economical, but do not offer the level of quality you would like. Others offer exceptional quality, cannot be delivered in an expedient manner. The secret to an effective training program is to balance these realities in a way that best aligns with the actual needs of your learners.

An advanced user base may not need much, if any, fundamental training. Though more costly, in this scenario, the right balance for you may be customized curriculum that is typically more costly to provide.

Benefits of Classroom and Live Instructor Led Learning

Despite the time consuming nature of live training, the human interaction it offers is unmatched by any other training method. The most successful training programs understand the human elements are oftentimes as important

Benefits

- **Dynamic Delivery:** By constantly evaluating their students, instructors can instantly adapt their delivery of material to best suit the needs of their learners.
- **Immediate Help:** Students receive instant feedback from the instructor.
- **Desk Separation:** Stepping away from the distractions (phone, email, other colleagues) inherent with your desk has the benefit of providing learners with a more focused – distraction free - learning experience.
- **Networking with Peers:** Students not only benefit from the expertise of their instructor, but also from the experiences and social interaction with other learners.

Disadvantages

- **Time Consuming:** Classroom learning is often structured as a multi-day event. This means taking teams out of production, and potentially disrupting projects.
- **Logistically Challenging:** Finding time where the schedule of each learner can align for a live class can be especially challenging. These scheduling challenges can push the date of classes beyond the initial window of need forcing training managers to evaluate whether to host multiple classes, or delay the class for all learners.



Benefits of Online and On-Demand Training

Though sacrificing the human interaction benefits of live instructor led training, online and on-demand training offers an unmatched just-in-time versatility. The most successful training programs understand the importance of aligning the delivery of training with the expected need of the learner. When the need for knowledge is mistimed with the receipt of that knowledge, retention of that information is often limited.

Benefits

- **Timely:** Online and on-demand training offer a just-in-time versatility that requires little-to-no personnel resources beyond the learner.
- **Topical:** While there are times end-to-end training are needed, many learners leverage on-demand training as a reference tool. Learners are able to acquire the topic-based knowledge they need in a time efficient manner, and get on with the rest of their project.
- **Comprehensive:** Teams have access to more software than ever thanks to Autodesk Design Suites and Industry Collections. Although teams may not utilize every tool available to them, there's a high probability teams will encounter scenarios where one of those tools may be the best tool for the job. With modern-day on-demand training libraries, there's a good chance your team will have the instruction necessary to harness these opportunities.
- **Flipped Classroom:** On-demand training resources provide an opportunity to flip the conventional classroom. Instead of committing the staffing necessary to host lengthy multi-day classroom training sessions, learners can leverage on-demand training and later consult trainers for a more focused Q&A/mentoring session.

Disadvantages

- **Difficult to anticipate needs:** Much of the power of on-demand training is the ability to provide just-in-time instruction to the learners throughout your organization. Accomplishing this means providing a library that proactively addressed the needs of your organization. Since training needs are constantly evolving, it can be difficult to anticipate training needs in the future. **Lacks Human Interaction:** Although there are tactics for making on-demand training more personal, none are able to match the dynamism of a live instructor. Learning is an incredible personal endeavor, and adult learners often wish to leverage a live instructor to validate their understanding of a topic.
- **Inherent Understanding of Learning Paths:** Knowing what to learn next can be as important as knowing what to learn now. Without a clearly defined storyline of



what courses to complete, and in which order they should be completed, on-demand training tools present an intimidating experience.

Training managers oftentimes find their self at an intersection on conflicting economic realities. Budgetary realities may will often push for less costly on-demand training, whereas social realities will typically push towards classroom learning. While each method has its benefits, the concessions made by choosing one over the other will have a significant impact on the overall quality of your program. Finding the balance between these constraints, we've found teams who find a way to blend both classroom and on-demand learning are most successful.

7 Virtues of Successful Training Programs

Have an Education Mission Statement

Why are you training your employees? Do you want them to be proficient in bleeding edge technology? Are you trying to increase your bottom line? Is company morale important?

There isn't one single answer, but it is important to create a set of high level guiding principles to help you aim your training program.

Like any good mission statement, this will be the marker against you weigh any decision that you make.

Be creative and open minded to the Mission Statement. It will let you open up to new training opportunities that you might have not thought of in the first place.

Everyone gets a Learning Path

Simply creating a catalog of the formal training you offer is not enough. This creates confusion and apathy among your employees.

With some simple assistance from managers, each employee should be given time to sit down and review the available formal training and with discussion, decide on what classes fit within their overall goals and growth plan in the company.

This one on one approach may seem time consuming, but it is usually not a significant time investment. Plus, the benefits it can foster far exceed the time used.

The personalized approach helps employees understand that their future at the company is important, and it also helps them understand that training and education is important to the company. This will enhance the culture of education and knowledge sharing at your firm.

Most paths are similar for the different job levels, but even minor adjustments are extremely appreciated by individuals, taking into account their professional goals and desires. This is also



a great opportunity for the employee to offer feedback related to the class offerings and lets the manager know what they would like to learn.

A successful approach we have used involves managers and the head of education organizing and generating a Learning Path for each employee throughout the month of January. Once the list of who is taking what is generated, the head of education then knows how many of each class are needed and start making a schedule to support this.



Know your Kingdom

We are talking about employees being educated here, and a critical piece of a successful and holistic training program is the training team being educated about your company and staff as it relates to the overall education plan.

What do people need to know

There is an old adage that states “you don’t know what you don’t know.” An important addendum for a successful training program is “you don’t know what you need to know.” This can be a difficult hurdle to get over, but it’s an important one. The Learning Manager and his or her team must stay a couple steps in front of the staff in terms of what they need to learn. Part of this is keeping tabs on new rules and tools that will impact the way people work. This attempt at future proofing can be extremely problematic and must be done with deliberation and proper discussion with company management. The last thing you want is to create classes and other training around a new piece of software that your PICs have no intention on using.

Another less problematic task in understanding what people need to know is by finding out what they don’t know already around your currently used procedures and technology. Still not simple, but just as crucial, and there are a couple tried and true methods for getting this information.

We already mentioned one way which is the annual sit-downs to generate employee’s Learning Paths. This feedback can be extremely valuable to get a direct unfiltered understanding about what people want or need to learn at your company.

Another way to know what people need to learn is by leveraging the folks that are the front line for problems: your IT and support staff. Informally, just ask them, and maintain a conversation about trends in the support that they see. More formally, ask for reports from the help desk ticketing system, if available.

Making appropriate “educated guesses” about what people will need to learn combined with finding out what they already don’t know can go a long way in generating content and training materials that will be immediately useful to your staff.

Who knows what

You need to make an effort and monitor what employees are your rock stars, and what employees are your stragglers. The rock stars you can lean on to help train and tech, the stragglers are a good metric to find out what holes there might be in your overall curriculum.

Smaller firms have an easier task in this respect: if you come from a company of fewer than 100 people, you probably already know your rock stars and stragglers. Larger



organizations will need to create a deliberate method for tracking this, leaning on staff managers to filter out the appropriate information. This too could be collected during the annual Learning Path meetings, and documented to pass off to the Learning Manager and crew.

In addition, an often difficult topic to discuss is the “untrainable”. We like to think that anyone can learn anything as long as they just try hard enough, but this is not always the case. Some individuals simply will not be able to get certain concepts, and this is a delicate issue to work around. You must first determine that there isn’t an issue with the training techniques. If that can be ruled out, you must involve management and make them aware of the individual’s limitations and lean on them for guidance. There may be concerns or job requirements that you are not aware of, and as the Learning Manager and not personnel manager, it is not your responsibility to decide to proceed, it is simply your responsibility to offer guidance.

What training is already happening

A lot of training happens outside of a formal setting. As we look at an overall holistic view of training in a company, it is crucial to know all the ways that training is happening.

Do vendors come in for educational lunches? Are project teams sharing knowledge about best practices? All of these methods of education are great places to steal and borrow content and ideas to build upon or use in other ways.

Inversely, as a preemptive measure, it’s also important to know what extra training is happening to make sure it aligns with your Mission Statement as well as matches the content and material you know needs to be upheld in your organization. This often is not an issue, as most “outside” training is very focused and limited, but every once in a while you need to put the brakes on a training session before it even starts. It is definitely better to do this than have to go back and undo any training that has happened.

Monitoring and collecting this information can be an issue. You will need to setup your own techniques for properly gathering this information based on your organization’s size, its culture, and geography limitations. We typically find that while there may not be a formal set of people that the Learning Manager looks to for this information, the manager needs to know who they can successfully lean on to get this information in a timely fashion and keep the lines of communication open.

Good Communication

This isn't simply for training; good communication is critical for an entire organization to run smoothly.

Management Meetings

A specific example for a successful training program is communicating with the company leaders and managers. These individuals not only want to have input into what is going on, they can also offer valuable insight into the company goals and mission that can and should be used to help realign the training goals. Is your firm going to start going after government work? Maybe adding some training on design/bid/build projects would help. Going to start doing projects in another state? Might be time to get some training resources around that state's building code.

We recommend a formal recurring meeting time with the right members of leadership and the head of education. This doesn't have to be a nitty-gritty in the weeds meeting, but a quick high level conversation to keep things in line with each other.

Learning Manager Availability

A less formal but just as important lesson around communication involves the accessibility of the education head for your company. This position is an informal leader in a firm, and as such, should not be hiding out in an office. Direct and obvious availability of the education head can help generate feedback that might not have been available, but also increase that culture of education firm wide.

Blended Curriculum

When most people think about training, they think about a formal classroom setting. You are doing a major disservice to your company and your employees if you limit your education plan to just a classroom.

Reinforce that classroom training with immediately available online learning opportunities. There are many companies out there now that create this short task focused training, and these are an excellent supplement. If you have the resources, creating you own is an excellent idea to be able to truly refine the content available.

In addition to specific task and lessons, you need to offer informal training sessions that are more general in nature. These are excellent ways to reinforce items that you have seen employees struggle with in the classroom and also introduce new concepts that are too small for a class of their own.

SOAPBOX: many firms use the time tested "Lunch and Learn" for immediate training needs. For many reasons we advise against this approach.



Sticking a training session during lunch tells the attendees two things: first that what you are about to learn isn't important enough for a firm to spend time on it, and the second is that if you have to miss it, go ahead and miss it.

Beyond that, the lunch hour is the typical time (for U.S. folks anyway) to run errands and take care of personal business and to just get away from the desks and recharge. Lunch and Learn sessions take away from this potential personal time, and the sessions will usually lose out to an essential errand that just has to get done.

Pick a time during the workday, and put it on everyone's calendar. Use that time to go over new procedures, changes in the template, or just cover an issue that a lot of people have come to you with recently. Make it a "real" meeting and that makes it important and a proper place to focus on what is an important task: learning to be more effective and productive in Revit.

Measure Progress

You will never know how successful your education plan is if you don't keep an eye on it. And to be clear, this is measuring both the classes and training materials in addition to the staff doing the learning.

Managers and reviews should include a formal area to discuss how training is proceeding. IN addition, managers need an open line of communication to the Learning Manager to convey important data about who on the staff is having a challenging time picking up information. It may not be the staff member at all, and ultimately might be the method of training.

To monitor classes, each class should include a review in one form or another. Many LMSes have built in review for courses. If you use an informal system, there are numerous online survey tools that can be leveraged. Keep in mind how little humans like to fill out forms and keep the end of class surveys, brief and to the point. You will get far better data from it if the more people you have filling it out.

Policies and Standards

This may seem at first glance to be way out form left field, but is crucial to be able to support your training curriculum with a strong set of policies and standards. While the creation and maintenance of these should not fall under the responsibilities of the Training Manager, this individual and his or her team needs to monitor policies and standards to ensure that training that happens supports the goals and practices of the company.

Building on that, the more refined and robust your policies and standard are, the easier it is to create and maintain content for classes. It's a two way street, with training supporting and encouraging standards, and standards promoting high quality training.



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7 Steps to Training Righteousness

Step 1: Establish your Training Evangelist

If you are reading this paper, chances are this person is you. Whether or not you make this position a formal one depends on your company's culture and size. We highly encourage making the position more "formal" than not. We certainly do not intend to recommend that every company needs a full time dedicated Training Manager, however for proper support from management and to understand how creation of new content and maintenance of existing content should be handled, a dedicated specific individual heading up the effort is extremely beneficial.

Step 2: Discover and Communicate

Discovery. Summarize Results. Present to Management.

Perform the Discovery

This is your opportunity to ask questions, and gain an understanding of where things stand inside your organization today. To receive quality feedback, it's important to make respondents feel comfortable sharing information with you. As the training evangelist, it's important to build a trust between yourself and those responding. Without this trust, people are likely to be fearful of sharing negative feedback. Even if the consequences are not of concern, people tend to soften negative feedback if they think the person they're sharing it with will think lesser of them because of it. For this stage to be successful it must be perceived as a judgement free zone.

Your method for conducting the discovery may vary depending on the size of your organization, but in most cases we find a blend of online surveys and in-person interviews to be best. Similar to training, online surveys have the benefit of scale but lack the human component. In-person interviews possess the human element but can be time intensive. For this reason, we typically recommend sending a survey to the entire company, and follow that survey up with in-person interviews with select individuals at all levels of the organization.

Summarize Discovery Results

The biggest challenge after conducting a discovery is organizing all of the information. As the training evangelist, you should review all of the data you collected to begin identifying trends and/or themes related to learning within your organization. During this process we find post-it notes and a big blank wall to be the best tools. We will review the data, writing a single idea/observation per post-it note. The right organization probably won't be apparent to you until you begin shuffling the post-it notes around a bit, and you begin drawing relationships between different observations.



Identify your Ask

The end result of the summary stage is oftentimes a lengthy document that details every observation made. While this can be a critical component to document the overall discovery process, the change of management reading this document without a clear reason is slim. This is why before meeting with management you need to identify the one thing you're asking for. Be able to articulate it in a concise 2-3 sentence statement.

When writing such statements, I like to apply the PBS or Problem, Benefit, Solution structure. Applying this structure your first sentence summarizes the problem, the second the benefit to the company of addressing the problem, and the final sentence your proposed solution. A strongly written statement will typically compel management to then begin studying your summary document in more detail.

Present to Management

Everything to this point has been preparing you to present to management in their language. Your tactic in this setting is to get broad agreements early in the meeting, and leverage those decisions to drive the discussion. This is the underlying reason for the PBS statement. If you can get management to agree to your PBS statement, presented at a high level, you've already facilitated your first decision.

Let the PBS statement drive the conversation, and your lengthy summary document be there to provide the granularity as necessary. Do not present your lengthy summary document expecting any meaningful discussion to come from it. Chances are a small, inconsequential element will be gravitated towards, and that one element will monopolize the discussion. Keeping things high level, and diving in to granular detail only when necessary helps you better manage this meeting.

Beyond the PBS statement you also want to enter this meeting with a high-level plan or roadmap for how you expect to address the challenges found in your discovery. This is as much about articulating the fact that you have a plan, as it is to set expectations for your process of achieving it.

Step 3: Establish a Mission Statement

After you receive buy in from management that you should begin developing a training program, it's time to begin defining what that program will be. I suggest working with your management team to develop this. Although you may be capable of authoring this statement on your own, forcing management to participate in the development of this statement also forces them to take some ownership in the program itself.

When leading the development of this statement be clear in what it is and what it is not. This is not your training plan, but instead what you want your program to achieve. Be clear that from this point forward every new class will be measured against this statement. Only classes that align with this statement will be included in your training program.



Step 4: Identify Program Elements

Select your Deans

You can't do it alone. You need champions throughout your organization. It's easiest to position the deans to reflect roles within your organization. Have someone who is respected for high quality design? Make them the Dean of Design. Someone is really good on the computer? Dean of the Technology Department, and so on.

And note the specific use of the term "Dean". Like in a college setting, a dean is not exclusively responsible for creating classes. A dean is responsible for students well beyond a classroom. Your successful overall approach to training is going to rely on the inclusion of education throughout your entire organization, not simply in the classroom. A dean is responsible for the culture of education, and promoting it well outside a lecture hall.

Evaluate Helpdesk Trends

Technologically speaking, this is a great way to see what people are struggling with and what they need to learn. This can help you get a jump on creating some classes.

Identify your Classes

Impact Training: Avoid a culture of learners retaking the same class multiple times. If the purpose of an individual attending a class is to fill in specific knowledge gaps, have them attend impact training instead. Unlike long-form (day+) training, impact training is designed to be quick-hitting for immediate awareness around a specific topic.

Live Instructor Led Training: While logistically more challenging, don't ignore the benefit of the human element in your training program. In our experience foundational skills are usually best delivered in this way. The simple reason for this is it's usually when learning entirely new skills that we have the most questions, and have the ability to misunderstand information. A good instructor will be able to identify these behaviors, and make necessary adjustments along the way.

On-Demand Training: The just-in-time capabilities of on-demand training are a strength that should not be ignored. The closer you can align the transfer of knowledge to the application of that knowledge the more impactful training tends to be.

Step 5: Build your Program



Formal Training

Now that you have your classes identified, you need to build the content. In general for formal classes, shorter is better in a professional setting. Attention spans can run short, and everyone has work to do.

The mind can only absorb as much as the butt can endure.

Create an outline and expectations of what should be created for each class and the format of them: will this specific class be online? Will it be a lab or a lecture? Should every class have a PowerPoint to guide it? Once these expectations are set, you need to acquire or create the assets to support them: buy a bunch of laptops, create a PowerPoint template, find a good online quiz company, figure out where you can fit everyone for a class, etc.

You will need to pick your trainers, again by leaning on your Rock Stars. Make sure they understand what is expected of them in terms of class content, and specific class objectives, and then give them an opportunity to create their classes. This will be new for them as well, so be sure to maintain an open dialog with all the trainers and review what they have put together.

Informal Training

Limiting your training to the classroom is a recipe for failure. You need to offer up specific opportunities for non-classroom training. Get these “out of the classroom” classes scheduled and on people’s Outlook calendars (or whatever calendar application you use). If you need assets for these sessions, it’s time to create those as well, however usually these are created closer to the time of the session, not like the formal “classroom” training.

Learning Paths

Sit down with each employee and map out their training. You should be able to rely on a good assortment of classes that you have thought up, and this is a great time to get new ideas. You need to be flexible and patient during these startup months, but the Learning Path meeting is always a great opportunity to get people excited for what is about to come.

Step 6: Start Training

This one is fairly straightforward. You have your plan, now it’s time to do it. Do not expect perfect results immediately. Nobody in your organization is going to expect them either. But



they will recognize a well thought out all encompassing approach and that will get everyone excited and help generate a positive forward thinking attitude.

Step 7: Evaluate, Adjust, Repeat

Compare what you have achieved to your mission statement. How well did you do? What could you have done differently? What will you change?

Begin your management meetings and keep to that schedule. It is imperative to have buy in and support from above.

Keep up with your Learning Path meetings. These one on one “guidance counselor” sessions will continue to help you emphasize a culture of learning as well as be one of the best ways to let you refine your educational offerings.

Consistency is a key here. Once you have started with some momentum don't let it stop. You will need to change and update your classes, but keep having them, keep having your informal session, keep having all your supporting meetings. Eventually the culture of education will build and take on a life of its own.