

Achieving Lasting Behavior Change

Part One – copyright protected DRAFT

Introduction

Changing behavior in a planned way is an ever present personal, professional and social challenge. Kicking your caffeine habit, learning new spending habits as a family to save for retirement, getting the team at work to be more customer service focused or reducing childhood obesity in developed countries all turn on the idea that we can design, plan and implement positive behavior change that sticks.

Our success with planned behavior change is spotty. My weight yo-yos up and down as I try one diet after another, corporate is always announcing the next great change at work that quickly turns into the flavor of the month and self-destructive health and spending behaviors appear to be threatening the well-being of many societies. Some have tried to change so many times that they have given up. They claim it is not possible to change yourself or others in a deep and lasting way.

Yet there are individuals, teams, organizations and even entire societies that set their hearts and minds to achieving behavior change and do it. There are examples all around that hopefully include your own personal and professional experiences. And these successes have been studied closely to reveal the art and science of how it works. A handful of excellent books, all with one-word titles such as Influencer, Nudge, Switch, Redirect, Willpower and Habit have chronicled these successes in a motivating way and present principles, frameworks and techniques for how to replicate them. Such books do a great service as they provide both hope and actionable lessons at a time when there is an urgent need to change behaviors.

Despite our struggle to do it well, achieving lasting behavior change is not hard in theory. There is no rocket science involved. A close reading of the best informed popular books as well as the scientific literature on behavior change reveals the same lessons over and over again. And there are five of them:

1. Target simple but vital behaviors
2. Motivate change by appealing to both heart and mind but mostly heart
3. People automatically adapt to changes in the environment so change the environment
4. People change people so look to networks, groups, friends and family members
5. Behavior change is an experimental process of learning from experience.

These are all conceptually simple ideas. Thankfully there is no complex theory to master to get good at planned behavior change. On the other hand, applying these ideas takes considerable skill. Learning to influence behavior change is a bit like learning to read. What you need to do is not conceptually tough but learning to do it takes some time and considerable practice. And like learning to read, learning to change behaviors can feel awkward and takes sticking your nose in it. Finger goes to page, eye focuses on word and you sound it out. Doing this type of learning is almost impossible without a lot of help.

Let's take a quick look at each lesson and some techniques we can use to apply them.

Target Simple but Vital Behaviors

In the important and easy to read book *Influencer: The Power to Change Anything*, the authors draw on behavioral science to demonstrate how some very difficult behavior change challenges can be met in a systematic way. They focus on a handful of “behavior change geniuses” or people that have been able to use behavioral science to achieve seemingly impossible transformations. For example, they highlight the work of Mimi Silbert at the Delancey Street Foundation. She uses behavior change techniques 30-years in the making to transform newly released hard-core felons into productive citizens.

Some of the key findings in *Influencer* include:

- To change, people need both motivation and skill and that can come from personal, social or structural sources. This means there are six sources of influence (see figure) that you can draw on to achieve lasting behavior change. In practice you will need to use all six sources in multiple ways to be successful.

Motivation	Skill
<p>1. PERSONAL Example Technique: Links values to new behaviors</p>	<p>2. PERSONAL Example Technique: Deliberate practice</p>
<p>3. SOCIAL Example Technique: Peer pressure</p>	<p>4. SOCIAL Example Technique: Sink-or-Swim teams</p>
<p>5. STRUCTURAL Example Technique: Rewards and punishment</p>	<p>6. STRUCTURAL Example Technique: Choice architecture</p>

Adapted from: K. Patterson, *Influencer: The Power to Change Anything* (McGraw Hill, 2007)

- You don't change for the sake of change you do so to achieve a goal or outcome. Success requires breaking your goal or outcome into super specific behaviors to perform and learn which are most important.

It is easy to confuse goals or outcomes with behaviors. For example, let's say you want to be a better communicator. You might decide that means you must listen to people more closely when they are speaking. Your target behavior then is to listen closely. But exactly how to you do that? Look into their eyes, take notes or ask clarifying questions during a pause? Listening closely is not a behavior it is an outcome or something you want that results from doing specific behaviors such as looking at them, taking notes, asking questions and so on.

Every behavior change challenge is like that. We start with a goal – lose weight, have empathy with customers or help the poor and we won't make real progress until we break that goal down into discrete, unambiguous actions or behaviors. If your target behavior is clear you measure progress and take pre-emptive action against backsliding or relapse.

It is also easy to confuse behaviors with process, workflows or tasks. A process involves multiple steps and many behaviors. Preparing a low-calorie breakfast, answering a customer's question or explaining employment options are not behaviors but a set of related tasks or a process.

Earlier we mentioned taking notes as a behavior to achieve the outcome of listening closely to others in order to become a better communicator. Taking notes is in fact a multi-step process. Asking for permission to record a conversation is a behavior in that process.

Clarity on target behaviors pays a big dividend. It gives you something specific to measure, it is easier to practice and learn and it also helps you determine what is most important for achieving your outcome. For example, with a little practice I might find that I have more positive communication experiences by looking at the other person when they speak and showing facial expressions in response to their comments than I do when taking notes. Or as the authors of *Influencer* put it, some behaviors are far more vital for achieving your outcomes than others. Target those to get the most out of your behavior change effort.

For example, consider all the different behaviors you could target to lose weight. Which ones are most important? While that depends on your circumstances to a degree, research has shown that achieving sustained weight loss in general (for all types of people) correlates with weighting yourself on a weekly or frequent basis.

Getting on a scale every day is a specific behavior but it does not involve how you eat or exercise so how can it work let alone be one of the most vital things you do? It works because it helps determine what specific eating and exercise behaviors are themselves producing weight loss. It also is an early indicator when you are back sliding or gaining weight. In short it is a behavior that support excellence in lesson five – behavior change is a process of learning from experience.

There has been a lot of research into vital behaviors. For example, research has shown there are five behaviors that drive excellence in customer service including smiling, making eye contact, identifying yourself, explaining what you are doing to help the customer as it happens and asking if they need anything else they need.

While there are dozens of behaviors that going into an employee-customer interaction it is these five that are mostly responsible for creating the outcome of satisfaction. Knowing the vital behaviors tells you where to focus your change and influence efforts.

Always check to see if the vital behaviors have been researched for your behavior change challenge. If the research has not been done you will have to uncover them yourself.

Behavior change can mean starting new behaviors, stopping old behaviors and avoiding the onset of new unwanted behaviors.

It is important to know what your goal entails. Learning something new is a different type of challenge than breaking a deeply ingrained habit. Often real-world challenges involve both and run the risk of accidentally triggering unwanted behavior change. Take for example losing weight. You will need to learn new food preparation behaviors and break some bad eating habits. In addition, you need to be watchful for unwanted behavioral side effects such as increased smoking or incessant food-talk with friends that are not into it.

Fortunately, you don't need to figure this out all up front. Get as clear as you can on specific vital behaviors, habits to break and new behaviors to avoid and get started. If you are confusing behaviors with outcomes or processes, or if you are targeting low-impact behaviors, that will show up in your experience. Your attempts will fail to produce the outcomes you want and you will need to make adjustments.

That's why the fifth lesson emphasizes:

Behavior change is an experimental process of learning from experience.

One of the key things we need to learn from experience is the simple and vital behaviors that are needed to achieve the goal.

Appeal to Heart and Mind but Mostly Heart

For the most part planned behavior change is not an intellectual exercise. It is about motivation, emotion, mental energy and the ability to stay the course.

The importance of emotion in achieving lasting behavior change is emphasized in the popular book, *Switch: How to Change Things When Change is Hard*. In *Switch* the authors explain the recent scientific advances into how our minds work using the metaphor of a rider and elephant. Imagine a human riding an elephant and how the two work together or not. That's how your mind works!

In the metaphor the rider is our rational mind and the elephant is our emotional mind. The elephant is big and powerful and provides the energy and strength but is driven by habit, impulse and immediate need. The rider is fragile and weak by comparison but sits atop the elephant and uses the superior view and ability to plan and think clearly to guide the elephant in a way that benefits them both.

The rider is about rational reflection, planning, self-control and learning the lessons of experience. The elephant is about the senses, making snap judgments, taking immediate action and visceral experience including emotions, drive state (need for sleep, drink, food, sex) and cravings.

When the elephant and rider work together behavior change can be relatively easy and when they don't it can be impossible.

The rider-elephant metaphor, originally introduced in the book *The Happiness Hypothesis*, frames a lot of neuroscience and cognitive science in a practical way. Take for example the idea of trying to motivate behavior change. We don't do that well. Why? In many cases we try verbal persuasion. Present the most compelling facts as to why making a proposed change is so important. When contrasting existing behaviors to the new proposed behaviors we create a burning platform for change. For instance, think about all the advantages of having a healthy weight and all the potential dangers of remaining obese.

We try to appeal to the logic of the rider. While good to do that does not create any deep motivation for change. After all, the rider can pull on the reins all day and if the elephant is not interested in changing direction nothing will happen. On the other hand, if we make a strange sound or dangle a tasty-looking leaf in the right direction the elephant will react instantly and the rider will have to go along. That's why getting people just try something, telling emotional compelling stories and appealing to the senses and existing appetites in clever ways often produces the most meaningful motivation and *momentum* for behavior change.

The lessons from *Switch* and *Influencer* suggest we rely less on verbal persuasion and logic to motivate and sustain change and more on emotion, empathy and direct experience. Talk to the elephant not just the rider. In the Western world with our culture and management models dominated by science and other aspirations to rationality, we are taught to do just the opposite. Make your business cases and use the facts to create a burning platform and you will ignite a change movement. The rider cheers, the elephant sleeps and nothing much happens.

All of the stories and tools in *Switch* are masterfully grounded in the metaphor of the rider and the elephant. The key lessons are:

Direct the rider

- Leverage bright spots – find and use what works
- Script critical moves – focus on simple behaviors not complex procedures
- Point to destination – understand goal and motivation for it

Motivate the elephant

- Make people feel something, establish empathy
- Break change down in small steps to avoid brain freeze or fear
- Tie change to a sense of identity

Shape the path

- Tweak the environment to encourage change
- Build habit so behavior is automatic
- Rally the herd – diffuse new behaviors

All of these ideas are included in the five general lessons and are in one way or another covered in other modern texts of behavior change. For example, scripting critical moves emphasizes that in any change effort it is important to understand the simple vital behaviors that relate to the goal you are trying to achieve. We discussed that in lesson one above and illustrated it with the concept of vital behaviors from *Influencer*.

The point to destination technique emphasizes understanding the goal but in terms of motivation, not specific behaviors. You need to unpack the goal or desired outcome in terms of the psychology of the person undergoing the change. What makes it important to them? Do they have a history of going for the goal and failing? What rewards do they receive from habits that are targeted for change? Without some insights into their values, interests and emotions it will be tough to develop any real motivation for the goal. All serious books on behavior change emphasize this idea in one form or another.

While *Switch* may summarize the same underlying cognitive science of behavior change as other texts, the use of the rider and elephant metaphor is significant. The metaphor is simple, compelling, runs deep and provides a way to get some scientific insight with very little work.

For instance, the authors emphasize that behavior change can in fact be relatively easy when the rider and elephant work together. That does not happen automatically. The art of changing when change is hard is learning how to get your rider and elephant to work together. You learn to do that through experience and again we illustrate the central role of lesson five:

Behavior change is an experimental process of learning from experience.

We need to conduct many experiments to determine how to get our rider and elephant to work together.

Change the Environment to Change People

Nearly every text on behavior modification stresses the opportunities we have to change the environment as a way to directly influence the behaviors we chose. After all, the elephant runs on immediate reaction to what the environment presents. The environment stimulates our senses which in turn trigger emotions, associations and behavioral responses.

Consider the situation when the driver of car pulls in front of me without using their signal. I get mad and honk my horn. This is the dominant pattern of the elephant but it does go beyond simple stimulus and response. One way to see that is to recap the example using the ABC model from cognitive therapy.

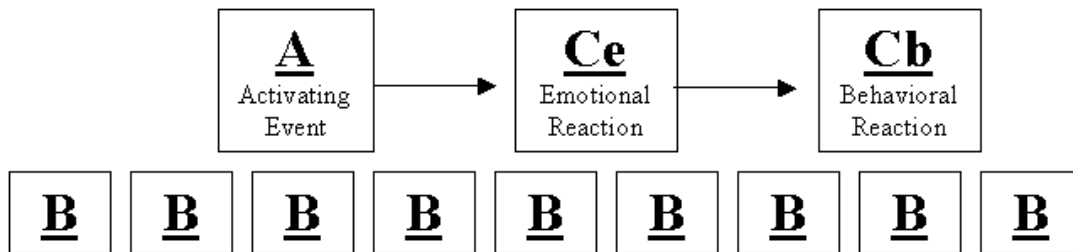
In the ABC model behaviors are dominated by chains of cause and effect that include:

- **A** or an activating event - someone pulls in front of you without using their signal
- **B** a series of beliefs are triggered by the activating event- the person means to be rude
- **C** emotional and behavior consequences of the series of beliefs – I get mad (emotion) and honk my horn (behavior)

or $A \rightarrow B \rightarrow C$ for short.

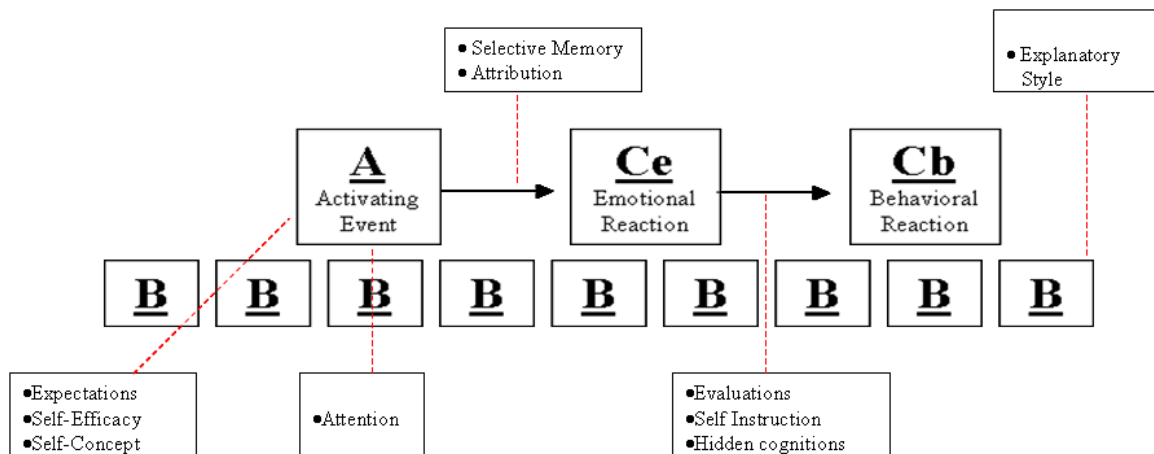
You can see A as the stimulus and C as the response. The stimulus and response are mediated by beliefs, sometime a long chain of beliefs. That is where the rider can get into the act but not always. Understanding environmental triggers and cues, the automatic beliefs we use to interpret them and the emotions and behaviors we that are hardwired to respond with are important for understanding the elephant.

We need to model the ABC around the behaviors we want to change. So let's take a look at it in more detail. Rian McMullin provides an excellent introduction to the ABC techniques in *The New Handbook of Cognitive Therapy* (Norton, 2000). To summarize:



This more clearly shows that we have a stream of consciousness or running set of thoughts and feelings that runs throughout the episode triggered by the activating event. This is illustrated by the string on boxes containing a **B**.

McMullin goes on to talk about the special types of beliefs we have and how they determine the **A** and **Cs**. To summarize graphically:



In our car example, the thoughts and feelings I generate from someone pulling in front of me without signaling depends on several factors including self efficacy (belief in my own driving skills), expectations and memories of past related events. I may feel less confident and have different expectations driving in New York City during rush hour than if I was driving on a country road.

You can also see the rider at work in this diagram. The self-instruction between the emotional consequent and the behavioral consequent is an attempt to be sure we don't over or under react if we are angry or afraid. Once we do take action our explanatory style offers an interpretation that often justifies our behaviors and protects self concept. Perhaps my angry honking of the horn startles and upsets the other driver but that's OK because they deserved it.

The ABC model is both simple and powerful. It gives us a way to expose how the rider and elephant both play a role in decision-making and behavior. More specifically, it can expose the rules of thumb or heuristics about how to interact with other people, learn something new, make decisions and think and behavior in general. The natural rules we use to think-things-through include cognitive biases because we use them in the contexts where they work well and in contexts where they don't. Cognitive biases have been intensively studied in many areas including how we think about money and make decisions about mates to deciding when are going to make a purchase.

For instance when making a decision we can be unduly influenced by:

- The last review we read rather than trying to weight all the reviews (recency effect)
- What other people have decided to do (herd bias)
- What we have decided in the past (status quo bias).

While these rules may work out well in some circumstances they will fail to produce good outcomes in others. Thus our use of them is biased or involves faulty thinking.

Consider big jackpot lottery tickets. Odds of winning are practically zero but people by the millions still buy the tickets because they know someone must win and it could be their best chance at making it big in life. While there are many cognitive biases at work with a lottery ticket, they illustrate well the availability bias where we are judging the probability of an event by how easily a certain outcome comes to mind. It is very easy to recall big winners as their stories are told and retold countless times.

Cognitive biases, or the patterned way we are hardwired to think, are one reason making small changes to the environment can result in big changes in individual and group behavior. They partially explain why we generate the Bs and Cs we do in response to an A. They tell you how the elephant is likely to react to environmental stimulus.

This idea was popularized in the book *Nudge: Improving Decisions about Health, Wealth and Happiness*. The authors point out that by understanding the cognitive biases at work in a given situation we can design clever improvements that encourage decisions that are in the person's best interest. For example, we can change the environment to encourage decisions to eat healthier, save money needed for retirement or otherwise improve well-being. By making such decisions the resulting experience promotes new and positive behaviors and habits. The book is called *Nudge* because we are not changing the environment to force people to adapt. Instead we make a change that firmly guides them by using their cognitive biases to make new choices and try new behaviors.

A good example is eating in a cafeteria. People can be nudged to eat healthier food by making simple changes to the environment. You can make healthier foods easier to access (e.g. express lines), more visible (e.g. shine light on them and make the displays more attractive) and actively promote them (e.g. ask visitors if they would like some fruit – rather than fries with that). Each of these changes plays off a cognitive bias which in turn naturally pushes the elephant to move in a new direction. We do what we always do but the environment has been rearranged to produce new and beneficial outcomes.

Take another example. Employers that offer a 401k match are essentially offering employees free money. And it is a lot of free money. Yet participation can be low. Part of the problem is that you need to enroll in the program and that involves making several complex or otherwise uncomfortable decisions. That high cognitive load, coupled with the status quo bias and the fact that access to the money is far off into the future keeps the elephant out of the plan all the while the rider is screaming to do it.

The cognitive biases that keep me out of a 401k can also be used to keep me in and to maximize the contribution I decide to make. Some plans now automatically enroll employees so they get the match. That means employees must overcome the status quo bias to get out. There was a change in default choice from opt-in to opt-out and it makes the difference. To maximize the amount employees contribute, innovative 401k plans offer the option of contributing dollars you will get in the future (e.g. from a raise) rather than sacrificing dollars you have today. These “save more tomorrow” plans play off of several cognitive biases including our tendency to believe we will do better later.

Changing features of the physical environment and default values are just two examples of what the authors of *Nudge* call choice architecture. There are several dimensions to the architecture that controls choice, including:

- Prices and incentives associated with alternatives
- Setting default choices or choices that are made automatically without consent
- How feedback about choices is provided
- How error recovery and changing choice happens
- Structuring and communicating complex choices
- Using mapping and metaphors.

The dimensions of choice architecture encompass all aspects of the environment including physical (e.g. room layout and furniture), informational (e.g. signs and databases) and transactional (e.g. standard operating procedures and computers). It is especially important to pay attention to technology and personal gadgets that we interact with frequently.

Tuning choice architecture to produce and sustain positive behavior change involves learning the right mix of mappings, incentives, defaults, feedback, choice structuring and error handling that will encourage the new target behaviors as well as block unwanted behaviors. All of that turns on understanding which cognitive biases the elephant is using in the cafeteria, at an online shopping site, at work deciding if today is the day to get some exercise or other any other decision context. Discovering the biases and tuning the dimensions of choice architecture is one way of learning from experience how to motivate the elephant. Not so much by changing the elephant but by understanding how it naturally thinks and changing the environment to make best use of that.

As with the other two lessons, the key to making this one work is to emphasize the central importance of experimenting and systematic learning from experience. Frameworks such as six sources of influence, vital behaviors and choice architectures are all important for mastering behavior change but none are an instant success.

Behavior change is an experimental process of learning from experience.

Before we examine how to conduct such experiments let's review lesson four on how to change people's behaviors by working through the people that can influence them.

People change people so look to networks, groups, friends and family members

We naturally tend to do what the people around us are doing especially if we trust or admire them. Wanting to please, belong to the group and keep up with the Jones or even outshine friends are all powerful psychological drivers for behavioral mimicry.

The tendency toward behavioral mimicry runs deep. We are at core social beings. Being social even involves the pleasure centers and reward circuit (e.g. serotonin) in my brain.

Often simplified into the principle of peer pressure, the idea is you can influence behavior change in people through other people that have influence with them. Targeting messages to children to influence purchasing behavior of adults, going to talk to someone's boss at work or tattling on a playmate are all common examples.

Peer pressure works- elephants don't run alone. They move in herds. If one elephant decides to walk up a hill the others will naturally tend to follow. But it is more than that. We all look to others for help and advice – friends, family members a mentor at work. The trust we have in these relationships opens us to influence. After all, these people have our best interests at heart and the elephant can sense that.

But it is even more than that. Most of us have heroes or people we admire. While we can't often directly interact with them we are open to influence by reading about them or watching them on TV. Anybody we admire is certainly worth emulating.

Understanding the peer groups, trusted relationships and heroes of those that face a behavior change challenge is essential for helping them meet that challenge.

And they are not hard to spot. Once a natural influencer is identified you need to work with them to help facilitate the target behavior change in the ones they influence. This can be challenging especially if it means that they need to change behaviors too. For example, a family member may be enabling behaviors that need to be stopped or worse practice the behaviors themselves. Imagine trying to stop smoking when your entire family smokes.

Sometimes you need to develop new relationships to achieve lasting behavior change. Participating in change groups or networks (e.g. Weight Watchers), working with a mentor or coach and even seeing a clinician or therapist can be essential. These relationships bring into play the experience and knowledge needed to provide the motivation and skill we need to make it through tough behavior change. Inspiring stories, specific techniques to try and personalized encouragement and assistance makes behavior change more likely.

As existing relationships are tuned to support the behavior change and new change-dedicated relationships are established the elephant feels empathy and caring directed toward the goal. Caring is one of the most powerful forces for effecting positive behavior change. It signals you are not alone. Someone else understands your struggle and has your back.

Working with others that have skill, insight and empathy relative to a behavior change goal dramatically increases the probability that you will successfully learn from the experiences you have as you try to change. They suggest experiments, help you interpret results and help maintain perspective over time. In short, working with others is essential for most of us to master the fifth lesson of behavior change:

Behavior change is an experimental process of learning from experience.

Let's take a look at how this works and why it is the foundation for applying the other lessons.

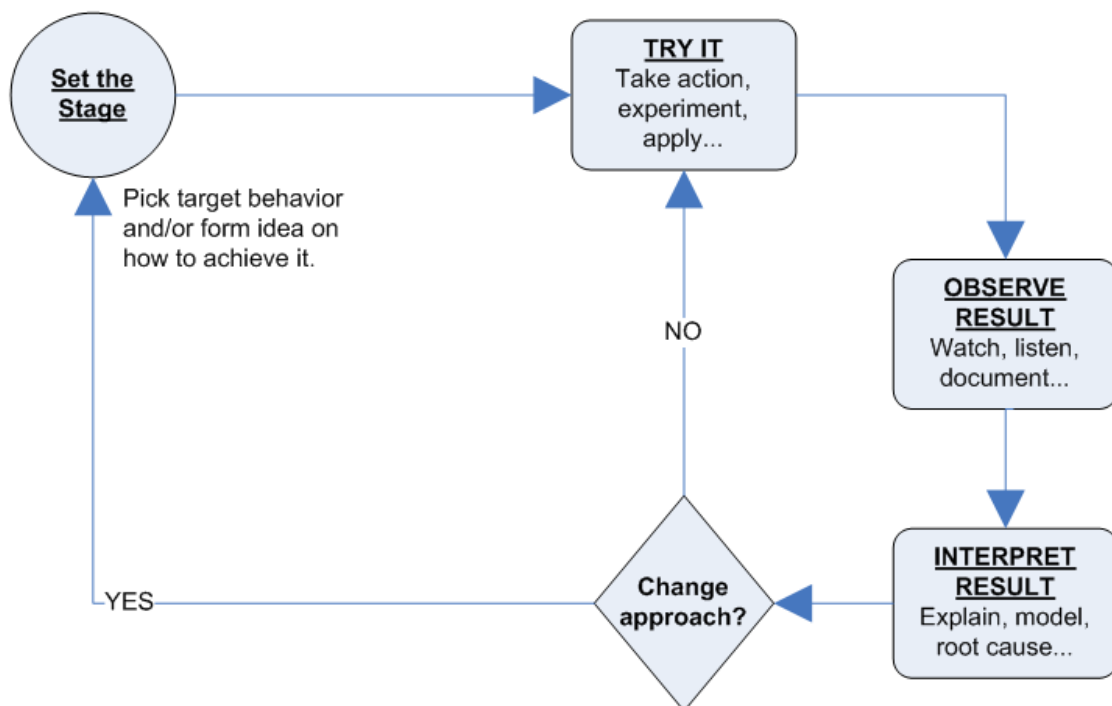
Experiment!

How do you learn to use a spoon, hammer or pen? How do you learn to open a jar of peanut butter, clean up a room or drive a car? How do you learn to please your boss, serve a customer or operate complex software? Amazingly the learning process involved in each of these cases (and many more) is basically the same.

You start with some preliminary idea (hypothesis) of what to do and:

1. Try it
2. Observe the results
3. Interpret the results
4. Decide to try something new or stay the course
5. Go back to step one and repeat until you have success or quit.

Iteration or repeating the process is essential. This looping effect is illustrated graphically below:



You can get a preliminary idea or form a hypothesis by watching someone else, being instructed, reading a book or from some other source but learning kicks into gear when you try it for the first time. Essentially we are experimenting, much like a scientist does but with less rigor to our method.

Like the rider and elephant metaphor the metaphor of being a scientist is very useful when it comes to understanding how we learn from experience. Like a scientist we continue to experiment, refining our hypothesis by trying something new until we land on one that fits the evidence life presents to us. What we learn may not be the ultimate truth in a deep sense but it works.

Experimenting is just what we need for achieving lasting behavior change. We start with some preliminary idea about the behavior we want to stop, start or avoid and a way to do that and then:

1. Try it
2. Observe the results
3. Interpret the results
4. Decide to try something new or stay the course
5. Go back to step one and repeat until you have success or quit.

For example, if your goal is to lose weight you might decide to eat less by reducing portion size. You decide to try that at breakfast and have one piece of toast with jam instead of two and have a small coffee drink instead of a large on the way to work. Armed with that hypothesis you:

1. Try it on Monday morning
2. Observe the results by weighing yourself on Monday evening
3. Interpret the results by noting no weight loss but assume it will take a few days
4. Decide to stay the course because it should take a few days
5. Commit to trying it again on Tuesday morning.

Each step in the process is essential but is prone to error. For example:

- You could feel poorly on Monday morning and decide now is not the time to start. Or you could simply forget because you are in a rush.
- Not getting the jam and the bigger dose of sweetener in a large coffee you might experience a sugar craving and eat a donut at the office
- Your scale might not be accurate or you might not know about normal weight fluctuation during the day. When you weigh in on Monday night you might see an increase!
- You could try this for several days and see no real weight change. Or worse, you may not see change over a longer period of time given off sets. Perhaps it is holiday season and you attend parties and have big meals and typically gain weight during this period.
- You might not see a change in weight in two days and decide to try something new rather than staying the course.

Generally if we hit too many errors while learning from experience we fail and stop. You might even decide that reducing portion size is not an effective technique for weight loss.

With a little insight we can manage the errors or challenges listed above. We can:

- Estimate the calories avoided in the reduce portions and calculate the number of days until we should see a measurable weight change.

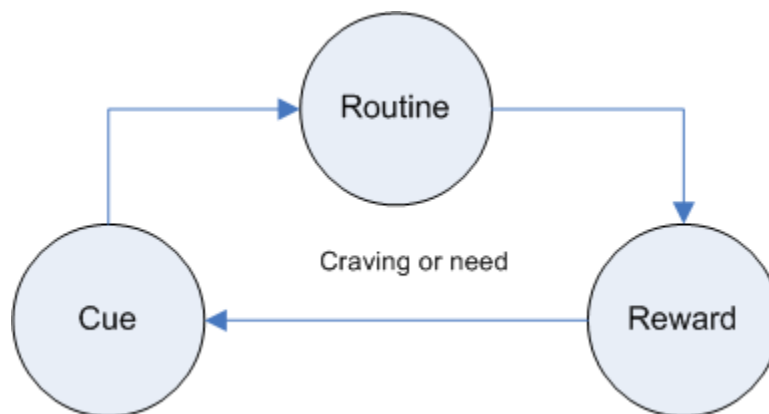
- Measure weight several times during the day to learn how it naturally fluctuates. This will help determine when to take a measurement to see if you are losing weight.
- Try using a process measure such as number of times per week you reduced portions as planned rather than an outcome measure (weight change).
- Determine a way to avoid additional eating behaviors that are offsetting the effects of reduced portions.

You might be able to sort this out on your own if you have strong observation and interpretation skills. If not, this is where working with others comes into play. Share your story with a friend that has lost weight or in a change group that includes a nutritionist and you are likely to get the feedback needed to keep learning from portion control experiences.

It will take many iterations of the learning from experience to figure out how to achieve and sustain healthy weight loss by reducing portions. It might in the end not turn out to be an effective technique for you. Or it may work but not result in the total weight loss you need. And so the cycle begins again and you may focus on food substitutions and increasing physical activity. Or perhaps you try a special diet that combines multiple new food behaviors or a lifestyle program that include activity behaviors as well.

The multiple iterations needed to change behaviors produce many failures or partial failures. These failures are teaching moments and an attempt to find those routines that fit our personal psychological needs and context.

In many cases our goal is not only to make behavior change but to maintain the new state. The goal is to achieve and maintain the new behaviors or more generally establish or break habits. As Charles Duhigg points out in his important new book, *The Power of Habits*, a habit is an automatic routine we have in response to a cue from the environment and that is reinforced by a reward. For example, a person might learn to automatically light up a cigarette (routine) when faced with a stressful situation (cue) and as a result feel more relaxed or in control (reward). Duhigg illustrates the idea with the habit loop:



This is similar to the A→B→C model from cognitive therapy that we discussed earlier.

Habits can run deep and may never completely disappear. The idea of breaking a bad habit may be misleading or even false. Thinking it is possible to “break” a habit could be one reason people backslide or relapse. Many smokers have stopped for weeks, months and even years only to start again. This is more likely to happen if you believe you have “kicked the habit” and no longer need to be vigilant. For smokers with a deep chemical addiction to nicotine it is necessary to learn a number of new behaviors to avoid restarting.

The book *Habit* takes this point a step further and argues that the best way to approach habit change is to leave the cue and reward alone and swap the routine for something new. In our smoker example, you will still experience stress (the cue) and want the reward of feeling relaxed or more in control but instead of lighting a cigarette (existing routine) you can call a friend or take a walk in a nearby park (new routine). It is learning new routines in response to triggers and craving a reward that is the key to behavior change. Figuring out what new routines will satisfy existing cue-reward habits and meet your change goals takes considerable learning from experience.

Learning from experience is essential for success with the other four lessons of behavior change. More specially, to make behavior change we must learn how to:

- Identify the simple and vital behavior that are necessary for achieving and maintaining your change goal (lesson one).
- Muster the mental energy and motivation needed to resist temptations to deviate from your goal as well as move through each step of the learning-from-experience process (lesson two).
- Modify the environment to make the target behaviors easier to achieve and maintain (lesson three).
- Work with others including existing relationship and establishing new relationships to get the caring and advice needed to try, observe, interpret and try again and again to achieve and maintain your target behaviors (lesson four).

Doing this learning results in insights, skills and routines that are tuned to your particular context and capabilities. While we naturally understand that eating less is required to lose weight and that reducing portion sizes means eating less, that is a far cry from understanding what specifically we must do to achieve and maintain reduce portions given our lifestyle, eating preferences and level of self-control. No one can work out all those details in advance they must be learned from experience.

Learning from experience is the process by which we personalize good general advice about how to achieve lasting behavior change and achieve results.

You get better at learning from experience with practice. You will see patterns and figure out what works for you just as you do when trying to master any skill. For example, measurement is always critical.

You must figure out how to quickly and easily determine if you are doing the behavior and if that is leading to the outcome you expect. Doing measurement right can create a lot of positive mental energy especially if it is used to compare progress with others or engage in game play psychology.

With practice you will get skilled at using measurement and therefore improve your ability to learning from experience.

To summarize, behavior change is an experimental process of learning from experience. You set the stage by translating your goal into a set of target behaviors, selecting a behavior and picking an initial way to try and achieve it.

With the stage set you:

1. Try it
2. Observe the results
3. Interpret the results
4. Decide to try something new or stay the course
5. Go back to step one and repeat until you have success or quit.

This process requires considerable skill and is error prone. You need to know your strengths and weakness and work with others when needed. Do not be fooled by how simple these steps seem. It takes courage to try new things, smarts to figure out why something is working or not, wisdom to know when to stick with something or try something new and tenancy to go through the many failures that are needed to learning from experience.

Fortunately, there are ways to quickly and accurately determine the strengths and weakness of individuals and groups when it comes to learning from experience. Using instruments such as the Kolb learning style inventory it is possible to determine what dominate style you have and how well you can flex that style. This is critical information when it comes to figuring out how to achieve lasting behavior change.

How the Lessons Work Together

Getting to a specific behavior to try is the crux of what makes learning from experience effective. As the first lesson says, target simple but vital behaviors. To do that we must translate the business or personal outcomes we want into the corresponding behaviors. For example, if you want improved customer satisfaction employees must learn the behavior of smiling or if you want improved bike safety riders must learn the behavior of wearing a helmet.

Often the goals or outcomes we seek are complex and made up of many skills, motivations and behaviors. For example, becoming an effective communicator or mastering the art of influence requires many different skills and behaviors. How do we get started learning something this complex from experience?

The key is to decompose the general goal – become a better communicator or influencer – into a set of competencies and in turn decompose each competency into a set of skill-based techniques and then ultimately behaviors.

For instance, if you were to research the best practices or vital behaviors for mastering the art of influence you would find it requires nine general competencies:

1. Establish a likeable presence (we are more open to people that we like)
2. Create a need positive reciprocity (you do me a favor and I want to do you a favor)
3. Prove social validity (be of my group in some way)
4. Establish need for moral consistency (want to act in a way consistent with my values)
5. Leverage technical expertise to demonstrate authority (we are influenced by people with special knowledge)
6. Uncover and offer scarce information (we are influenced by people that have the inside scoop)
7. Frame and reframe thinking to promote desired outcomes (there are many sides to every issue)
8. Tune approach to decision making style (we all have specific things we need to feel comfortable about a decision)
9. Use power (personal, organizational, relationship) to influence outcomes.

To work well each competency should be supported by specific attitudes or values, techniques and vital behaviors. Take for example, the first competency, establish a likeable presence. You can do that in part by being polite. At the very least being polite can help you avoid being disliked. Key behaviors in being polite include saying “please and thank you”. The words must be delivered authentically and with energy or they will be ignored. The receiver must feel an attitude of respect come from the speaker.

To recap the example we have:

Competency 1 = established likeable presence

- Attitude 1 = Take every opportunity to demonstrate your respect for others
- Technique 1 = be polite
 - Behavior 1 = Say please when asking for something
 - Behavior 2 = Say thank you when receiving something

By decomposing the competency into a supporting technique/attitude and vital behaviors associated with the skilled use of the technique, we have defined some precise experiments for driving learning from experience.

There are other behaviors associated with being polite and other techniques for establishing a likeable presence. Indeed, you can apply this decomposition method to the other competencies involved in influence and generate hundreds of experiments to try.

To make trying each experiment as easy as possible we can summarize it on a 3x5 note card, called a knowledge card (or kCard). For example:

<p style="text-align: center;">Say Thanks in a Way that Builds Your Influence</p> <p style="text-align: center;">“A spoonful of honey will catch more flies than a gallon on vinegar”- Ben Franklin</p> <p>THINK: Lack of politeness offends, automatic politeness satisfies but authentic politeness delights. We tend to like and be more open to influence from people that go beyond the mechanical “thank you” to show that they really do appreciate what we have done for them.</p> <p>DO: Each day take the time to hand write one thank you note to someone that made a clear effort to help you.</p>

The card’s title provides a simple description of the behavior to try in the experiment and the motivation for doing so. The quote is an opportunity to build energy or refer to authority to strengthen motivation for the experiment. The title and quote also clearly reflect the attitude or value that stands behind the effective use of the techniques.

The think section of the card lays out the hypothesis to test by describing the technique and offering additional context of the supporting attitudes and values. The do section describes exactly what to try out.

Imagine having a deck of these knowledge cards covering all the techniques, attitudes and behaviors needed to learn the nine competencies of influence from experience. You could play the cards daily and quickly discover those techniques and behaviors that work best in your context. The deck greatly accelerates the learning from experience process because it predefines most of the relevant experiments for you to try but still leaves room for individualized experimentation. The back of cards can be used to document the results from each play creating data to learn from. Having a card to carry with you during the day (or an electronic version on your phone) acts as a natural reminder to try the experiment. Each card is a nudge. Sorting through the deck to select just those cards that fit your environment and learning needs creates a personalized path which means fewer cycles and more immediate results.

In short, kCards naturally support every step in the learning from experience process. They tell us specifically what to try and provide guidance on how to observe and interpret. The choice to continue with a card or select another one can be simplified with instructions for how to use the deck. For example, you may want to play a single card until it becomes a habit or you might want to play different cards every day.

The best knowledge cards can be read in less than a minute and include vital behaviors that can be tested with a 2-3 minutes of effort. This small-step design is critical as it keeps the cognitive load of learning from experience down to a manageable level even for very busy people.

Just as it takes considerable effort to develop a good training or coaching program, it can take considerable effort to create a good deck of knowledge cards. Below are two approaches you can use to create a deck of knowledge cards for any behavior change challenge:

- Traditional Publishing Approach: A single (or small group of) trainers, topic experts and/or writers collaborate on creating the deck and then share it with those going through the behavior change.
- Crowdsource: Teach the community going through the behavior change how to write knowledge cards, define a high level competency model on the topic to guide their work and then have the group write, share and play their own cards.

Each approach has strengths and weakness but I tend to use the crowdsourcing approach unless clinical or technical expertise is essential to the content of the cards. A hybrid approach also works well.

Why does the crowdsourcing approach tend to work best? Writing knowledge cards is a great way to transfer general learning from books, classrooms and training programs into immediate action and experimentation in the workplace, home or the community. Having participants write and share their own cards during training, development or coaching not only addresses the learning transfer problem, it builds a sense of community and allows the power of diversity to come through in the process.

With the group writing knowledge cards you can create large decks quickly and cheaply. The cards reflect diverse backgrounds and individual differences of participants in terms of the quotes, techniques and behaviors that are selected. Although individual, these preferences are often shared with a few others in the group. By allowing individuals easy access to the entire deck they can quickly self-select those cards written by others that reflect their style. This is how YouTube and other large user generated content sites work. While there is a lot of “junk” on the site it is easy to find just what you like and the content with broad appeal naturally bubbles to the top.

Having a group author a deck of knowledge can create trusted relationships and common interested around the goal of making the behavior change. Community members help each other by sharing cards, making suggestions on how to improve cards and sharing experiences about how they played cards and the outcomes the create.

Taking the crowdsourcing approach to creating a deck of knowledge cards is especially effective in culture change efforts and when the group is trying to learn new soft-skills such as communication, leadership and improved team work.

You can create some network and community effects with the traditional publishing model too. In this case a small group of experts authors the deck. The deck is then introduced to the community going through the behavior change. As cards are being played the group can interact and share feedback, results and suggestions for other cards. Holding meetings to share applications stories can help others gain a better understanding of a card or new insights into how to use it.

A hybrid approach is also possible. In the case the traditional methods is used to define the competency model and author a starter set of cards. These are turned over to the group to use and flesh out the remaining cards in the deck.

Here are some guidelines for designing and implementing a deck of kCards:

- Define the behavior change challenge. Be sure to understand how the new behaviors are expected to create value and how success will be measured.
- Get to know the community with the behavior change challenge. You want to understand their motivation and skill issues related to the change and study their environments so you can customize the cards to their needs. Use the ABC and habit loop modeling methods when possible to generate more detailed insights.
- Conduct a literature/vendor search and develop a list of vital behaviors and competency model for targeted behavior change.
- Decide if a traditional, crowdsourcing or hybrid authoring approach is best.
- Train the knowledge card authors and decide how the community will use the deck to learning from experience.
- Create and deploy the deck.
- Support the community as the deck is used and monitor for outcomes.

Students can get free on-line training on how to write knowledge cards at kcards.ning.com but you need to make an email request to mark.k.clare@gmail.com for membership.

kCards are relatively simple and inexpensive to implement. They can be applied to any behavior change challenge and integrate naturally with training, coaching, mentoring, process improvement, technology implementation and culture change efforts. They work well because they incorporate all of the five lessons of behavior change. To see how let's first recall five lesson of behavior change:

1. Target simple but vital behaviors
2. Motivate change by appealing to both heart and mind but mostly heart
3. People automatically adapt to changes in the environment so change the environment
4. People change people so look to networks, groups, friends and family members
5. Behavior change is an experimental process of learning from experience.

kCards honor these lessons as follows:

- The DO section of the card targets one simple but vital behavior. The THINK section provides framing for acting on the behavior by referencing a technique or specific features of the context (e.g. at lunch or before meeting with your boss) that makes application much easier. (lesson one)
- The title and quote in the card motivates change by delivering a small jolt of positive mental energy by promising a benefit and by using inspiring words. kCards can also be written at various levels of difficult and a coach or change agent can use them to maintain motivation by dynamically adjusting the difficulty of the learning experience. In short, a small deck of cards is a great way to implement deliberate practice. Cards by their very design require little effort but do produce an outcome that is noticeable immediately. This helps maintain motivation by keep the task sized for even those with little motivation and providing an immediate reward. (lesson two)
- The card or deck as an object in paper form acts as an environmental reminder or nudge to try the experiment. In electronic form it can come with an email or audio reminder to take action. In some applications attractive card holders are created and placed on desks or cards are built into day planners / organizers to further the impact of modifying the environment to accelerate behavior change (lesson three)
- Facilitating the use of the deck and using crowdsourcing to create a deck generates a trusted network of relationships where the group assists each individual to achieve the behavior change. It is the group activity of authoring, sharing, using and providing feedback on the cards that transfers learning amongst members in a far more personalized and reusable way than traditional training. (lesson four).
- As mentioned above kCards are optimized to support experimentation and learning from experience. Each card is an experiment to try and the deck represents the space of most relevant experiments. kCards dramatically lower the cognitive load associated with managing my own learning from experience process. It has been scripted out while at the same time leaving plenty of room for creativity should it naturally occur. (lesson five)

Using the Five Lessons

kCards are one way to put the five lessons of behavior change into action. There are others and some are reusable such as 12-step programs (change support groups) and cognitive behavioral therapy. Most often however, change programs are conceptualized and implemented in ways that neglect one or more of the five lessons. I have seen major change programs in motion that have not defined vital behaviors or put specific mechanisms in place for the many cycles of group learning from experience that are necessary to produce new outcomes that stick. Other common problems are not establishing a clear connection between the new behaviors and value creation and failing to understand the current mental models of the community that must undergo change. The best way to start is with lesson five. It forces clarity around behavior and demands immediate testing that should trigger rich and iterative learning. Lasting behavior change starts and ends with our ability to learning from experience.