



*How We Learn What We Learn*

# *The Six Stages of Skill Learning*



*Flight* Simulations  
for Leaders™

## How We Learn What We Learn

# *The Six Stages of Learning*

by George Davis

Are there skills you'd like to have, but don't? Things you wish you could do, but don't know how? Taking a broader view, are there combinations of skills you'd like to have? Are you having trouble using the seven basic tools of total quality management, the six steps to successful selling, the seven habits of effective people, and the principles of managing by project, all at the same time? How do they work together? How can you apply complete sets of skills to your work and your life?

Stop for a moment. How good are you at brain surgery? Sure, it's a joke, but think about it: is a neurosurgeon born with fully developed surgical skills? When were the skills learned, and how? What about an airline captain, a software programmer, a heavy equipment operator, a TV technician? What about a car mechanic, an author, a teacher, a nurse? How did they learn to do what they do?

Think about some of your own skills. What are you good at? Are you a good writer, cook, water skier, parent, manager? Are you better than when you started? How did you go from no skills to fully-skilled? How did you learn?

There is a predictable process we follow as we learn new skills. Whether the skills are physical, like swimming or hang-gliding, or managerial, like leading a team or facilitating a meeting, learning them seems to follow the same process.

This learning process has six stages, which we accomplish in order, though we may stop at any stage, inadvertently or on purpose. We don't reach Stage 5 or 6 for every skill we try, nor would we want to, and in some skill areas we don't even get started. (How many brain surgeons do we need?)

Let's take a closer look at each of the six stages of skill learning.

### **1 Blissful** *Not knowing we don't know*

Ignorance is bliss. We know nothing about thousands of skills that others use every day in their work. In most cases, we don't even know the skills exist, and it's all right. For our personal well-being and peace of mind, we spend most of our lives insulated from what we can't do; we can take comfort that the world passes us by!

Stage 1 is usually safe. Sometimes, though, being at Stage 1, not knowing we don't know, can get us into trouble. At this stage we may think we have a skill, even though we don't. Examples abound, from gamblers who "know" how to beat the odds, to new restaurant owners who are certain of success because "I've been eating all my life", to excited start-up entrepreneurs who are certain the world will beat a path to their door. When amateurs think they're pros, the outcome is predictable. In general, though, what we don't know won't hurt us.

## **2 Frustrated**

### *Knowing we don't know*

It is easy to reach Stage 2. All it takes is awareness, and we become aware in the natural course of events. We read newspapers, magazines, and books, we watch TV, listen to the radio, sit in church, and talk to our friends and coworkers.

As we live day to day, we can't help being exposed to new skills and areas of knowledge, and once we are exposed to a new skill, we become aware of something we don't know or can't do. If this missing skill is perceived to be a desirable one, it can be frustrating to be at this stage

This happens regularly, actually by design, when we attend seminars and lectures. We assume we'll learn by listening, but we won't—lectures can do no more than move us into this frustrating second stage. It's too bad that lectures are the core of higher education, self-help workshops, and profes-

sional seminars. They result not in learning, which we hoped for, but in feelings of incompetence and inadequacy.

When a lecturer (teacher, speaker, minister) is dull, we try to forget the dreariness of the lecture and most of its content as soon as we can, usually before it's over! Even when the speaker is wonderfully inspiring, we soon forget the euphoric feeling, and can rarely remember the material for more than a short while. No matter how we cut it, the underlying message in a lecture is that the speaker is smart and we're not. Lectures make us aware, but rarely is there any lasting learning or enriching effect from them.

Motivational seminars are excellent examples of non-learning experiences. Motivational speakers are master entertainers, skilled at manipulating our emotions for a moment of elation. But even when the best of speakers or lecturers builds a fire in us, the fire doesn't last. We buy the books and tapes being sold in the back of the room, and not just to make the speaker rich. We remember how great it felt while the speaker struck those chords within us; so we listen again and again, wondering how it happened.

If feeling good is our motive, then listening is enough. But if learning (lasting change, growth, improvement) is our motive, then we have to do more than listen and feel good. We need to *do* something. We need to *experience* what it is we want to learn, what it is we want to become. Experience is not a passive activity. We need to participate, to get involved.

### 3 *Awkward*

#### *Knowing, but clumsily*

Experience, actually **using** a new skill, no matter how clumsily, is the key to becoming skilled. Think about learning to drive, or to type, or to use your computer. You had to think your way through each step. It was a conscious process, done cautiously and deliberately. The rules of the game, the “right” way to do it, occupied your mind.

At this Stage 3, it is very easy to slip back into old habits. The newly promoted supervisor finds it easier to do the work rather than to teach a team member to do it. The manager who wants to adopt Total Quality Management (TQM) principles finds it easier to let a few marginal products slip by, “to make quota just this month.”

In training and education, we help students learn by giving them work assignments and practical exercises — multiplication tables, essays, laboratory work, driver’s education. We may also use role playing and case studies where appropriate. And while most computer-based training falls in the category of automatic page turning, the best of software tutorials actually invite us to try out a skill, at least one time. The key is hands-on experience, and it works.

Even if it gets this far, which is rare enough, most formal education stops at the third stage. So does management development. So do self-improvement programs. That’s unfortunate, because through Stage 3 the skills have not been permanently learned. We are still awkward and uncomfortable and, being human, we prefer to avoid discomfort. We avoid it by ignoring or

rejecting the new skills and clinging to our old familiar ways. It feels better than pushing out of our comfort zone into new and difficult territory, so we let the infant skills atrophy and die.

That’s why it is so crucial throughout this stage that the learner be committed to learning the new skill. It is this resolve that keeps us moving forward and prevents our easy slide back into old styles and habits. Only the most committed learner, whether committed by choice or by coercion, will keep working at it. Stage 3 is not a fun time.

### 4 *Natural*

#### *Automatic, habit, routine*

It is at Stage 4 that a skill becomes automatic and routine—a natural habit. In skill-based occupations we expect or require performance at this level. Think about the last time you had a haircut, an oil change, ate in a restaurant, or went to a doctor. We expect high performance from skilled people, and when we get it we refer to them as “professionals.” They’re very good at what they do.

We should expect knowledge workers, including managers and teachers and salespeople, to meet equally high standards of skill performance, and yet we are extremely forgiving of sloppy managerial performance, for example, even at the highest levels of business and government. We allow our leaders and officials to get by with performances that we’d fire a housekeeper or mechanic for. It’s time to expect that these people, too, routinely and automatically use professional level skills for problem solving, decision making, team building, coaching, mentoring, facilitating, and serving us.

How do we reach Stage 4? Experience. Lots of experience. Successful experience. Does “successful” experience mean doing it right, or better than someone else, or making money, or being fulfilled and satisfied? No, none of the above. Having a successful experience means only that during and after the experience, we gained relevant and useful feedback on which to base future decisions and actions. Another way to describe the process at this stage is to say that our learning is being reinforced and fine-tuned. The important thing here is to keep practicing. Keep doing it. Keep applying the skill. Don’t give up!

So is experience the best teacher? Maybe. Or maybe not. If we’re thinking work experience, there are five reasons we want to rethink this old cliché. First, experience takes a long time, often much longer than we can afford in this fast-paced, quickly changing world. Second, it is costly. Third, educators are finding that work experience not only takes too long, but is too random to be efficient as a learning tool. Fourth, cause and effect are so separated by time that their dependency relationship goes unnoticed. We don’t know what caused what. Fifth, there are significant risks in learning on the job, many of which are either expensive or dangerous.

Let’s put it all together. On the job, we make many decisions today that will have impact days, months, or years from now. By the time the results are in, we no longer associate the results with the decisions or actions that caused them. At the very least, the good decisions we have made go unreinforced. From a learning point of view, we either don’t know why things happened the way

they did, or we mentally assign an erroneous cause to the result. And along the way, we have exposed ourselves and others to serious risks. The costs are high.

If learning at work is faulty, how then can we acquire the hoped-for skills?

Clearly, what is needed is a highly-focused, laser-beam approach that emphasizes desired learning and compresses the time required. In many learning situations, especially where the stakes are high, this need is served by computer-based workplace simulations. The simulation may be an aircraft in flight, a delicate surgery, or a management situation. In all cases, real decisions are made and applied, then followed by immediate feedback and results. The process can easily be tailored to the exact needs of the learner, and can be repeated again and again dozens of times until the desired learning is thorough and complete.

We must take care that the simulation is a realistic representation of the workplace, so the bridge from learning to work application is short and direct. It is unfortunate that much of computer-based training takes one of two forms which are misleading. One is the video game, in which cause and result are deterministically related. If you press button A at a certain time, the result is always exactly the same. The popularity of video games depends on this fact. No one would play if the results varied randomly.

The second misleading form—from an education point of view—is the “war game,” which enjoys great popularity in business today. That’s sad, because the underlying principles of a “war game” are competition, deception, and an assumption that resources are finite—

that is, we cannot create new resources and wealth. These games simply perpetuate out-of-date, inapplicable, and unsuccessful business and organization strategies.

When designed properly, however, workplace simulations are certainly better learning tools than random daily experience, and are rapidly becoming the new core of serious education.

## **5 Confident**

### *Skills integrated into useful sets*

A skill is rarely fully useful in isolation. For example, we will enjoy diving much more if we can swim, too. Wilderness backpacking is more satisfying if we can also read a topographical map. Leading a team works best if we can combine leadership skills with goal setting, performance measurement, collaborative decision-making, and many other skills at the same time. It is the skill *sets* that make the difference, that not only give us the feeling of wholeness and completeness, but make our skills useful.

In our work experience, skill sets are put together randomly, for the most part, especially in the world of leadership and management. We grab a video here, a seminar there, add a few pages from a book of buzzwords, and hope the magic will unfold us. Or, as we often believe, the stardust of many years' experience surely will transform us into world-class leaders. It won't happen. Neither will we become a "complete" manager by being awestruck by a world-famous leader addressing 500 of us packed into a hotel ballroom. Skill integration does not come from undirected daydreaming (visioning), or from waiting to see what will happen. Skill

integration into applicable, useful skill sets comes about only one way: selecting the skills and carefully planning their practice.

What one must do above all is to choose from amongst the myriad possibilities, plan how to achieve the desired set of skills for our own particular managerial success, and then clearly focus on their accomplishment. Put another way, you must identify the skill sets needed to become the leader you want to be, learn the individual skills by focusing on them, and then combine the skills by practicing them together according to a conscious plan.

In getting to this fifth stage, we encounter the same practical difficulties that we found in reaching Stage 4: experience is the best teacher, except that work experience takes too long, costs too much, is too random, separates cause and effect, and is too risky. Other than that, it works fine. Here again, we can use simulations to help us learn. At this stage, the combination of skills is so complex, however, that paper and pencil simulations are not adequate. Only actual replications of the workplace in computer-based simulations can effectively handle all the variables at once. The depth and permanence of learning are impressive under these conditions, though, and the effort taken to create the necessary tools will be well-rewarded.

## **6 Right**

### *Congruence of skills with belief systems*

We can perform skills entirely satisfactorily at the Stage 4 level of habit and routine or the Stage 5 level of skill integration. Most of us do. On our jobs we often feel that we have reached the pinnacle of our performance at

one of these stages. We're satisfied, we're happy, and so are our bosses and customers. And yet once in a while we have an extraordinary experience, one in which our work moves forward significantly, yet smoothly and effortlessly. We have hit our stride. It can happen to anyone. It has probably happened to you. Think of some skill or area of knowledge about which you can talk extemporaneously for hours. Or have you ever "worked" at something you liked for hours, for days without getting tired? Did you lose track of time? It is easy to devote energy to these tasks because it is as natural as breathing. You are in "flow." You are doing your right work. You are having a peak experience. The skills you are using are truly a part of you. You and the skills are one entity. Take them away and you would not be you any more. It is part of how you identify and describe yourself.

It may be easier to recognize this gift in another person. Frequently we meet someone who is extraordinarily good at what he or she does. We know this is a special person. We feel better around them. They go beyond the required or expected, and seem to be giving of themselves. In fact, that is exactly what they are doing: giving of themselves. They are the true artists of every calling, the real leaders, the great teachers, the most fulfilled of people.

How does one get to this remarkable Stage 6? It is profoundly simple, and it is automatic—whenever a learned skill is in harmony with your core values, whenever a skill set is aligned with your personal value system, then you are there. You can't help it.

That's another way of saying you feel

complete and fulfilled, and you perform exceptionally well, when you're doing something you believe in. The secret, of course, is to find work you believe in.

Think, too, about this possibility. It also works the other way around. You can feel complete and fulfilled, and you can perform at this exceptional level also *if you come to believe in something new you have learned!*

That is the extremely important phenomenon associated with Stage 6 learning—when new knowledge or skills do not conform to your initial belief system, *your belief system may change to accommodate them.*

This is personal transformation. You have new skills, a new understanding, a new set of guidelines to live by, a new paradigm!

In an organization, this leads next to the possibility of fundamental change. What if a significant percentage — say 30% — of the people in an organization experienced the same change of belief system? Wouldn't that change the organizational paradigm? Wouldn't that change the culture?

The six stages of learning described here can be the road map to automatic skills application, personal transformation, and culture change in an organization. They can be a framework for the growth and improvement of an individual, a work group, a project team, or an entire company. Put them to work for you now.

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