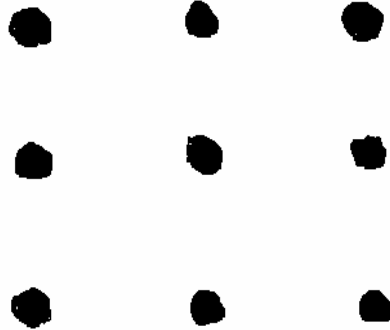


The Necessity of Being Taught, The Possibility of Being Self-Taught

There is a well-known brain teaser that goes like this:



“Without lifting your pen from the page, connect all the dots with four straight lines.”

The puzzle is simple for some, impossible for others. Its solution reflects a certain model of problem solving that is known as “Thinking outside the box.” The concept is cliché in these days of the enlightened corporation. In fact, the cliché has come to replace the skill, so that “thinking outside the box” has become the box. Nevertheless, if we can go back about forty years and pretend that we are hearing the idea for the first time, giving the concept the sense of freshness it deserves, we may be able to examine it and learn something about learning.

When one is given a problem to solve, one typically deals with it on a continuum of stress responses. The less familiar the problem is, the more stress it is likely to generate. Those problems with which one has the most experience usually cause the least stress. These are problems that the solver has seen before in slightly different clothing. Moving the sofa is like hanging the pictures on the wall. One algebra problem resembles another one. The exception to this rule is the problem that seems familiar, but in fact contains an unfamiliar element.

The dot problem is a wonderful example of the preceding kind of problem. Most of us have connected dots before. It seems a simple matter to be able to connect dots with straight lines. Furthermore, the square, as well as the number nine, are comforting old friends. Nonetheless, when many of us try the puzzle, we come up with four lines that connect only eight of the nine dots. We try a few possibilities in a few seconds, coming up with the same result each time. At this point, we feel our heads pressed firmly against the sides of the box.

Those that are already adept at solving such problems, including those that know the solution to this one, will gain very little from the above puzzle. Similarly, those that

are lacking the experience that would provide the proper insight are as likely to quit as to continue. What is the element that allows a few people to push their hands through the non-existent sides of a box that previously confined them?

The process of learning can be divided into two categories: learning as a result of being taught, and learning as a result of self-discovery. In actuality, each category contains elements of its opposite, so that often it is hard to tell in actual practice when someone has been taught something and when someone has learned it by themselves. Nevertheless, it is possible to identify situations in which the aspect of outside teaching predominates versus those in which someone has come to something on their own. A typical school classroom describes the first situation, and the child-prodigy describes the second.

The typical description of a genius is someone who has learned something that no one could have taught them. Many people are envious of the process of “genius” and wonder at the illuminations from the sky that fill the heads of these people who write great novels, discover black holes, solve historic math dilemmas, or change the course of the arts. If an observer really wanted to observe this process of “genius,” they would come to see it as a person facing a puzzle.

As I have insisted, there are only two ways to solve a puzzle. Someone can teach you something, showing you a possibility that you had not identified; or you can recognize the possibility yourself, see it as something you had not considered before, and use it to solve the problem. For most people, the first method is the only method. For example, many people would be unable or unwilling to continue to look at the dot problem until I suggested to them that one can draw lines longer than the length of the box. But in the case of “genius,” the puzzles are often so intimidating that no one exists to teach their solution. (In fact, sometimes no one has even recognized that there is a puzzle to be solved until the “genius” addresses it.) In this case, there is only the second method, the means of self-teaching, with which to solve the problem.

It is not necessary to be a genius to live a successful life. In fact, the proportion of said-geniuses living successful lives to said-ordinary-people living successful lives is so small as to make the geniuses statistically insignificant (perhaps even non-existent). And, in fact, no one is a genius in every field; which means, conversely, that even a genius must attempt success as an ordinary person in most of their activities. Therefore, the first kind of learning, that involving outside influence, is quite necessary.

But because of the pervasiveness of the necessity of outside teaching, many of us have come to see the grid of problem-solving as a box. We make a distinction between “genius problems” and “ordinary problems,” defining the latter as the kind of problems that ordinary people are capable of solving. We often go further, telling ourselves that, because these are “ordinary problems” they always have a solution that can be taught or circumvented. The hidden repercussion of this idea is that, as most of us do not attempt “genius problems,” whose solutions have never been discovered and which therefore require a degree of self-teaching, we do not need to engage in this second kind of learning. In fact, many people would describe themselves as incapable of undertaking this kind of learning, even if they needed it.

Somatic methods, including the *Feldenkrais Method*® contradict the notion that “ordinary people” do not need or cannot engage in self-teaching. These methods address problems involving a better understanding of the self. These are problems which, in

some cases, more traditional avenues have been unable to fully overcome. The medical model of diagnosis is a good example of the “teaching” model for learning, where a client comes in with a pain and the doctor attempts to overcome the pain by offering information the patient did not previously possess. Somatic methods often address certain “mysterious pain” problems better than medical methods, and their success lies in the fact that they have encouraged self-learning as a means of overcoming difficulties.

How is the model of self-learning brought into play in a somatic method such as the *Feldenkrais Method*? Furthermore, why is the notion of self-learning a necessity in the successful addressing of a problem? In the case of the *Feldenkrais Method*, a client is often drawn to attend an *Awareness Through Movement*® class because they are dissatisfied with their ability to engage in a particular activity. For instance, a client, which I will hereafter call a “student,” finds she cannot type for more than fifteen minutes without pain. She has heard that people who take *Awareness Through Movement* classes are often able to overcome these difficulties somehow. So she signs up for a workshop lasting six weeks. What will her experience be with the class, and how will this involve her learning process?

In each *Awareness Through Movement* class, students are typically given a specific movement to make. The movement is simple, but it is often not easy. Usually, the movement, which may be something as simple as lying on the back, standing the legs, and lowering them to the floor on the right, is made more challenging with certain constraints. In this case, the movement must be made with the right leg crossed over the left. Furthermore, the hands are interlaced behind the head. Lastly, and most importantly, the students are instructed to use as little effort as possible in raising and lowering the legs; the movement must be smooth and elegant. These constraints make the simple movement more difficult for the majority of the students because it reduces the number of ways they may solve the problem. These are the four straight lines they are given with which to connect the dots. Not five straight lines; not curved lines.

Instructors try to take the pressure off of the students by informing them that they need not solve the problem, but only examine it. In other words, they tell the students to take their legs as far as they can comfortably, and *no further*. The teacher suggests to the students that, in the process of doing the small movement that they find easy, they will discover a way to do the larger movement with similar ease.

This reassurance is ignored by most beginning students who typically go at the problem with either grim determination or exhausted despair. Many will often try and solve the problem with momentum or with muscular strength. These people either disbelieve the instructor who tells them that this is not the way to solve the problem, or they despair of ever finding another way to solve it.

What do these responses say about the mindsets of these students? What are these students going through? These people imagine this problem of the lowering of the legs to be a familiar one. For most of them, this is a disastrous misconception. By imagining themselves to be faced with a familiar dilemma, they attempt to solve it by fishing through their previous experience.

In terms of this lesson, the problem of lowering the legs is not what it appears to be, as we have described it. If we describe the body as a collection of relationships as opposed to a collection of parts, then we can describe the process of movement as “the invocation of certain relationships in order to effect a change in the self.” If we only

think that we are “lowering our legs” in this lesson, we automatically conceive of the problem as something confined to our legs. But if we see the movement as describing a relationship between our pelvis and our ribcage, where the movement of the pelvis affects the movement of the ribs, then we understand better the true challenge of the movement.

The students will each have a different amount of experience in addressing this problem. Their experience can be seen as the extent to which they have used their bodies in the past, and the extent to which they understand how they have used them. We could say that they are attempting to lower their legs by effecting the bodily relationships that they have always used. In order for them to improve the movement, to make it easier, it is necessary for them to discover a relationship in their body that they have not made use of before.¹ The solution they are looking for incorporates information they do not yet possess, even though the information is accessible to them.

How is it accessible? There are two ways for these students to get this information, theoretically. Firstly, someone can show them. To some extent, the instructor attempts to do this with leading questions. “As you make the movement with your knees, what is happening in your ribs? Can you soften in your upper ribs so that you can lengthen your left side?” But, of course, there are limits to the power of these questions. Even the placing of hands on the student, or the physical manipulation of the student by the teacher, can only direct that student so far. Whatever is preventing them from moving easily may also prevent them from understanding the outside teaching.

It is to this end that the second kind of learning becomes an essential element in the process of moving through the difficulty of the problem. Suddenly, every student is required to be a genius, because they are faced with a problem that is compelling, one that, if solved, will benefit them greatly, and because there is no one that can tell them what they need to know to overcome their difficulty.

It is necessary for the student who has failed to solve the dilemma to come to the recognition that they cannot solve the problem with the information they already have. They require information that is accessible to them, but which they currently have not made use of. They gain this information when they pay attention to their experience of the movement. As they move from the neutral position to the extreme position, they are bombarded with information, much of which they have previously discounted as irrelevant because it did not relate to the information they assumed they needed to solve the problem. “Why should I pay attention to my ribs when it’s my legs I’m moving?”

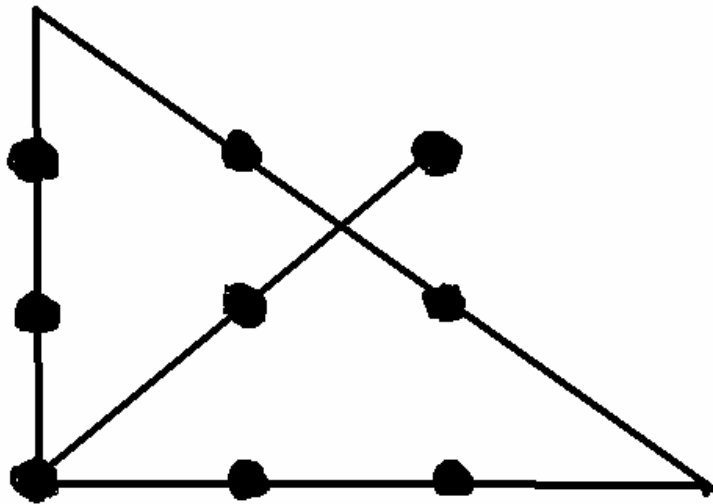
By deciding not to attempt to solve the problem, they cease to rely upon their limited store of information. As they cease to bring their history of solutions to the problem, they are able to take in all information without deciding what is relevant and what is irrelevant. In this way, they have an opportunity to notice something. This “something” that they have noticed may in fact be a piece of the solution they are looking for. As they continue to move in this open state, they are able to explore the parameters of the new information. At some point, they may get enough information to change the

¹ To be exact, they may have experienced these relationships in the past, but have forgotten them. This happens to most of us as we cease being children; for whatever reason, as we age, we restrict ourselves to a habitual way of moving. Though we have been able to move easily as a child, we have forgotten, and we must relearn the movement. Of course, in some cases we never learn the movement at all, even as children, and we must come to discover the movement for the first time.

way they are moving. They may find that they are now able to move their legs to the side more easily.

The “problem” has been “solved” in a limited way: The problem was: “I must improve the movement,” and, consciously or not, many of the students have done so. This is because they have increased their concept of their “selves.” Each “self” includes more bodily relationships than it included previously. This process may be repeated indefinitely over a series of lessons, and a constant refinement of the movement is the result.

In this situation, and perhaps in others, students gain a great deal of benefit by engaging in this process of self-learning. The process allows them to take in information that was previously unavailable to them because of their inability to conceive of its use. In a sense, the information that was available to them served as an extra point outside the box, invisible, but necessary for the solution to the problem, much as it is necessary to conceive of a point outside the three-by-three grid in order to solve the problem of the four lines.



Perhaps this paper might have been called “The Possibility of Being Taught the Necessity of Being Self-Taught.” The title I chose reflects my initial statement that one can live a full life without ever having taught oneself anything, so long as one has teachers to teach the essentials. In a sense, though, this is a fallacy, because we learn things as children that no one can really teach us. Although an infant requires the example of other speakers to learn to speak, no one really teaches an infant to speak. The actual art of speaking in all its complexity is too much for anyone to transmit to anyone else. Luckily for all of us, we are far too self-absorbed as infants to be prevented from teaching ourselves the most important lessons of our lives – language and movement.

Once these lessons are learned, we can survive the rest of our lives with what we know, and with what other people tell us.

Even so, when one is given a problem whose solution offers a tangible benefit, a problem which is compelling, solvable, and which requires self-teaching, one can come to the notion that one can exceed one's boundaries. More importantly, the act of self-teaching opens up the possibility that the boundaries are not boundaries at all.

Adam Cole publishes a free monthly newsletter about *Feldenkrais* on www.feldenkraisinfo.com. During his training, Adam wrote a novel entitled *Myth of Magic*, about a school of magicians who are fighting for their survival in a world that does not understand them. Visit www.mythofmagic.com to read an excerpt from this Feldenkrais-influenced book. To learn more about Adam, hear his CD, read his poetry, and much more, visit www.acole.net.