The Training Game – More than meets the eye or the ear

by Barbara Boat, Lynn Loar, and Karen Pryor

Lynn Loar:

Admittedly, I'm stubborn, but it has taken me two years to stop resisting and embrace something I had learned – or thought I had – in five rather enjoyable minutes. Reinforce what you'd like more of and you'll get it. Ignore the rest unless safety is involved. For precision and clarity, pinpoint what you like with a marker signal, e.g., a click, and follow the click with a treat to show the learner both what you like and that you'll reward its occurrence. Now my dog always waits politely until she hears "Okay" before eating her dinner. Nice. Took at most two minutes.

Clear, simple, easy. Involves precise timing and coordination, not my strengths. So, play the training game (with people role playing the learner). Practice clicking during the behavior so the learner understands what you have selected and treating with the other hand promptly and without dropping the clicker or taking your eyes off the learner. So, I practiced and my timing and coordination improved. My dog now waits to hear "Okay" when anything edible appears.

Timing is the key to communication. Too late and you reinforce the wrong behavior. Too infrequently and you frustrate your learner, and appear stingy and unreliable to boot. Precise timing creates a bridge of understanding between the trainer and the learner, and this bridge facilitates both learning and trust.

For accurate timing, you need to focus not only on the moves the learner makes, but on the definition of the task the learner is developing, to reinforce on-target moves and ignore tentative forays that could, with only a click or two, send the learner off to a dead end. This means more than the sculptor's envisioning a statue in the block of marble – it means seeing with the learner's eyes his vision of his statue in the block of marble.

Breaking things down into small enough increments to click somebody through the steps – when they don't know the goal – is no small task. During one round of the training game, a group decided I should have the learner stand on one foot. I had asked them to pick something easy, and they thought this fit the bill. But, does it?

The learner waits outside the room while the group decides on the task. Then the trainer opens the door to signal the learner to enter. So, the learner, in this case a dedicated humane officer with the Humane Society of Santa Clara Valley, walked in and got clicked. Took another step and got clicked again. Thought she was moving in the right direction. She had seen the training game once or twice before and knew that typically the learner was clicked for walking toward a target. If I clicked her for a few more steps, I'd be in trouble. That would be enough reinforcement for her to conclude she was heading in the right direction. Actually, I was clicking as her heel left the ground on each step hoping she'd realize how early the clicks were. Not likely, though. How do you break the task down – and slow the walker down? Well, standing on one foot really means lifting the other. So, clicking for moving the free foot seemed right. Walking involves forward momentum; standing does not. Could I shift her balance backward a bit? Instead of positioning myself so she'd always be moving toward me, which I usually do to be able to see facial expressions and gauge levels of frustration, I let her pass me. She had to turn and reach behind her for the treat, shifting more of her weight onto the back foot. A couple of clicks as she turned and began to lift her other leg for the next step worked. On the sixth step, she stood still, lifted one leg several inches off the floor and looked tentatively at me. The room burst into applause.

So, it takes six clicks to get somebody to imitate a flamingo. What's the big deal? I asked her what it felt like being the learner. She said

"Reinforce what you'd like more of and you'll get it."

"I've had people explode in anger during the training game or burst into tears."

"My poor learner-victim was hopelessly confused and I was the cause."

she felt anxious, confused, tentative, vulnerable and exposed, but also eager and encouraged. I explained my quandary about getting rid of the forward momentum to the group. They were astonished – from their perspective things went quickly and linearly from entering to focusing on feet to standing on one foot. It looked this way to them because they knew ahead of time what the goal was. Everything they saw was in this goal-oriented context. Not so for the learner who has no idea what is expected.

Clicks must come rapidly both to provide direction and encouragement. Too few and your learner not only loses interest in the task, but becomes miserable, hurt, even betrayed. I've had people explode in anger during the training game or burst into tears. In one session an experienced and confident learner bounded in offering all sorts of behaviors (and exhausting herself in the process). For her considerable efforts she received few clicks from an inexperienced and unsympathetic trainer. After a minute or two of jumping, turning, moving first one limb then another to see what would earn a click, she turned to the trainer and said, "I'm out here working myself to death for you and you're not giving me anything back. Frankly, I don't like you and I don't trust you."

So, there's more here than meets the eye and the ear. Breaking tasks down to small, manageable steps is a useful skill for teachers and parents as well as trainers. Having adults role-play the learner to feel the anxiety, frustration and uncertainty of that position teaches empathy for the animal/child/student, another valuable contribution. But why the emotional impact? And why do the participants remember in vivid detail the trial they participated in months, even years, afterward?

Barbara Boat:

About a year ago I met Lynn and she talked to me about clicker training and the training game. I was intrigued with the applications to high-risk families (see *Latham Letter*, spring 2000). I really thought I understood what clicker training and the training game were all about. I thought that the training game would be like playing "Warmer-Colder" except the click would replace my voice in coaching the learner to exhibit the designated behavior. Wrong! Very, very wrong!

At a subsequent Board meeting of the Pryor Foundation I had an opportunity to be a learner and a trainer. My coach was very skilled and I soon was turning in circles, picking up my rewards (pennies) after each click that my coach used to inform me that I was doing a fabulous job and was a very smart learner. Now it was my turn to be the coach. The designated behavior for my learner-victim was to walk several steps to a table and touch the mat on the table with her hand. As soon as my learner started offering me behaviors I was overwhelmed! Should I click and reward that step or that turn or – oh no! I accidentally clicked as she sank down on one knee. How am I going to get her off the floor? I was mortified. My poor learner-victim was hopelessly confused and I was the cause!

My sense of responsibility to create a positive outcome for my learner amazed me then and still does! I can relive this coaching experience in great detail (yes, we did successfully complete the task – eventually). Why is the impact so lasting and vivid? I think there may be several reasons, some of which are at least tangentially related to the teaching of empathy and compassion:

1) *The training game is not a "game" at all. Clicker training is a powerful, powerful tool. And like any tool, its effectiveness depends upon the skill of the user.*

2) *Use of the clicker focuses the attention of the trainer totally on the learner. We know from many research studies that positive attention is a powerful reinforcer of behavior. Witness the success of parent-child interaction training, based on the principles of operant conditioning.*

"The training game taps our ability to walk in the learner's shoes."

3) *The trainer must have a sense of the learner's abilities, that is, what the learner is able to do. My coach did not demand that I spin 40 times on one foot. Respect for the learner's abilities is inherent in the training game.*

4) *The training game demands clarity of timing and reinforcement on the part of the trainer. If the learner "doesn't get it," blame the trainer. The responsibility for outcome is placed squarely on the trainer's shoulders. Granted there are many temperamental differences in learners and so forth, but the trainer is responsible for recognizing or inventing creative solutions.*

5) *The training game taps our ability to walk in the learner's shoes. We see the learner's confusion, feel the frustration and the desire to please, to be a good learner and share the joy – yes, joy – when the task is accomplished. High Fives and laughter!*

6) *Not everyone can be an effective trainer using clicker training. I have real doubts about my abilities here. I will practice and observe and learn all I can, but this may not be the best technique for me to use in teaching empathic and compassionate behaviors to children and families because I may not be able to master the technique. But, trust me, I am going to try!*

Karen Pryor:

Clicker training is the way animals learn in nature. That is, animals will repeat behaviors that promptly produce desired outcomes and abandon those that do not. Successful outcomes reinforce the behaviors that brought them about, and animals learn from experience. Thus, a wild animal may forage or hunt and a domesticated one beg or come running at the sound of the can opener. The outcome in both cases is food to eat, which reinforces the behavior. Wild animals adapt their techniques to changing weather and seasons, domesticated animals to strategies that work in their homes.

Animals, especially young animals, optimistically explore and experiment in nature as they discover what works and what doesn't, how to catch or find food, how to recognize the cues that food is near, how to get at new sources, etc. This is very much like the optimistic exploration and experimentation we establish in animals (and people) by teaching them the training game. One reason it is so much fun is that it resembles the experience of discovering how to win! By your own efforts! – that is so much a part of the learning that young animals do. So, yes, reinforcement is the basis, but the chains of learned behaviors and cues, and especially the reinforcement for varying the behavior and THEN going after what works, combined with discovering the environmental cues, "the rustle in the grass," they're the global behavior.

Lynn Loar:

My dog now comes running at the sound of Velcro. She didn't until two years ago when my husband bought three new pairs of shorts, all of which have Velcro on the back pocket. He wears these on weekends, stuffing the back pocket with dog biscuits when he takes her on walks. Within two days—before the first of the newly purchased shorts had even been laundered—she had figured out that the sound of Velcro opening had the potential to mean good news. She came enthusiastically and optimistically, withstanding the occasional disappointment caused by my Velcro-sealed purse. The pay-off with the pocket is frequent enough, and by now an intermittent and powerful reinforcer, to maintain the behavior.

"Clicker training is the way animals learn in nature. That is, animals will repeat behaviors that promptly produce desired outcomes and abandon those that do not. "

"Clicker training gets your timing right so you can comfort a sick child."

Erstwhile neighbors of mine had a basset hound named Sloth whom they took on camping trips. They wanted her to enjoy some off-leash freedom but not stray far away. Understanding how animals learn, they tape recorded the sound of the refrigerator door opening and took the cassette and a portable player with them on their trips. Whenever they could not see Sloth, they'd play the tape and she'd come running, sometimes getting a treat for her appearance, sometimes not, just like at home.

As Barbara and I talked about our ideas for this article, we reviewed the training game played at the Pryor Foundation meeting almost a year ago. Barbara remembered it vividly, down to every detail. To my surprise (I have a very poor memory and was an observer rather than a participant when Barbara learned and trained), I remembered much of what had occurred. Neither of us had made any effort to remember this, and I was struck by the extraordinary excellence of our recall. I asked Barbara if she remembered anything else this vividly other than her granddaughter's chemotherapy. Her granddaughter Katie was diagnosed with a virulent form of cancer almost two years ago; Barbara has been very involved in the care and emotional support of her granddaughter and the rest of the family. Part of the reason I was so surprised at Barbara's vivid recollection was that the Pryor Foundation meeting occurred at a particularly tenuous juncture in Katie's treatment.

To my astonishment, Barbara replied that she remembered the training game more vividly than the details of Katie's chemotherapy. Why does the training game effortlessly embed itself in memory? And, what exactly is it, since it is obviously more than a game? How can a couple of therapists who work abusive families put the training game to good use?

In a recent talk at the University of North Texas in Denton, Karen Pryor remarked, "Clicker training gets your timing right so you can comfort a sick child." Timing is a way to break down empathy into teachable skills. Not correcting or giving advice, sincere but alienating moves, but precisely timed skills that truly help both the problem and the relationship.

Barbara Boat:

Empathy is the skill that lets you feel the feelings of another. Compassion takes empathy a step further, feeling the feelings of another combined with the urge to help. Kindness is compassion in action, behaving helpfully based on one's awareness of the feelings of another. Clicker training focuses the trainer's attention on the learner, with respect for the learner's abilities, frustration and fatigue. This accurate assessment that is essential for clicker training is empathy – in a way that can be learned through repetitions of the training game. Trainers always want their learners to succeed – the trainers' success depends on the learners' achievements – so they are very helpful. They streamline things and break tasks down into small and manageable steps. They make learning fast and fun through frequent clicks and generous treats. They come across as kind and encouraging trainers, and their students as avid and enthusiastic learners.

"Can we break empathy down into acquirable skills so that compassion and kindness replace abuse in troubled families?"

So, can we teach empathy, compassion, and kindness to harsh and punitive parents through the training game? Can we break empathy down into acquirable skills so that compassion and kindness replace abuse in troubled families? That's some of what we'll be working on at the Pryor Foundation, and we'll share what we learn with the readers of the *Latham Letter.*

Keep your eyes open,
and your ears
ready for the click!

Barbara Boat, Lynn Loar, and Karen Pryor are members of the Pryor Foundation's Board of Directors.

www.pryorfoundation.com