Learning principles can be of great value in modifying the behavior of school children. Too often a teacher's own shortcomings and inadequacies hinder him from being truly effective with his students. In general our educational system is based on negative contingencies rather than positive ones. Ways in which a teacher can be more effective in behavior modification include using positive approaches to the reinforcement of desirable behaviors, employing effective attention as a reinforcement, reinforcing the behavior immediately and consistently at first and infrequently after the habit has been established, avoiding inappropriate punishment, and using the principle of shaping to increase by small increments the incidence or strength of a certain desirable behavior. (DE)
I would like to comment on Dr. Heilman's statement "teachers are still looking for miracles." By this he meant that teachers have a very difficult time accepting their own shortcomings and inadequacies. There is a strong tendency to put a lot of pressure on a pupil to meet the administration's standards. Teachers have a very difficult time accepting the fact that some children are slower than others. We even have the tendency to feel sorry for ourselves and instead of letting a child learn three or four words in one week, there is a tendency for teachers to become frustrated and angry when a child is not up with the rest of the class. Some teachers then frustrate children because of their slowness and make matters worse. The word acceptance is loaded; please think about it.

There appears to be a great deal of resistance to new ideas especially to the acceptance of behavior modification. It occurs to me that the more training a person gets, in some cases, that the more resistive and rigid he becomes to new ideas. There appears to be something wrong when the people who should be more open to new ideas resist change. To elaborate this point, I have been a consultant to a state institution where there are very few trained professionals. At this hospital people are very open and willing to accept new ideas. Because

*Speaker's manuscript transcribed from tape.
of this they experience a great deal of success with behavioral modification programs. I think this is the function of listening to new ideas instead of resisting new ideas. On the opposite end of the pole, many professionals argue the reasons that these approaches won't work.

Teachers need to become more flexible and open to new ideas because private business is going to surpass them if they don't. For example, on the West coast, there are private corporations that are contracting with the schools. In effect these corporations state "we will teach Johnny to read for $250.00. No read, no pay." These private concerns are proving to be successful and are using behavioral modification techniques. One such company uses S & H green stamps to obtain the desired reading behavior. A great many behavioral modification techniques are being used and the S & H green stamps serve as a reward.

Our general educational system is based on negative contingencies instead of positive ones. As a matter of fact, the school system functions very much like the law. If a person doesn't go through a red light he is not punished. If he goes through a red light he is punished. As one can plainly see there is no reward built into our law system. Our school system is very much the same in that the implication is that all school work is set up the following way: If you do the work you won't be punished. If you don't turn in your papers you will get an "F". Basically the system is negative and one that allows for more punishment than reward. So shouldn't the system be, "if you do something for me, I will do something for you. If you accomplish something, I will give you a reward."
Some other things that a reading teacher might want to increase are:

- frequency - doing something more often
- duration - spending more time doing a task
- speed - doing something more quickly
- accuracy - doing something more accurately

In order to develop these four qualities, a teacher should build a chart, run a baseline on the behavior, reward the appropriate behavior that is desired, and record the change in reading behavior so that the child and teacher can observe the progress.

Some teachers have used M & M's, extra recesses, speeches, other academic materials, field trips, special programs, and special activities as rewards.

Two qualities of a good reinforcer are: 1. It should not be obtainable outside of the program situation. 2. It has to have a high probability of increasing the rewarded behavior.

Note: This speaker has recently co-authored The Stamp System, a program for parents and teachers in behavior modification. The following are selected portions from the manual printed with the consent of the authors.*

regardless of the influences of heredity. Especially since we can't change or affect the influences of heredity, we must pay strict attention to ways in which we can become more effective in the use of principles of learning. Both parents and teachers use these principles every day, often without realizing that the techniques they use in their teaching or disciplining have been systematized and studied by psychologists and educators.

Parents and teachers are often concerned about whether they are "good" parents and teachers. "What am I doing wrong?" is an often heard question. Every day many parents seek out the advice of professionals—physicians, psychologists, ministers—as to how to deal with various problems with their children. If some very simple and easily applied learning principles are adhered to, many of these problems will cease to be so troubling. It is assumed, of course, that the child's health and especially his diet are good, for these can greatly affect a child's behavior.

Reinforcement.

One of the first things you should know about is what psychologists call "reinforcers" or "reinforcement." You use reinforcers practically every day. Some of them are tangible, like giving a child a nickel when he picks up his toys. Some are more intangible, like saying "thank you" to the child when he picks up his toys. Sometimes we do both at the same time. You have at your beck and call one of the most powerful reinforcers for human behavior known, and that is your love and attention. Every day we reinforce one another by our interest and attention. If, for example, we did not pay attention to someone who was conversing with us, he would soon cease his conversation. By listening and paying attention to him...
we are reinforcing him and encouraging him to continue. In like manner, we reinforce our children and students with our attention. Sometimes this attention encourages them to behave in a "good" or desirable manner. Often, however, our attention is to the wrong behavior and tends to encourage "bad", inappropriate, or undesirable behavior.

We are so accustomed in our society to concentrating on the inappropriate or undesirable behaviors in our children that we quite unintentionally reinforce these behaviors and make them worse than they were to begin with. In other words we reinforce some behavior by paying attention to it. Suppose, for example, that Johnny begins to whine because he was told to go to bed. Not wanting to hear him whine, you say, "Oh, okay, you can stay up another half hour." There, see what you did? You reinforced his whining. You could expect that the next time he gets in a situation in which he doesn't get what he wants, he'll try whining again. Essentially, you have taught him to whine by using your attention as a reinforcer.

In school, teachers often reinforce certain undesirable behaviors, also, by paying attention to them. If, for example, Johnny leaves his seat without permission, chances are that the teacher will make some comment to Johnny about it. This comment amounts to attention and this attention can serve as a reinforcer. With some children, the comment might serve to prevent further infractions. Let's suppose with Johnny, however, the attention given him by the teacher serves as a reinforcer, essentially encouraging him to continue getting out of his seat and walking around the room. It is as though Johnny were asking for attention from the teacher. Occasionally, simply ignoring his behavior is also a highly effective method for discouraging such behavior. He doesn't get any attention so he might as well stop.
Selective attention as a reinforcement.

It might be helpful at this point to comment on how effective selective attention can be in encouraging some behaviors and discouraging others. Suppose Johnny has developed the habit of walking around the room. This serves to take him out of the situation of studying. Also, suppose that the teacher's attention has been a reinforcer tending to encourage his extra-seat activity. If the teacher could then begin selectively to pay attention to Johnny when he happens to be in his seat studying and begin to ignore him when he leaves his seat, the chances are good that the desirable behavior would increase and the undesirable behavior would decrease.

Building habits.

We are trying to build habits, not just mechanically forcing a particular behavior. We don't want to have to prod the mule every time he's supposed to do something. In order to build a habit quickly, the best learning technique is to reinforce the behavior immediately after it occurs—don't wait until it's "convenient" for you—and every time it occurs. Then, as the behavior begins to occur more frequently in order to strengthen the behavior the reinforcement should be thinned out; that is, the behavior should not be reinforced every time it occurs. In fact, the less frequent at this point, the stronger will be the habit! In other words, reinforce frequently to get the new behavior started; reinforce infrequently to build a strong, lasting habit.

Punishment.

Another concern parents and teachers often have is related to punishment. Punishment can be effective in learning, but there are several major drawbacks which the parent or teacher should try to guard against. First of all, unless the punishment is specific and helps to
point out the desirable alternative to the "bad" behavior, the child's behavior will likely become more variable and unpredictable. That is, when a child is punished by poor techniques, the next time the child is in the same situation chances are he won't behave the same way as when he was punished before. But you won't be able to predict what he might do. He might behave "correctly" in the situation, he might come up with an altogether new response which is equally undesirable, or his behavior might be even worse! Also, if the child really believes he is being punished unfairly and unjustly, he might begin to lose respect for the punisher, eventually even coming to hate the person. Let's hasten to point out that this is not likely to happen if the punishment is fair, just, and especially, serves to let the child learn.

Another "don't" which teachers, especially, might heed, is not to use an unrelated desirable behavior as a punishment for an undesirable one. For example, teachers have been known to punish children by making them memorize Bible verses. Teachers also often make children write sentences or paragraphs as punishment for some altogether unrelated offense such as talking in class. Learning theorists can readily see that such procedures serve to teach the children that these activities are undesirable. That is, if writing and memorizing Bible verses are punishment, the chances are good that the child will avoid such activities in the future.

(Perhaps some of the frowned upon behavior of our current college-aged young people results from just such forms of punishment. Teachers have made children copy sections from the U.S. Constitution or the Declaration of Independence as punishment. Doesn't this run the risk of teaching disrespect for such documents?)
Shaping.

Occasionally parents or teachers want to increase the incidence or strength of a certain desirable behavior in a child, but the behavior occurs so rarely that it is almost impossible to reinforce it. In such cases, it is necessary to use the principle of shaping. We use shaping frequently without realizing exactly what we are doing. For example, when we hire a new secretary we don't expect her to know the whole job the first day at work. We show her a few aspects of the job the first day, a few more the second day, and so on until she has learned the entire job. This sort of shaping can be used to get behavior going in children. For example, if you want to teach Johnny to pick up his clothes in his room you probably will fail if you try to reinforce (with stamps or otherwise) Johnny for cleaning up the entire room on his first trial. Instead you might give him a stamp for picking up just his dirty socks the first day, picking up both his socks and shirt on the second day, his socks, shirt, and trousers on the third day, and so on until he has completed the entire task.

In school, teachers are often frustrated and angry when a child is not able to read at his grade level despite efforts to help him. If, instead of showing anger and frustration to the child, the teacher uses a shaping approach with him, perhaps her efforts would have more effect. Most teachers are familiar with the technique of having the child learn only two or three new words each week. A remedial reading program generally is essentially a shaping approach as is the basic approach used to teach children to read from the first grade on.... We certainly don't expect a child in the first grade to simply pick up a book and begin reading. Shaping, then, can be a useful technique for both parents and teachers in guiding a behavior which rarely occurs.