James H. Straughan lists five steps for modifying target behavior and four steps for working with teachers using behavior modification. Grant Martin and Harold Kunzelmann then outline an instructional program for pinpointing and recording classroom behaviors. (JD)
I. Select a Target Behavior

1. List specific behaviors you and the teacher wish the child to acquire or eliminate. Often these behaviors go in pairs, i.e., the acquisition of a desirable behavior means the elimination of an undesirable behavior. Where this is the case, list both.

2. From the above list, select a single target behavior. This target behavior may not be the outstanding problem, but it should be simple and prior consideration should suggest that it is manageable.

3. Is the target behavior objectively identified? That is, will others be able to identify the same instances of behavior?

4. Does the target behavior have a specific beginning and end? Most behavior eventually leaves the individual in position to repeat behavior but if the cycle is too long, the behavior is unwieldy for management purposes.

5. Does the target behavior occur often enough for a count to be made? Some behaviors (e.g., fire setting) may be very important but occur so rarely that environmental contingencies are difficult to arrange. Some frequently occurring behavior, such as positive social interaction, might be selected and modified in the hope that it will compete with undesirable behavior.

6. Is the target behavior useful or relevant to actual goals? For example, to look at a book is only relevant if the child is actually reading or studying.

II. Count Occurrences of the Target Behavior

1. Select appropriate times each day to record the target behavior.

2. Use a counter or some other device, such as marks on a slip of paper, which is dated and has the recorded starting and stopping time of observation.

3. Counting may be done by whomever is available. The student may often be able to count his own behavior.
4. Self-recording of the target behavior by the student may have a desirable effect upon the frequency of the behavior.

5. Obtain base rates over a period of four or five days or until target behavior has stabilized.

III. **Graph the Frequency of the Target Behavior**

1. Use some form of graph to plot rate of response for each observation period.

2. The graph is important because:
   a. It gives the manager a clearer picture of what is occurring.
   b. Observed changes in rate serve as a reinforcement for changed manager behavior.

3. If possible, the child may graph his own behavior.

IV. **Change Environmental Conditions**

1. Analyze existing conditions.
   a. Antecedents
      Under what existing conditions is the target behavior likely to occur? Persons present, time of day, nature of task, behavior of others, is the behavior the end of a long chain, etc.
   b. Existing consequents
      How does the teacher react, what do other children do, what does the child gain or escape from?
   c. Potential reinforcements
      What will this child work for, what does he avoid, what does he like to do?

2. Modify conditions.
   a. Change antecedents
      Change lesson order, classroom arrangements, tasks, time for breaks, nature of tests, discuss problem with child, etc.
b. Change consequents

Use positive reinforcement: May be used with or without prior explanation. May consist of food, tokens, candy, desired activities, attention, and approval, etc.

Extinguish undesired behavior: Usually coupled with positive reinforcement of desired behavior.

Use negative reinforcement or punishment: Time out, send home, remove positive reinforcement, impose penalty.

V. Evaluate

1. Observe changes in rate of target behavior.

2. Observe effects on other behavior.

3. Determine if change will be maintained or if conditions must continue.

4. If ineffective, try something else.
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WORKING WITH TEACHERS USING BEHAVIOR MODIFICATION  

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I. Initiating Programs  

A. With individual teacher  

1. Select a simple problem, one you and the teacher feel will be comfortable for a first try, and one that other reports suggest will be amenable to behavior modification.  

2. Choose a teacher who is positive and willing or perhaps one who has had experience with behavior modification.  

3. Consult with teacher at each step of the way about the procedures and how they are implemented.  

4. As successes are achieved, others will become interested in trying similar approaches. Make these mutual learning experiences.  

5. When several teachers have become involved, they can meet as a group periodically for mutual feedback and encouragement. Eventually some may wish to present what they have done in a larger meeting.  

B. Through presentation to a group of teachers  

1. Arrange to talk to a group of teachers about behavior modification - or have a visitor in to do it.  

2. Keep the theory and language simple.  

3. Present examples of what others have done. Discuss both successes and failures. Do not try to oversell the approach. Agree that there are difficulties and ask for suggestions in solving them.  

4. Meet either with individuals or small groups who show considerable interest. Proceed as with individual teachers.  

II. Meeting with the Individual Teacher  

A. Place  

1. Preferably go to her classroom, not your office.  

2. The setting will help her recall details of the child's behavior.  

3. Going to her will help establish you as a doer rather than an ivory-tower theoretician.

4. It may be useful to see the setting!!

B. Content

1. Find out what the child does before and during the periods of problem behavior.

2. If the problem behavior is continuous, find out what the child does when he first comes in.

3. Get specific examples of what he does.

4. Discuss where he is sitting, see if the teacher thinks this makes a difference.

5. Ask what she does following the problem behavior, and then what after that.

6. Find out how the class reacts to him and how they react when he is gone.

C. General rules

1. Accept the teacher's views of the child. If she would like to get rid of him, agree that this is one solution to consider.

2. Agree that if other things have been tried and failed, this is an unusual case and unusual methods must be tried. Don't belittle the problem.

3. Get the teacher's ideas on what should be tried. If there is resistance to behavior modification, follow up these alternatives in detail. Get her to be specific and perhaps this will be enough to make the alternative approach appear impractical.

4. Go ahead and try the teacher's idea if she still wishes to after discussion.

III. Observing the Child

A. After agreeing on specific behavior, observe the child.

B. This may be done by either the teacher or you. Preferably the teacher should be involved to some extent.

1. If you observe, discuss what and why, so that the teacher's fears of being observed are minimized.

2. If she is unusual, she may be willing to have her own behavior observed. It is usually best for her to count her own behavior. Some teachers have their own students take data on the teachers' behavior. That should be reinforced!!
IV. Explaining Reinforcement

A. Keep theory and language simple.

B. Emphasize practice.
   1. Immediate reinforcement.
   2. Continuous reinforcement at first
   3. Reinforce for little gains at first - shaping.
   4. Stress positive reinforcement.
   5. Encourage experimenting with extinction for undesirable behaviors.
By way of introduction, this program is designed to give you an initial set of behaviors, both verbal and graphic, which is critical for classroom measurement. The content reflects an attempt to standardize the measurement of behavior found in classrooms and a simple way to record it. At a later time you may learn graphing techniques which visually portray what you learn in this program.

It has been said that classroom measurement is presently not as accurate as a ten cent ruler. Knowing our weakness, we need to do something about it. This program will provide you with some of the skills needed to measure accurately. Keep in mind that this booklet is intended for instruction.
PINPOINTING BEHAVIOR:

1. The purpose of this section is to show how to discriminate actual behavior.

2. What is behavior?
   A. A few examples of classroom behavior are:
      - Writing numbers
      - Writing words or letters
      - Reading words aloud
      - Asking a question orally
      - Circling an answer
      - Counting on paper or orally
      - Crossing out
      - Watching
      - Pointing
      - Placing items in order
   B. Other behaviors of the kind that we may wish to reduce or eliminate are:
      - Hitting
      - Kicking
      - Spitting
      - Throwing
      - Talking inappropriately
      - Out of seat

3. The following math problem appeared in a workbook. The student was asked to write in the correct answer. What is the student's behavior?
   \[ 2 + 2 = \]
   Your answer: ____________________________

4. Yes, the behavior of the student was the writing of the numeral "4". You might have said that "looking at the problem" was the behavior involved; however, looking does not include movement.

5. A group of third grade students are sitting on chairs in a reading group, when suddenly John hits Mary over the head with a book.
   Which one of the following is the behavior described?
   A. Being aggressive
   B. Disturbing the class
   C. Hitting Mary over the head with a book
   D. Sitting in a chair
   Your answer: ____________________________
6. Right, the correct answer is "c", (hitting Mary over the head). The reason we know this is the behavior is simplified by the use of the "Dead Man Test."

This test states that if a dead man can do it (the description under question), it is not behavior. A behavior must contain movement. A dead man can look frustrated, look at a book (as mentioned in frame 4), or even sit in a chair, but he cannot hit someone over the head with a book.

7. If you want to know whether or not a given description is behavior, just ask yourself, "Can a dead man do it?" If a dead man can do it, the description in question is not a behavior.

8. Which one of the following descriptions passes the Dead Man Test?
   A. Looking sad
   B. Sitting at a desk quietly
   C. Being unmotivated
   D. Raising and lowering his hand

   Your answer: D. Raising and lowering his hand

9. The correct response is "d", raising and lowering his hand.

10. A dead man cannot raise and lower his hand; thus, these words describe a behavior.

11. In order to help us further refine our pinpointing procedures, it is helpful to consider a complete behavioral movement cycle.

12. An example of a behavioral movement cycle is the raising and lowering of a hand. A complete movement cycle involves a movement sequence which ends, and then can be repeated. For example, please follow the directions:
   A. Place your hands on this paper.
   B. Now raise your right hand above your head.
   C. Now lower your right hand back down to the paper.

   Your right hand has now undergone one movement cycle. At the point that your hand touched the paper on the way down, you reached the end of the cycle and your hand would be in a position to repeat the behavior.

13. Stop reading and look at a clock and then write down the time in hours, minutes, and seconds, with colons separating the hours, minutes, and seconds.

   Your answer: ____________ : ____________ : ____________

14. Your answer should be in the form 10:45:09.
15. How many complete numerical movement cycles did you record after discriminating the time?
   Your answer: ________________________________

16. Of course, six (five, if done at 1-9) because after completing the numeral 1, you are free to make another numeral. The same is true for the zero digit. The making of the zero is one complete movement cycle. The colon is defined as consisting of two vertical dots, so is considered one movement cycle, although not counted here because you did not produce them.

17. If you said there was only one movement cycle involved in the writing down of the time, you were almost correct. It might be said that the writing of the whole sequence of numbers is one cycle. However, it is best to define a movement cycle in as small and specific a manner as possible. Always remember that a movement cycle ends when you are free to respond again.

18. Which of the following classroom descriptions is an example of a complete movement cycle?
   A. Mark gets out of his seat and walks to the pencil sharpener.
   B. Mark turns around and stares at the wall.
   C. Mark gets out of his seat, walks to the teacher's desk, and returns and sits down in his seat.
   D. Mark puts his pencil in his mouth.
   Your answer: ________________________________

19. The correct answer is "c". Mark is able to get out of his seat again, only after he has returned and sat down.

20. How many movement cycles are there in the following spelling words which the student is asked to write?
   Pan
   Garden
   Cit
   Ball
   Bell
   Your answer: ________________________________

21. Since each completed letter is one movement cycle, the spelling list contained twenty (20) complete movement cycle.

22. Notice that one of the words in the above list is spelled "cit" instead of "sit". Out of the total list of words, then, how many correct movement cycles are there?
   Your answer: ________________________________

   How many incorrect movement cycles?
   Your answer: ________________________________
23. Good for you - 19 correct, and 1 incorrect cycle. The "c" in the word cit is the one incorrect cycle.

24. It is true, however, that in teaching spelling, we usually count one whole word as wrong even if only one letter is incorrect. For ordinary purposes, it is alright to count the word as one response, either correct or incorrect, but remembering that one word contains several movement cycles.

25. How many correct spelling responses (or words) are included in the following list?
   Pen
   Garden
   Cit
   Ball
   Bell

Your answer: ____________________________

26. Fine, there are four correct words — pen, garden, ball, and bell; and one incorrect word — cit.

27. A written word, then, can be thought of as a gross type of movement cycle. During the baseline period, you will probably find it more practical to count correct and incorrect words, or math answers, rather than breaking them down into more precise cycles.

OBTAINING RATES OF BEHAVIOR:

28. The recording of time from start to stop is necessary in evaluating behavior. If you had the information that John did 10 correct math problems, you could conclude:
   A. He's a poor student.
   B. He's good in math.
   C. He's a fast worker.
   D. He's a slow worker.
   E. None of the above.

Your answer: ____________________________

29. Answer "e" is the correct answer, because if you don't know how long it took John to do these 10 problems you can't evaluate his performance. John could have done those 10 problems in one minute or two hours, or John could have done 10 incorrect math problems during the same time period.

30. Given the additional information that John did the 10 correct problems in two minutes, you can conclude:
   A. He is working faster now than before.
   B. He is working slower now than before.
   C. His rate was five correct problems per minute.
   D. He's good in math.

Your answer: ____________________________
31. Only answer "c" of the above question can be concluded from the information given. Answers "a", "b", and "d" would require comparison of John's scores to some of his previous scores.

32. A rate statement tells how many responses are made during some time period. We find minutes a useful time base, so our rate statements give us the average number of responses per minute. Rate is obtained by dividing the total number of responses by the total number of minutes on the program.

\[ \text{Rate} = \frac{\text{total responses}}{\text{number of minutes on program}} \]

33. John starts math at 9:15 and ends at 9:47. John does 16 correct addition problems in this time period; where each answer is counted as one movement cycle and the writing of each passed the Dead Man Test.

\[ \text{Stop time: } 9:47 \]
\[ \text{Start time: } 9:15 \]
A. Total working minutes
B. Total correct responses
Rate formula - total responses
\[ \text{number of minutes on program} \]
C. Rate - _____ correct addition responses per minute.

34. Answers to 33:
A. Total minutes on program - 32
B. Total correct response - 16
C. Rate per minute - .5 (Note: Rate is expressed in decimal form.)

35. Spelling starts at 12:35 and stops at 12:47. John spells 30 words correctly and misspells 10 words during this test.

A. Stop time : Start time : 
B. Total working minutes - 
3. Rate formula - (write out)
C. John's correct spelling rate per minute 30 correct
\[ \frac{12 \text{ minutes}}{12 \text{ minutes}} \]
D. John's error spelling rate per minute - 

36. Answers to 35:
A. Total working minutes - 12
B. Rate - number of responses
\[ \frac{\text{total working minutes}}{\text{total working minutes}} \]
C. Rate per minute - 2.5 correct spelling responses
D. John's error rate - .83 errors per minute.