CURRENT BEHAVIOR MODIFICATION IN THE CLASSROOM: BE STILL, BE QUIET, BE DOCILE¹

RICHARD A. WINETT AND ROBIN C. WINKLER

STATE UNIVERSITY OF NEW YORK AT STONY BROOK

Classrooms have recently been criticized as total institutions where there is a rigid preoccupation with order and control, and where children are required to be still, to be
silent, and to obey. Behavior modification has been described as a major source of change
in the classroom. A review of this journal's papers on behavior modification in the classroom indicated that inappropriate behavior has been consistently defined as behavior that
interferes with order, quiet, and stillness. It is argued therefore, that behavior modification has supported rather than changed the questionable status quo. Alternative areas
for behavior modification in traditional classrooms and the role of behavior modification in the development of open classrooms are discussed.

Silberman's book, Crisis in the Classroom, (1970) was an incisive appraisal of the current state of our nation's educational system which coordinated a broad spectrum of prior critical observation and research. Silberman depicted our public school classrooms as "grim, joyless places" (p. 10), where there is a rigid "preoccupation with order and control" (p. 122), "a slavish adherence to routine for the sake of routine" (p. 126), coupled all too often with an outdated, irrelevant, ill-taught curriculum. The obsession with silence and lack of movement seems to be the result of a rather explicit reinforcement system in which these are the criteria by which a teacher's competence will be judged.

"A teacher will rarely, if ever, be called on the carpet or denied tenure because his students have not learned anything; he most certainly will be rebuked if his students are talking or moving about the classroom, or even worse—found outside the room and he may earn the censure of his colleagues as well. Nor will teachers receive suggestions from their supervisors as to how to improve their teaching methods and materials; they will receive suggestions for improving "discipline." Thus, the vows of silence and stillness are often imposed on teachers who might prefer a more open, lively classroom." (p. 144).

Silberman noted that the result of this "... mindlessness—the failure or refusal to think seriously about educational purpose, the reluctance to question established practice . . . (p. 11)," "... is to destroy students' curiosity along with their ability—more serious, their desire to think or act for themselves (p. 130)."

Given these charges levelled at our school systems, plus the impact Silberman's book is apparently having, it appeared important critically to evaluate current behavior modification work in classrooms and ascertain to what extent this work has either contributed to the situation graphically described by Silberman or been a force for change and innovation in the public school classroom, as is being claimed by its proponents (Bijou, 1970). Such an evaluation is perhaps less likely to set up straw men if it is done by those who have themselves been trained and worked in the fields of behavior modification and classroom intervention. Since the Journal of Applied Behavior Analysis has consistently published the best work in this area, sam-

¹Reprints may be obtained from Richard A. Winett, Department of Psychology, University of Kentucky, Lexington, Kentucky 40506 or Robin C. Winkler, State University of New York at Stony Brook, Stony Brook, New York 11790.

pling the studies in this journal from 1968 to 1970 seemed a reasonable approach for such a review to follow. Our concern in this review was for studies that have dealt with relatively normal classrooms (realizing that other type classrooms possess special problems); our purpose was not to evaluate specific techniques or results but rather to investigate the kinds of target behaviors that were either reinforced or in various ways proscribed.

WHAT KIND OF BEHAVIOR IS BEING REINFORCED?

A study by Thomas, Becker, and Armstrong (1968) sought to rigorously classify "appropriate" and "inappropriate" behavior. Included under inappropriate behavior were: getting out of seat, standing up, walking around, running, hopping, skipping, jumping, moving chairs, rocking chairs, tapping feet, rattling papers, carrying on a conversation with other children, crying, singing, whistling, laughing, turning head or body toward another person, showing objects to another child, and looking at another child. Appropriate behavior included: attending to the teacher, raising hand and waiting for the teacher to respond, working in seat on a workbook, following in a reading text. A later study by the same group (Madsen, Becker, and Thomas, 1968) apparently followed the above guidelines, as was true of Ward and Baker (1968), and later Packard (1970), Broden, Bruce, Michell, Carter, and Hall (1970). Bushell, Wrobel, and Michaelis (1968) and O'Leary, Becker, Evans, and Saudargras (1969) had similar restrictions but also respectively prohibited singing a Spanish song during the wrong time period and talking in the hall. Ward and Baker (1968), following Becker et al., (1967), added a further general category under inappropriate behavior: doing something different from that which he has been directed to do, or is supposed to do.

Surratt, Ulrich, and Hawkins (1969), Barrish, Saunders, and Wolf (1969), and Schmidt and Ulrich (1969) investigated various techniques to

reduce two forms of disruptive behavior—out of seat and excess talking or noise. Hall, Lund, and Jackson (1968), Hall, Panyan, Rabon, and Broden (1968), and Coleman (1970) demonstrated the reduction of nonstudy behavior (generally, out of seat and talking) and the increase of study behavior (writing assignments, looking in a book, answering questions). McAllister, Stachowiak, Baer, and Conderman (1969) extended the investigation of these "problematic" behaviors to a high school class.

Some of the above behaviors would be, in fact, disruptive to typical quiet, controlled classrooms. If being quiet was considered necessary, then singing, whistling, or laughing would indeed be considered inappropriate and out of place. But if a quiet classroom is needed for every type of lesson, be it reading, spelling, social studies, or any of the other many types of lessons where behavior modification has been used, then the children are being forced to spend almost their whole day not being children, but being quiet, docile, and obedient "young adults". One of the purposes of the present paper is to suggest that it may be that learning can take place more effectively if it can be accompanied by singing and laughing and whistling and that a quiet, controlled, docile classroom may not only be unnecessary but destructive.

It should be noted that for the most part, the abovementioned studies were not dealing with very aggressive (i.e., assaulting teacher or peers, destroying property) children. For example, in the Thomas et al., (1968) study the frequency of aggressive behavior was so low during baseline and intervention as to receive no separate breakdown in the results section, as was true of other predesignated "disruptive" behaviors. Aggressive behavior was only noted as a central problem (description of experimental subjects) in Madsen et al., (1968); Coleman, (1970); and Wasik, Senn, Welch, and Cooper (1969).

Taken as a whole, these studies can be strikingly characterized by the uniformity in behaviors specified (in various ways) as appropriate and inappropriate, the latter most often being out of seat and/or talking to peers. We were unsuccessful in finding a study (except for one, see below) that in any way deviated from the norms of "silence and lack of movement", or sought to ask rather fundamental questions about the curriculum. For example, no one questioned whether silence and lack of movement are, in fact, necessary for learning or whether being a passive, obedient recipient of the teacher's rules and information is a role that behavior modification should support. Just as we previously examined the reinforcement system controlling the teacher's behavior, it is important to analyse the factors that might help account for the researcher's behavior in the classroom. In part, the state of affairs being described is a legacy of the initial desire of behavior modifiers to simply show that you could demonstrate behavioral control in classroom situations, as Skinner had suggested (Skinner, 1968). The nature of the behavior being controlled was a secondary consideration. The traditionally minor role of response topography in operant research did not discourage this tendency. Further, behavior modifiers usually do not control their own schools and therefore, are most often at pains not to disagree with the values and goals of the school to which they wish to gain entry. To do so could mean the elimination of a research opportunity. It is not surprising, therefore, that behavior modifiers have used their procedures to serve the goals and values of the existing school system. If the existing school system had adequate goals and values, this would be admirable, but if the critics quoted above are even partly correct, then behavior modifiers are doing education a considerable disservice.

Just what do those present goals seem to be? Taken as a fairly accurate indicator of what public schools deemed as the "model" child, these studies described this pupil as one who stays glued to his seat and desk all day, continually looks at his teacher or his text/workbook, does not talk to or in fact look at other children, does not talk unless asked to by the teacher, hopefully does not laugh or sing (or at the wrong time),

and assuredly passes silently in halls. Unfortunately, this description seems to fit perfectly with Silberman's cogent observations of just what is wrong with our schools. We are thus forced to conclude that as currently practised, behavior modification has done very little to change the deplorable state of our schools. If anything, it appears that behavior modifiers have been instruments of the *status-quo*, unquestioning servants of a system which thrives on a petty reign of "law and order" to the apparent detriment of the educational process itself. What is, perhaps, most disheartening is that our procedures seem to work, and thus, make the system operate that much more effectively.

OTHER AREAS OF BEHAVIOR MODIFICATION

Some of the preceding points apply also to other areas where behavior modification has been used. For example, behavior modification, in the form of token economies, has been extensively used in psychiatric hospitals (Ayllon and Azrin, 1968; Krasner, 1968; Winkler, 1970). There is considerable reliable evidence that token economies have been able to reduce the frequency of institutionalized behavior usually found with chronic patients. However, there is little reliable evidence that token economies have made a significant contribution, relative to other types of programs, to the number of patients who are discharged from chronic wards or to the length of time discharged patients remain in the community (Davison, 1969). There is now almost universal agreement that psychiatric hospitals in their present form as total institutions for long-term care are detrimental to the patients in them and should be replaced by smaller community oriented centers of prevention and out-patient therapy (Greenblatt and Levinson, 1965). This being so, by making life more productive for patients in present chronic wards and not stressing removal of patients from those wards, token economies help serve the status quo through helping people adjust to a system that in itself is in need of change. Fortunately, there is an increasing stress in more recent token economies on programs emphasizing discharge (Birky, Chambliss, and Wosden, 1971), accompanied by the overdue realization that even with such programs, discharge is very often more a function of administrative policy than treatment programs, even if the treatment programs are powerful and innovative.

The same question needs to be raised with behavior modification in other institutions, for example, correctional centers, army psychiatric units, and delinquent centers. To what extent is behavior modification in these areas helping the existing institutional system achieve its present goals, e.g., goals of control for the sake of control, order and (misleading) tranquility, thus preventing rather than producing needed change?

FUTURE ALTERNATIVES

Behavior modification acknowledges the role of the environment in producing behavior, but has to a large extent, concerned itself with changing people such that they can adjust more appropriately to the particular institution or social sub-system in which they live. There is another role, however, for the behavior modifier that involves changing the social system that maintains the behavior, thereby creating new environments instead of patching up the results of existing environments. In the present context, such a role involves changing the educational system. The following are some areas where this role might be applied.

There is a strong need for extensive dialogues in our communities on just what kinds of human beings we want our children to be and to grow up to be. Such dialogues would determine what values and behavior we want our schools to transmit and reward. The second part of this dialogue would include discussion on how these objectives can be achieved so that school can become a rewarding, fulfilling experience for the child. The complexity of these questions in an

age of rapid social and moral change is apparent, and the weight of their political, social, and economic significance is enormous. We suspect that there is no one solution for education's problems, but that different alternatives can be developed for different communities or groups within a community (Fantini, 1970). We would like to discuss two of these alternatives to which the behavior modifier might turn his attention.

We have been impressed by what has been variously called "informal", "free", "open", or "British system" classrooms. No matter what name they are given, these classrooms can be characterized by the encouragement of movement, peer interaction, individually paced learning often on student-selected material, an attempt to make relevant to the outside world the work done in the classroom, the lack of routine qua routine, the relaxing of disciplinary sanctions (simply, because formerly "deviant" behaviors are often no longer defined as such), and a more intricate, rather different teacher role (see below). While there is some evidence that these schools have been effective (Silberman, 1970) in England and in such places as North Dakota and Harlem, New York City, in at least meeting the education criteria of traditional schools, the tendency of some (for example, Holt, 1967) to see such schools as the panacea must seriously be questioned. We simply do not have enough data at this point; more research is urgently needed on the long-term effects on the child and society of informal schooling. The apparent potential of these settings, though, indicates that intensive study and research in process as well as longterm outcome are certainly warranted. Important investigations could study: (a) effective means of convincing school districts to adopt (perhaps, on an "experimental" basis) informal classrooms; (b) appropriate evaluative criteria for such schools; it seems apparent that such criteria should differ from currently employed standards (for example, they might include meaningful assessment of initiative, interpersonal interaction, ability to evaluate new ideas and creativity); (c) relevant observational techniques for the "class in motion"; for example, procedures could be developed to ascertain how effective a particular technique is in changing patterns of social interaction in the classroom; (d) the training and evaluation of the teacher in such settings (see below); (e) the role of architecture in facilitating the open classroom.

The question also remains whether current behavior modification procedures are actually antithetical to the spirit and intent of informal classrooms. For example, is the competitiveness often created by the token economy (for example, Barrish, Saunders, and Wolf, 1969) in keeping with the atmosphere of an open classroom? Some present procedures may, however, be readily adaptable to these settings and could play a valuable role both in the planning and operation of informal classrooms. An effective teacher in such a setting must have a thorough knowledge of each child's academic and social repertoire and a clear understanding of the goals of the classroom and how such goals can be reached for each individual child. While an authoritarian model is not appropriate for such classrooms, the effective teacher does guide and direct pupils to these goals by the very nature of the activities that are made available to them, the kinds of projects and social behavior encouraged and the behavior modelled for the children by the teacher. In other words, a well-functioning informal classroom is not simply the complete turning loose of the child, as some would have us believe (Holt, 1967). At its best, rather it is a carefully planned total social environment (see Pearl, 1971). Given this perspective, social learning theory appears a most fertile ground for ideas on actual structuring of the classroom, as well as for suggesting the qualities and behaviors appropriate to the effective teacher. For example, teachers could be trained how to formulate what is reinforcing for each child and how to embed such reinforcers, which ideally should be integral to the learning activity, in the ebb and flow of an open classroom.

While it appears that the transition from traditional to informal classrooms en masse is still

far in the future, behavior modifiers in more traditional school settings can, in the meanwhile, turn their attention to the reinforcement of behaviors that this review has indicated are now seriously neglected by our schools. The increased emission of such behaviors by school children can, in part, help change these institutions. For example, Wasik, Senn, Welch, and Cooper (1969), working with two culturally deprived children (who, incidentally, were initially aggressive) included working independently, initiating conversations with others, helping others and talking and playing with peers as behaviors to be reinforced. Winett, Richards, Krasner, and Krasner (1971) showed that even second-grade children can effectively manage their own contingency program. An extension of this latter project would include children rather than the teacher and/or experimenters deciding as much as possible the rules of their own program and, hopefully, reinforcing behaviors other than quietness and simple attention.

While we have made efforts strongly to express our disapproval of what we consider the nearsightedness of some of our colleagues, we wish to close this paper on an emphatic, positive note. Behavior modifiers seem to have the orientation and technology that can effectively investigate and implement social change. It is because the behavior modifier has chosen to remove himself from the safe confines of the office or laboratory and venture into the "real" world that scrutinizing criticisms and evaluations have become all the more important.

REFERENCES

Ayllon, T. and Azrin, N. H. The token economy. New York: Appleton-Century-Crofts, 1968.

Barrish, H. H., Saunders, M., and Wolf, M. M. behavior game: effects of individual contingencies for group consequences on disruptive behavior in a classroom. Journal of Applied Behavior Analysis. 1969, **2**, 119-124.

Becker, W. C., Madsen, C. H., Jr., Arnold C., and Thomas, D. R. The contingent use of teacher attention and praise in reducing classroom behavior problems. Journal of Special Education,

1967, 1, 287-307.

- Bijou, S. W. What psychology has to offer education—now. Journal of Applied Behavior Analysis, 1970, 3, 65-71.
- Birky, H. J., Chambliss, O. E., and Wosden, R. A comparison of residents discharged from a token economy and two traditional programs. *Behavior Therapy*, 1971, **2**, 46-51.
- Broden, M., Bruce, C., Michell, M. A., Carter, V., and Hall, R. V. Effects of teacher attention on attending behavior of two boys at adjacent desks. *Journal of Applied Behavior Analysis*, 1970, 3, 199-203.
- Bushell, D., Jr., Wrobel, A., and Michaelis, M. L. Applying "group" contingencies to the classroom study behavior of preschool children. *Journal of Applied Behavior Analysis*, 1968, 1, 55-61.
- Coleman, R. A conditioning technique applicable to elementary school classrooms. *Journal of Applied Behavior Analysis*, 1970, 3, 293-297.
- Davison, G. C. Appraisal of behavior modification techniques with adults in institutional settings. In C. M. Franks (Ed.) Behavior therapy: appraisal and status. New York: McGraw-Hill, 1969. Pp. 220-278.
- Fantini, M. D. Educational agenda for 1970's and beyond: Public schools of choice. Social Policy, 1970, 1, 24-32.
- Greenblatt, M. and Levinson, D. Mental hospitals in B. B. Wolman (Ed.), *Handbook of Clinical Psychology.* New York: McGraw-Hill, 1965. Pp. 1343-1359.
- Hall, R. V., Lund, D., and Jackson, D. Effects of teacher attention on study behavior. *Journal of Applied Behavior Analysis*, 1968, 1, 1-12.
- Hall, R. V., Panyan, M., Rabon, D., and Broden, M. Instructing beginning teachers in reinforcement procedures which improve classroom control. *Journal of Applied Behavior Analysis*, 1968, 1, 315-322.
- Holt, J. How children learn. New York: Pitman, 1967.
- Krasner, L. Assessment of token economy programs in psychiatric hospitals. In R. Porter (Ed.) *The role of learning in psychotherapy*. London: Churchill Ltd., 1968. Pp. 155-174.
- Madsen, C., Jr., Becker, W., and Thomas, D. Rules, praise, and ignoring: elements of elementary classroom control. *Journal of Applied Behavior Analysis*, 1968, 1, 139-150.

- McAllister, L. W., Stachowiak, J. G., Baer, D. M., and Conderman, L. The application of operant conditioning techniques in a secondary school classroom. *Journal of Applied Behavior Analysis*, 1969, 2, 277-285.
- O'Leary, K. D., Becker, W. C., Evans, M. B., and Saudergras, R. A. A token reinforcement program in a public school: a replication and systematic analysis. *Journal of Applied Behavior Analysis*, 1969, 2, 3-13.
- Packard, R. G. The control of "classroom attention": a group contingency for complex behavior. *Journal of Applied Behavior Analysis*, 1970, 3, 13-28.
- Pearl, A. What's wrong with the new information in education? *Social Policy*, 1971, 1, 15-24.
- Schmidt, G. W. and Ulrich, R. E. Effects of group contingent events upon classroom noise. *Journal* of Applied Behavior Analysis, 1969, 2, 171-179.
- Silberman, C. Crisis in the classroom. New York: Random House, 1970.
- Skinner, B. F. *The technology of teaching*. New York: Appleton-Century-Crofts, 1968.
- Surratt, P. R., Ulrich, R. E., and Hawkins, R. P. An elementary student as a behavioral engineer. Journal of Applied Behavior Analysis, 1969, 2, 85-92
- Thomas, D. R., Becker, W. C., and Armstrong, M. Production and elimination of disruptive class-room behavior by systematically varying teacher's behavior. *Journal of Applied Behavior Analysis*, 1968, 1, 35-45.
- Ward, M. H. and Baker, B. L. Reinforcement therapy in the classroom. *Journal of Applied Be-bavior Analysis*, 1968, 1, 323-328.
- Wasik, B. H., Senn, K., Welch, R. H., and Cooper, B. A. Behavior modification with culturally deprived school children: two case studies. *Journal* of Applied Behavior Analysis, 1969, 2, 181-194.
- Winett, R. A., Richards, C. S., Krasner, L., and Krasner, M. Child monitored token reading program. *Psychology in the Schools*, 1971, *in press*.
- Winkler, R. C. Management of chronic psychiatric patients by a token reinforcement system. *Journal* of Applied Behavior Analysis, 1970, 3, 47-55.

Received 8 July 1971. (Published without revision.)