

Marketing Measurably Effective Instructional Methods

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The failure to gain wider acceptance of measurably effective teaching methods by the educational establishment may be due to resistance to behaviorism, in particular, and to a set of contingencies that resist change, in general. The promotion of effective instructional methods is presented in terms of recommended marketing principles, including identifying and solving perceived consumer needs, using plain English, segmenting the marketplace and developing specific solutions, identifying opportunities for greatest impact, creating tangible educational products, seeking new markets, planning marketing strategy and tactics, and writing for non-technical publications. Precision Teaching is presented as a case study in the promotion of effective instructional methods. Although it is a measurably superior instructional methodology, Precision Teaching has not been widely adopted. By applying basic marketing principles and strategic planning, some of its proponents have initiated an ongoing effort of outreach and promotion.

KEY WORDS: education; marketing; instructional method; Precision Teaching.

We are faced with a remarkable challenge. Although we are able to offer instructional methods that are literally orders of magnitude more effective than those used in typical classrooms, we find after several decades of effort that we have not been able to penetrate the "educational marketplace" to any significant degree. There is a crisis in American education which is no longer a secret: each year hundreds of thousands of stu-

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dents graduate from high school functionally illiterate. Virtually every major news publication in the nation covers this "story" one or more times per week. Parents, administrators, business and government leaders, and the general public all cry out for better education. Here we sit, with important solutions to this crisis, yet no one is listening.

As "behavioral educators" we do not all have well-defined solutions that offer orders of magnitude greater effectiveness, but some of us do. In Seattle, for example, the Morningside Academy has for ten years been developing and refining instructional methods, curriculum and materials based on a combination of Precision Teaching, Direct Instruction and the instructional design principles of Tiemann and Markle (Johnson, 1990). For most of that time, the school has offered a money-back guarantee for its summer programs that students will advance by at least two school years of achievement, measured by standard tests, during an eight-week period. They have never returned any money. In a recent Job Training Partnership Act (JTPA) program for homeless, illiterate men, Morningside produced the greatest amount of progress of any known JTPA-funded effort, averaging two years of improvement for every five weeks in the program. These results, representing perhaps the leading edge of our field, are, indeed, orders of magnitude better than those achieved in ordinary classrooms. The achievements of the Direct Instruction model in Project Follow Through (Becker & Carnine, 1980; Binder & Watkins, 1990; Gersten & Keating, 1983; Watkins, 1988) and the Precision Teaching Project in Great Falls, Montana (Binder, 1988; Binder & Watkins, 1990; West, Young & Spooner, 1990) have long been cited as examples of what we can accomplish. Other behavioral programs exist that are capable of delivering such results, yet American educators are not beating paths to our doors.

This paper offers some observations of how we have been going about the process of "marketing behavioral education," provides some suggestions for improvement, and describes recent efforts to promote Precision Teaching to a broader audience.

EXPLANATIONS FOR FAILURE

Educators blame their students' failures on many variables, nearly all of which are beyond their control. A ubiquitous example is the use of clinical and psychometric diagnoses to account for students' lack of learning. Other common explanations for failure to learn include excessive television, use of drugs, and long hours spent by students in part-time jobs. Socio-economic variables said to prevent learning in school include general poverty, single-parent homes that do not afford sufficient management of

students' homework or school attendance, and culture or ethnic diversity in the classroom. Educators also complain that class sizes are too large for effective teaching and that school days, weeks, or years are too short to accomplish what is expected. What is common to all of these explanations is that they refer to variables beyond the control of educators. Consequently, they seem to absolve teachers of responsibility. Just as intelligence and aptitude testing provide convenient explanations for failure, these other variables offer credible rationales for evaluation reports and communications with parents about why so many students are failing to master reading, writing, communication and quantitative skills.

Unfortunately, most educators, school psychologists, administrators, and even parents accept such explanations for failure. Or they assume that efforts to improve students' learning must include compensation for socio-economic conditions, costly investments in computer technology, reduced class size, more time in school, or other interventions peripheral to the direct interaction between students and teachers. Many proposals for educational improvement, especially those suggested by business leaders and others outside the educational community, involve major restructuring of school management and administration, adjustments in the contingencies that control the performance of teachers and administrators. Thus, school-based management, establishment of incentive systems, parental choice among schools, and other similar changes promise to drive educators toward a more results-oriented approach. Although many of these suggestions may, indeed, offer opportunities for indirectly improving students' learning, none of them address the most fundamental element of the educational process: instructional method.

RESULTS CHALLENGE THESE EXPLANATIONS

The controversy regarding what interventions are most likely to solve the current educational crisis is about effectiveness, and the results of some of our most effective programs and methodologies speak for themselves. In the Precision Teaching Project, where students and teachers engaged in about 20 to 30 minutes per day of timed practice, charting and decision-making in key basic skills, average Iowa Test of Basic Skills scores for an entire elementary school rose over a period of three academic years by between 20 and 40 percentile points, depending on the sub-test, as compared with scores of schools in the same district (Beck, 1979). The cost of this program was amazingly low: a few hundred dollars for initial teacher-training and less than ten dollars per student per year for charts, practice sheets and other materials. Beyond adding brief periods of Precision Teaching each day, Great Falls educators made no other changes in their

programs. These results suggest that dramatic improvement in basic skills achievement need not be either expensive or time-consuming.

The results of the Direct Instruction Model in Project Follow Through are equally compelling (Becker, 1977; Becker & Carnine, 1980; Watkins, 1988). Direct Instruction programs produced greater improvements in the achievement of young, disadvantaged children than either typical public school programs or any of the other Follow Through models (including the Behavior Analysis model from the University of Kansas). Follow-up evaluations revealed that Direct Instruction students were more likely to receive high school diplomas, less likely to be retained in any grade, and less likely to drop out (Gersten, 1982; Gersten & Carnine, 1983; Gersten & Keating, 1983). These results suggest that effective teaching can overcome the effects of poverty and other adverse socio-economic conditions, at least to the extent that well-taught children can succeed against heavy odds. In fact, notable "non-behavioral" programs such as those provided by Marva Collins (Collins & Tamarkin, 1982) and Jaime Escalante (Mathews, 1988) have also demonstrated that students with severe socio-economic disadvantages can excel, given effective instruction.

Our best teaching methods have been able to counteract both psycho-educational deficits and social disadvantages. The Morningside Academy's programs routinely enable children and adolescents with clinical diagnoses to improve by multiple grade-levels per year, and improve the literacy skills of homeless, illiterate men with criminal records by nearly two years per month of instruction (Johnson, 1990).

Clearly, we have methods that effectively address the educational crisis in this country by overcoming what are thought to be the controlling variables of education failure. It is equally clear, however, that merely producing such results does not ensure adoption of these methods. In fact, there is resistance at every level in the educational establishment to adoption of behavioral education (Watkins, 1988). Therefore, we must examine other types of efforts, beyond successful instructional development and delivery per se, as means of promoting the adoption of these methods.

LESSONS FROM THE PRIVATE SECTOR

Ogden Lindsley, Henry Pennypacker and other leading behaviorists have encouraged those engaged in applying the principles of behavior analysis to "go private," that is, to find markets where the contingencies of perceived value will shape our behavior towards more effective packaging and promotion of what we have to offer. Some successful behavioral educators have established schools, tutoring agencies and publishing com-

panies. Others have shifted their efforts toward non-educational markets such as behavioral medicine, corporate training and performance management. Whether or not we choose to go private, we can learn a great deal from private enterprise, especially from the process by which business people identify their markets and customers, package and "position" their products and services to meet perceived customer needs, and effectively sell those products and services by communicating in language that customers understand.

Most behavioral educators are researchers, practitioners, or both. Most lack training or experience in private sector sales and marketing, and most are not skilled at packaging or describing what they do in ways that ordinary people can understand or appreciate. Moreover, the vocabulary of mainstream education often resembles plain English. And although behavioral educators might criticize the lack of precision in mainstream educational language and methodology, it often seems more understandable, and perhaps less threatening, to average people than the language of behavior analysis. Combined with the all-too-common tendency among behavioral professors to impose behavioral terminology on others, these conditions virtually guarantee that we will be unsuccessful in broadly promoting our methods and programs.

SEEING BEYOND OUR INDIVIDUAL CONCERNS

A prerequisite for those who would engage in efforts to promote behavioral education is a real interest in working beyond the responsibilities of their own individual job descriptions. Most teachers restrict the focus of their concern within the walls of their classrooms or schools. Most administrators are absorbed in the day-to-day management tasks of their buildings, programs, districts, and so forth. Most academics focus on their own research or demonstration projects, publishing in academic journals, and working to obtain grant support and tenure. Those of us engaged in promoting behavioral education must have a larger vision. We must concern ourselves with and seek to understand the broader social, cultural and economic environment in which our schools, programs, universities and research centers reside. We must then learn to place ourselves within that broader environment and to articulate what we have to offer within that context so that others will listen to and appreciate what we have to say.

Some of us may not choose to allocate energy beyond the limits of our own personal environments. However, if behavioral education is to provide major solutions to the educational crisis that currently engulfs our culture, many more of us must choose the broader perspective. In whatever

environment we chose to work, some of the following principles extracted from private sector sales and marketing should help to increase our impact.

IDENTIFY AND SOLVE PERCEIVED NEEDS

Find out what the customer needs and wants. Like many technologists, we tend to promote the features of our technology and the jargon associated with it. Even the traditional features and benefits approach to sales and marketing misses the mark because it begins with features. A better strategy is to discuss the needs, concerns and problems that potential customers recognize, and then describe features of the technology as solutions to those needs. Focus on curriculum areas and skills where everyone agrees improvement is needed and work to produce the kind of result that parents, students and other educators agree is desirable.

USE PLAIN ENGLISH

One of our greatest failings is inherent in the language we use to describe what we do. We often work to convert others to use of our jargon rather than describing what we do in common, easy-to-appreciate language. The terminology of functional behavior analysis is a powerful and precise tool for analyzing and understanding behavior, and for developing effective teaching methods and materials. As technologists, we should maintain the precision of that language because of its technical advantages. But it is not the language we should use to describe our products to the general public, or even to other educators. Automobile manufacturers do not use the language of mechanical and electrical engineering in their advertising and showroom sales. Why should we force the language of our discipline upon the average consumer? The term behavioral education itself may work very strongly against us. Behaviorism is clearly out of vogue among educators and psychologists, due in part to a simplistic understanding that has pervaded both the popular and professional literature. If our mission is to promote effective educational methods and programs, we may be hampered by concurrently striving to convert others to behaviorism per se. For example, in efforts to promote Precision Teaching, Direct Instruction and the Personalized System of Instruction (Binder, 1990), the phrase "measurably effective instruction" seems more persuasive as a description of what we do than "behavioral methods," both because in relatively plain English it describes our data-based approach and does not carry the unnecessary baggage of reactions against behaviorism.

SEGMENT THE MARKETPLACE

Different parts of the marketplace have different needs and will require different solutions. Parents, for example, would like their children to be successful. By creating seminars, tutoring services, packaged materials sold at check-out counters, and other products that parents can understand and use, we address a specific market segment. With parents' growing concern about the educational system, that segment offers important opportunities for commercialization. Likewise, corporations who must teach their employees basic skills or provide day care or educational programs for employees' children, present another promising market. They have different needs, and will respond to solutions described in different language. Even within regular education, specific markets exist (e.g., language learning, vocational programs) where targeted products might have a reasonable chance of success. Recent efforts to develop private practice teaching as an alternative career mode for educators, in which individuals or groups of teachers provide specific programs to schools on contract, suggest that market segments exist even within school districts (Lochhead, 1991). If we begin to develop the equivalent of sales and marketing strategy, we will identify the needs of specific target markets within education, then package and describe products and services that meet those needs in terms that the consumers can appreciate.

IDENTIFY OPPORTUNITIES FOR GREATEST IMPACT

Educational research traditionally seeks statistically significant results. As behavior analysts who focus on changing individual organisms, we have a head start in the effort to produce educationally significant results, not merely statistically unlikely differences between mean effects. If we are to convince people of the value of our work, we must produce results that are obvious, even to the untrained observer. Students without reading skills who can read at a 9th grade level six months later show obvious improvement. Second graders who write as well as or better than sixth graders are impressive. High school students fluent in multiple foreign languages or who easily pass advanced placement examinations in mathematics represent obvious improvements over the typical product. These are all products that we can produce.

In the past, we have tended to gravitate toward special education, a field where expectations are low and where we are often able to produce better results than others. In large part this is because special education is more tolerant of non-mainstream methods and materials. However, special

education is not highly visible, and it provides a convenient "pigeon hole" into which other educators can easily categorize us. It is in regular education where we need to show results that are substantial and valuable. Many of us have grown skeptical of ever being accepted among regular educators, partly because the process of institutionalized education seldom rewards effectiveness per se. Many of us may choose to create opportunities for ourselves outside of standard public education. But as government, business leaders and the general public demand more and more accountability, and educational restructuring allows for greater choice and competition in demonstrating tangible educational results, we may yet see significant opportunities for greater acceptance of measurably superior instructional methods.

CREATE TANGIBLE PRODUCTS

Intangibles are more difficult to describe and sell than packaged products, programs or systems. The more we can define what we do in concrete terms, the better. Lists of behavioral principles and terminology do not seem tangible. Identifiable methods associated with specific materials and procedures, such as Precision Teaching or the Personalized System of Instruction, are a good deal more recognizable as things than is behavioral education per se. Direct Instruction programs and materials are actual products. So are software programs and other published materials. We need more packaged materials, programs and methods with identifiable names that appeal to average people because they meet perceived needs.

SEEK NEW MARKETS FOR OUR SOLUTIONS

Those at the vanguard of our effort must continually seek new opportunities to satisfy acknowledged educational needs in ways that will demonstrate obvious value to consumers. During the last two decades, some of our best researchers and practitioners have created private schools and tutoring agencies in order to escape the constraints of the public school system and to continue to push the limits of the technology. Private practice education and choice initiatives in various states and cities may offer new markets within the public system. Such programs as those proposed first in Miami Beach and more recently in New York City in which private agencies, universities, foundations, and groups of educators will be allowed to assume total responsibility for entire schools, may offer additional situations in which to implement and publicly demonstrate effective instruction

("Business-run schools are proposed," 1990). Such new opportunities may provide some of our best markets, as long as they carry with them incentives for demonstrating student achievement.

CONSIDER STRATEGY AND TACTICS

Given what we know about the educational establishment (Watkins, 1988), some approaches are likely to be more successful than others. For example, we have generally been trying to influence educators and educational administrators in efforts to gain acceptance for our methods. These are the people who hold the purse strings and operational control of the educational system. On the other hand, the actual consumers of the products of education are parents and employers. Increasingly, it is these people who are expressing concern about educational failure and who are allocating resources and articulating the need for change. With this knowledge, some of us might begin to shift our strategy toward an effort to engage and enlist the support of parents and corporate leaders who will then more knowledgeably exert pressure on schools for effective instruction. The implications of such a strategy suggest changes in tactics. By analyzing the contingencies at work in the larger cultural context, we might consider a range of strategies and tactics, then select goals and define action plans based on that analysis. In general, this is the realm of strategic planning, an essential component of any successful business enterprise.

WRITE FOR NON-TECHNICAL PUBLICATIONS

Those of us who write articles, mostly academic researchers and teacher-trainers, tend to publish our work in academic journals. If we seek broader acceptance of our methods, we must begin to publish in more popular journals, magazines and other publications that reach a broader audience. An example of this approach is the issue of *Youth Policy Journal* (July, 1988) devoted to articles about behavioral education written by members of the Association for Behavior Analysis. We would do well to identify even more widely read publications, especially magazines, where articles about effective education might inform a broader audience about what is possible.

Efforts to publish in popular magazines and to use other public media will require us to make important changes in how we communicate. We will need to use plain English eloquently, avoiding long sentences, passive voice, and other common features of academic writing. Such articles must

begin with descriptions of needs or of human interest stories that grab readers' attention, and they must contain practical and thought-provoking information that is targeted to specific audiences. Perhaps, most importantly, we will need to thoroughly consider why anyone might be interested in what we have to say, to understand the concerns of the readership, to describe solutions that readers can appreciate and find ways to help readers take further steps. By exposing ourselves to the contingencies of the popular readership, we will help to shape our own behavior toward more effective communication and persuasion.

A CASE STUDY: RECENT EFFORTS TO PROMOTE PRECISION TEACHING

Precision Teaching has existed for over 20 years (Binder, 1988; Binder & Watkins, 1990; Lindsley, 1972, 1990). It provides teaching methods based on principles derived from laboratory operant conditioning. However, few publications have described or presented results of Precision Teaching when compared with other disciplines or methodologies within education. This lack of academic publications is the result of a conscious strategy on the part of its founders not to publish. They believed that academic publications do little to change behavior and that the information in research papers are outdated by the time they are published due to the rapid development of the discipline. Indeed, they chose a strategy based on person-to-person influence and instruction in the method as a means of promulgating Precision Teaching. Whatever the positive results of these strategies might have been, the down-side has been that its proponents now have relatively little "ammunition" for establishing credibility among their more academic colleagues.

In recent years, there has been a resurgence of interest in promoting Precision Teaching as an important solution to America's current educational crisis (Binder, 1990; Binder & Watkins, 1989). Precision Teaching addresses a number of the needs and concerns commonly expressed by those interested in educational reform. These include, a) the need to show measurable results, addressed by inclusion of the measurement process as an inherent part of daily instruction and practice activities; b) the need for objective performance standards, addressed by the use of fluency aims which include both accuracy and speed dimensions of responding; c) the need for individualized instruction, addressed by use of daily measurement and charting to assess progress and make frequent decisions for each student in each curriculum area; d) the need for student-centered learning, addressed by an emphasis on involving students in the measurement, chart-

ing and decision-making process; and e) the need for cost-effectiveness, addressed by the relatively low cost of Precision Teaching materials and training. Further, Precision Teaching can be combined with any existing curriculum or teaching method to monitor and assess student progress, and to make decisions about when to change instructional programs.

Recently, proponents of Precision Teaching have begun a more active outreach effort by publishing in non-behavioral journals (Binder, 1988, 1990; Binder & Watkins, 1989, 1990), editing a special issue on Precision Teaching (e.g., *Teaching Exceptional Children*, July, 1990; West, Young & Spooner, 1990) for a readership not specifically oriented toward a behavioral approach, and holding strategic planning sessions at conventions (e.g., Association for Behavior Analysis in 1990). Further, non-educators and educators not involved with Precision Teaching were invited to attend the 9th International Precision Teaching Conference. An important outcome of this conference was a first meeting of the Association for Precision Teaching, an organization that will be devoted to serving both its members and the broader purpose of promoting effective instructional methods to a wider audience. Although this is just a beginning, proponents of Precision Teaching have renewed their commitment to promoting effective instruction to a wider audience, and have begun to plan and develop systematic efforts to do so.

CONCLUSIONS

To promote wider use of behavioral education methods, we would do well to emulate sales and marketing professionals in the private sector. Identifying market segments and their needs, addressing solutions to these markets in terms that they can appreciate, and following systematic strategies based on careful analysis should help us to increase our influence and effectiveness. Whether or not we can ever produce a major improvement in how our culture educates its students will depend on our ability to demonstrate and communicate solutions to perceived needs, and on the culture's acknowledgment of needs to which we hold solutions.

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