IMPROVING STUDENT ACHIEVEMENT BY IMPROVING STUDENT BEHAVIOR: PREVENTION IN ACTION

Robert H. McPherson, Jonathan Schwartz, & Staci Passe
University of Houston, Texas, USA

Abstract: Misbehaving students are typically low achieving, or at least, underperforming students. These students often negatively affect the learning of other students. Efforts to systematically and effectively implement behavioral management systems in the schools produce variable results. Indeed, the fidelity of treatment implementation may serve as the largest source of variance regarding the outcome of school-based behavioral intervention programs designed to address disruptive and off-task learning behavior. This article describes use of a web-based software program, the Review 360™, developed by researchers at the University of Houston, to facilitate a more effective implementation of a contingency management classroom-based behavioral system where students earn increasing privileges and rewards based upon their ability to demonstrate greater behavioral control. Case studies and research will be presented and discussed which will illustrate how technology can be used to reduce barriers to implementation leading to greater fidelity and ultimately improved student outcomes.

Key words: Behavioral management, Classroom-based interventions, Underachievement

INTRODUCTION

Imagine a warm, sunny afternoon. You are in a local park, lounging indolently on a blanket, with a bottle of wine and a good book on the grassy banks of a river below a swimming area. Suddenly you hear thrashing sounds, and a cry for help from the river. Startled you look over to see a person struggling unsuccessfully as the water sweeps him away. You courageously dive in, rescue him, and then return to the serious business of soaking up the sun. There is to be no respite for you, however, for you find yourself

Addres: Robert H. McPherson, College of Education, University of Houston, 214 Farish Hall, Houston, Texas 77204-5023, U.S.A. Phone: 001-713-743-5003. E-mail: bmcph@uh.edu

repeating this performance with several other drowning people throughout the afternoon. As you are ministering to the final victim, an observer asks a question that is startlingly powerful in its logic and simplicity: "Would it not ultimately be much easier and less dangerous to go to the swimming area and teach those people, collectively, how to swim than to rescue each individually
Rappaport (1972) as cited in Conyne, 2004 p. 5

The following discussion will consist of three parts. First, we offer a brief professional autobiography of the lead author of this article, so that you may know how he has come to his current understanding of prevention. A brief historical overview of American counseling psychology's enthusiastic embrace of the idea of prevention will then be provided, followed by our conjecture about why our profession has fallen far short of its aspirational goal of preventing mental illness and debilitating emotional distress.

The third section of this paper will return to the voice of the first author and is devoted to a brief description of a school-based intervention program that we believe meets best practice guidelines on prevention practice recently published in the *American Counseling Psychologist* (Hage, Romano, Conyne, Kenny, Matthews, et al., 2007). It is our hope that this paper serves as a modest example of how counseling psychologists might go to the swimming area and teach others to learn how to swim.

McPherson's career history

This story begins after my childhood and extended adolescence ended – on September 1, 1976 to be exact – when I began my first job as a counselor in a very low academically performing high school in a small dusty city in west Texas called Odessa. My students lived and attended school on the south side of the local railroad tracks, which by definition meant they were likely either Black or Hispanic, and most certainly, decidedly poor. I was fresh from my bachelor's degree education at Texas Tech University, where I had stumbled quite by chance into a psychology class and was eventually inspired to make counseling my profession of choice. Brandishing all the naive wisdom and youthful enthusiasm of a self-righteous idealist possessing, at best, a limited set of Rogerian inspired active listening skills, I entered Odessa's Ector High School hired to lead a student peer counseling program that had seemingly gone astray. The peer counseling program was established the year previously by order of the school district's chief of counseling services who had received special monies from the state of Texas to establish peer counseling programs in Odessa's three high schools.

From the first day on the job, my faculty colleagues were guardedly friendly with the presence of another long-haired liberal from a big city. As for the students, they were mostly indifferent to my arrival. For them, I was just another new white teacher who would have to prove himself deserved of their attention and respect.

In the weeks that followed the start of my new job, I consulted frequently, but independently with the two senior counselors at my school. They were respectful of one another, but approached their work with distinctively different styles and attitudes. I soon found that they rarely consulted or collaborated with one another. However, both were quick to agree that their work at the school was devoted primarily to the scheduling of classes, administration of standardized achievement tests, and other administrative duties. They provided little or no therapeutic counseling to the students. Unfortunately, this very much remains the professional life of most American school counselors.

When I asked about the peer counseling program, they also agreed that I should be slow in selecting new student peer counselors. They suggested that I spend time with the returning peer counselors and be aware that not all of them were well-regarded by the faculty and school administration. Indeed, there were a few returning peer counselors of questionable character or who were not exceptionally strong – academically speaking. This apparently was a source of considerable concern to the head principal of the school, too. He had serious doubts about the value of peer counseling.

One of the peer counselors of some suspicion that I encountered during my first week at the school was an exceptionally friendly and engaging student I will call Gerald for the purpose of this article. Gerald was good looking, talkative, bright, and African- American. I was greatly surprised to learn that Gerald was also a special education student. It is important to understand that placement in special education at that time meant students: (1) scored a standard deviation lower on their academic achievement tests than their IQ score would have predicted, or (2) were determined as emotionally disturbed. With special learning needs, special education students were separated from the regular or mainstream students, in order to receive additional individualized instruction. According to one of the senior counselors in the school, Gerald had met both criteria in the first or second grade (e.g., six or seven years old) and had remained in special education since. In disbelief, I exclaimed that he most certainly seemed above average in intelligence to me and noted that his behavioral record in the school was unblemished. I asked if Gerald had ever been tested again and considered for reassignment to regular education. The senior counselor's response was a very short, "No, not here".

Unfortunately, these many years later, little has changed in the American public

school system. Minority students, especially black boys, are disproportionately represented in our special education system. Further, once in the special education system, disproportionately fewer Black male children are mainstreamed or returned to the regular classroom.

His special education status not withstanding, Gerald remained a part of my small group of peer counseling students in the fall semester. He graduated from high school in the spring, and then successfully obtained a job at the local utilities company working as a senior electrical linesman. The job was sometimes dangerous, requiring considerable attention to details and complexity of problem-solving skills. Today I smile as I remember that Gerald made double my teacher's salary his first year on the job. He had succeeded in spite of his long-term misplacement in special education.

Gerald was just one of the highlights of my first year at Ector High School. I found, with little exception, that the returning members of my team of peer counselors were a solid and stable group of students. My predecessor, whatever faults he may have brought to his work, was a good judge of character. Most of my peer counseling students were well-liked by their classmates, though not because they possessed exceptional therapeutic skills or were the academic stars in the classroom. They were a very interesting collection of teenagers with varying interests, talents, and personal stories. Some came from single parent households, some lived without electricity in small houses on dirty floors with their large extended families, while others came from proud and hardworking blue collar families where no English was spoken at home.

As peer counselors, I provided them a more limited version of the counseling training that I received in college. Honestly speaking, I think it is questionable whether our program provided any significant service to the rest of the student body. However, the peer counselors reported that they often used their counseling skills with friends and family, and that those skills helped them better understand and communicate with others. Regardless of its efficacy as a direct extension of the school's very limited counseling services, the peer counseling program grew in popularity and size in the ensuing three years. To accommodate increasing student interest in the program, I eventually created a more formal psychology course that served as an elective credit for interested students. The course topics included a blend of interpersonal skills training, large group-like counseling sessions, and bits of general psychology that I was learning while completing a master's degree at a nearby university at night.

In addition to my work with the peer counselors, I was expected to also provide some limited individual and small group counseling to students with behavioral problems. However, weeks passed and I found few referrals from teachers or school administrators, and I grew increasingly frustrated. To me, it seemed that there

remained considerable distrust of me from students and their educators. An advisor for my masters degree program, Dr. Patricio Jaramillo, a Hispanic, suggested that traditional counseling might not appeal to poor students in general, especially students whose ethnic and cultural beliefs and traditions were much different from my own. He also noted that teachers were often reluctant to release students for personal counseling at the expense of instructional time.

After some thought, I decided that if the students would not come to me, I would go to the students. I began attending as many after school extra curricular activities (e.g., sporting events, drama productions, school sponsored dances, etc.) as I could find the time away from my own graduate studies. I volunteered to serve as the breakfast monitor – the federal government provided an additional food subsidy for schools with high levels of students at or below the poverty line. The school band invited me to become a faculty sponsor, as did the junior class, and I readily accepted both. It quickly appeared to me that the more visible I became, the more I was invited to do something else for the school. But sadly, my new visibility did not increase counseling referrals. My popularity with students was clearly improving, but I had not yet gained the trust of the faculty, so I employed a new tactic. I sent a memo to the faculty introducing myself as a willing and eager guest speaker for their classes. I offered to speak on a wide range of personal and development topics that would be of interest of students and germane to their classes. My offer was well received, but for reasons different than I had hoped. Several teachers used me as a substitute while they ran errands or relaxed in the faculty lounge. Apparently they saw no advantage in sending individual students to me for counseling, as it served as a disruption to their classes and meant spending some additional instructional time with students who missed their classes. However, if I was willing to take on the entire class, well then, they were more than ready to "sacrifice" their teaching time for an additional personal break during the day.

I persisted, hoping that my familiarity with students would at least increase their trust in me and inspire them to seek my counseling services on their own accord. I also began practicing something I called "counseling-by-walking-around". In this regard, I reframed my own notions of traditional counseling requiring scheduled, individual counseling sessions offered in the privacy of my office, to more opportunistic, casual conversations with students that I had reason to believe were struggling with personal or academic problems. My peer counselors greatly aided the cause by suggesting to me which of their friends was having difficulty. These mini, or in today's terms, *brief* counseling sessions occurred during the breakfast period in the school cafeteria, in the hallways between classes, on bus trips to band concerts, and in the stadium and gymnasiums of various sporting events. On occasion, a few of these student "clients"

would drop by office to just say, "Hello, Mr. Mac" and spend a few minutes "updating me" on their lives.

And thus was the way of my counseling experience for the first three years of my career. Then, I decided it was time to do something more "meaningful" with my life. I longed for the opportunity to do "real" counseling. Possessing a healthy dose of narcissism that fueled a high need to achieve, I left Ector High School to pursue Ph.D. training in counseling psychology in Houston. And since the completion of my doctoral studies, virtually my entire 30 year career as a counseling psychologist has been at the University of Houston. First, I worked at the university counseling center which serves as the primary mental health treatment facility for the students and faculty. During that time, I saw ten to fifteen clients per week presenting with a wide range of symptoms and pathology, I supervised post-doctoral and pre-doctoral interns learning psychotherapy, and I also oversaw a rather large student tutorial program, which was somewhat akin to my earlier days heading the high school peer counseling program.

Again, after three years, I left the university briefly to serve as a consultant with a career outplacement firm. I was hired to work with executives who voluntarily separated or who were involuntarily terminated from the first major layoff in the history of the Exxon oil company. The work was interesting and quite lucrative and provided my first extensive counseling experience with an older (40 to 65 year old) counseling population. When this project was completed, I was offered a teaching position in the University of Houston counseling psychology program. My instructional responsibilities for many years included teaching psychotherapy skills classes, the clinical supervision class for advanced doctoral students, and the legal and professional issues classes for both master's and doctoral students. Along the way, I also maintained a small private psychotherapy practice and co-founded a postdoctoral psychotherapy training institute with several other psychologists. After a brief stint as the director of training for the counseling psychology program, and upon the granting of tenure, I was then offered the job as chair of the department, a time demanding position I held for seven years. My teaching load was reduced and my private practice soon withered from neglect. Today, I am the executive associate dean for the university's college of education and my teaching duties are virtually non-existent. I sometimes jokingly suggest that my psychology practice now consists of misbehaving students and faculty members.

In sum, my career has been typical of most traditional, academic-based counseling psychologists who possess some administrative tendencies. Much of my work life has been devoted to the provision of counseling services, teaching others who have aspired to do the same, and most recently leading faculty who prepare the counseling

psychologists of tomorrow. I believe much of my career and goals are consistent with a prevention perspective. In the next two sections of this paper, I will discuss the role of prevention in counseling psychology and provide an example of prevention in action.

COUNSELING PSYCHOLOGY AND PREVENTION

Gerald Caplan (1964) is credited with introducing the concept of prevention into the psyche of the mental health world. His now classic view served to link community with population (Conyne, 2004), diverting the emphasis from the individual orientation of traditional psychiatric and psychological practice to the community. Caplan framed prevention within the context of a traditional public health perspective, with reducing the incidents of specific mental illness disorders within a given population as its goal. This epidemiological perspective framed prevention as occurring in three levels – primary prevention, secondary, and tertiary prevention. Primary intervention referred to larger scale programs intended to "inoculate" definable populations with certain skills, traits, or behaviors that would ultimately decrease the incidence of the onset of mental illness within a given population. Secondary prevention referred to those interventions that would serve to effectively cure or resolve circumstantial emotional duress following a traumatizing precipitating event(s) leading to mental illness of limited duration. Tertiary prevention referred to intervention designed to assist and maximize functionality of those persons who have already succumbed to mental illness.

Ten years following, counseling psychology more fully embraced the *concept* of prevention with the publication of the Morrill, Oetting, and Hurst (1974) article entitled "Dimensions of Counselor Functioning". They introduced the "Cube" which characterized counseling interventions across three primary dimensions. First, these authors described four primary targets of intervention: (1) the individual, (2) the individual's primary groups, (3) the individual's associational groups, and (4) the institutions or communities that exert noteworthy influence over the individual. In contrast to Caplan, these authors kept a clear eye on the individual, but through the lens of systems of increasing size and complexity. Next, they posited that the primary purpose of the intervention may be: (1) remediation (2) prevention or (3) development. Lastly, they described three methods of intervention. These included: (1) direct service involving the counselor or psychologist with the identified target for intervention, (2) consultation with and training of professional or paraprofessional "helpers" or (3) indirect interventions such as computers, books, television, or other media (Conyne, 2004). Depicted in three dimensional fashion by a 4 by 3 by 3 cube,

Morrill et al. (1974) conjectured thirty six opportunities or "faces" for counseling psychology (Conyne, 2004). While others preceded (Jordaan, Myers, Layton, & Morgan, 1968) and many others have since followed, most notably Pietrofesa, Hoffman, and Splete (1984) and Albee (1985 & 1986), Morrill et al.'s (1974) notion of the "Cube" continues to serve as the most exhaustive analysis of the possible roles and functions of counseling psychologists, fully embracing the importance of prevention.

More recently, in an effort to inspire a new generation of counseling psychologists on the importance of prevention Hage et al. (2007) reference persuasive epidemiological data (Satcher, 2000. Weissberg, Walhberg, O'Brien, & Kuster, 2003) suggesting the United States is a nation amidst a significant public mental health crisis for its children. Arguing convincingly for the value of prevention interventions in lieu of more expensive remediation programs for our youth, these authors provide a list of 15 best practice guidelines for prevention practice. They encourage all psychologists to:

1. Seek ways to prevent human suffering through the development of proactive interventions.
2. Select and implement preventive interventions that are based on theory and supported by research evidence.
3. Use culturally relevant prevention practices that are adapted to the specific context in which they are delivered and that include clients and other relevant stakeholders in all aspects of prevention planning and programming.
4. Develop preventive interventions that address both the individual and the contextual/systemic factors that contribute to psychological distress and well-being.
5. Implement interventions that seek to reduce risks as well as promote strengths and well-being across the life span.
6. Carefully attend to relevance and scope of the prevention research within the current progression of prevention science.
7. Be competent in a variety of research methods used in prevention research.
8. Conduct research that is relevant to environmental contexts.
9. Consider the ethical issues involved in conducting prevention research.
10. Consider the social justice implications of prevention research.
11. Develop prevention concepts and research, as well as skills in the practice and scholarship of prevention.
12. Foster awareness, knowledge, and skills essential to prevention in psychological education and training.
13. Design, promote, and support systemic initiatives that prevent and reduce the incidence of psychological and physical distress and disability.
14. Design, promote, and support institutional change strategies that strengthen

the health and well-being of individuals, families, and communities.

15. Psychologists are encouraged to engage in governmental, legislative, and political advocacy activities that enhance the health and well-being of the broader population served.

These guidelines are helpful in thinking and talking about prevention, but unfortunately, as Conyne first lamented in 1984 and more recently as Romano and Hage (2000) and Schwartz and Davidson (2006) have suggested, there have been far too few examples of prevention and developmental counseling interventions published in mainstream American counseling psychology journals, and in my opinion, especially the American Psychological Association's *Journal of Counseling Psychology*. I believe there are several intersecting reasons why counseling psychology has been slow to fulfill the hope and promise of prevention oriented services. These include:

1. For many years, counseling psychology fought intensely with mainstream psychiatry, and their clinical psychology brethren, for legitimacy as a provider of individual and small group psychotherapy. It is hard to lessen one's grip when it took so much time and effort to obtain the tool.

2. Psychology licensure in the United States depends almost exclusively upon the demonstration of: (a) formal academic training at the doctoral level, (b) supervised clinical practice emphasizing psychotherapy services, and (c) passage on a standardized written examination covering very general psychological research. Regrettably, licensure standards drive academic accreditation standards, which in turn, heavily influence training curriculums. In short, counseling psychology programs are now mostly defined around the research of the counseling process and the practice of psychotherapy – not prevention.

3. "Practicing psychotherapy" holds a much more appealing intellectual and cultural appeal than serving as a "mental health prevention specialist".

4. Private practice with its accompanying high salary levels has been an understandable attraction for most counseling psychology graduates, though the managed care movement has seen a recent decline in both the numbers of counseling psychologists seeking this career path. As a corollary, it has been my experience, that most counseling psychology students, regardless of their own socio-economic background, seek employment in settings that attract middle to upper middle class clients who are at least college educated and can directly (self pay) or indirectly (private insurance or public subsidized) afford the cost of individual counseling. This treatment population also prefers and expects the individual attention of their "own" psychologist.

5. Most examples of prevention services occur in public service settings, where the salaries for psychologists have paled in comparison to those engaged in psychotherapy private practice. (Note: Implicit to this discussion is the simple fact that the poor cannot afford to pay traditional rates for psychotherapy.)

6. The launch of prevention programs requires an understanding of larger systems, in addition to an understanding of the individual. As noted previously, most counseling psychology curriculums include little more than cursory reference to larger systems, with the noteworthy exception of more recent attention to the effects of multiculturalism on the individual counseling relationship.

7. Counseling psychology faculty is naturally inclined to teach what they were taught in their graduate school experience. The expression, "It is hard to teach old dogs new tricks," comes to mind here.

8. Larger scale prevention programs are time-consuming to design and to implement, and often are expensive to manage.

9. Correspondingly, counseling psychology faculties in the United States face a "publish or perish" job demand. Especially for our more junior faculty, the time to design, implement, evaluate, and then publish prevention research would be a very risky proposition for their eventual promotion and tenure.

10. Financial support, both public and private, is scarce for prevention programs. As well, there are inevitably multiple stakeholders in a larger scale prevention intervention each demanding some benefit (not always financially) from the prevention program.

In summary, I believe that counseling psychology has long held noble but mostly aspirational intentions regarding prevention. With our preoccupation with the counseling process, financial reward systems that favor both practice and research related to counseling process, and a very entrenched path to becoming a practicing counseling psychologist, there are understandable reasons why counseling psychologists have tended to play lifeguard by the river rather than swim instructor at the swimming area. This now brings us to the title and final portion of this paper.

CHANGING STUDENT BEHAVIOR

It seems just yesterday, though eight years have actually passed, since a younger university colleague and friend came to me with an intriguing idea. His research interests focused on teacher's preference and acceptability of various forms of behavior management interventions for children exhibiting disruptive classroom

behavior. He found that most teachers preferred the use of contingency management programs, but were reluctant to use such programs because they were time consuming and difficult to document for reporting purposes. He proposed the development of a software program that would guide classroom teachers in the design and implementation of a behavior reward system for their classrooms.

He asked me to help find funding for the project and I quickly agreed, impressed with his concept. Despite recalling some of the disappointments of my efforts at a high school so many years ago, with age and maturity, I have grown more appreciative of the opportunities for positively affecting the lives of high school students as a school counselor in ways other than traditional counseling. My colleague was offering me to "return" to schools but in a more innovative and preventive way as suggested by Morrill et al. (1974).

As a first step in supporting my colleague's idea, the university's instructional technology department was contacted with request for support for the project. However, we were quickly informed that developing such software was beyond the scope of their expertise and mission. We then submitted two federal grant proposals requesting funding for the development of the software. Though both proposals received relatively high ratings, both were left unfunded with informal explanation that such software was esoteric and not likely functional in public school settings. I then arranged a meeting with the chairman of the local school district. He appeared warm to the idea and referred us to the district's head of technology services. After hearing our idea, she offered advice and an unexpected invitation.

First, she suggested that we should web-base the application. She indicated that she was well aware of the problems of educational software arriving "in a box". Such software required loading on individual computers and the software was often times incompatible with the differing and ever-changing computer operation platforms. Then, she indicated the district would beta test the software, but only if we intended to make a profit from eventual sale of the project. She politely, but firmly told us that she was tired of university professors coming into the district with grand ideas, only to abandon both the project and the district when their interests shifted elsewhere. Her belief was that should we have for-profit financial interests in the software, we would ensure the development and maintenance of a quality software application. Stunned, we left her office wondering how and if we could/should become businessmen.

After some considerable thought and much trepidation, we decided to launch an educational software business funded in part with our personal savings and with investment funding from friends and family. Such an effort required that we develop a formal business plan demonstrating the value proposition of the software to the district and the sustainability and profitability of our business model. As you may well

imagine, terms like "business plan" and "profitability" were foreign terms for two academic counseling psychologists. We subsequently sought out business consultation from a family member with experience with software companies. And frankly, we had as much to learn about software development as we did basic business practice.

Developing a value proposition for our business plan was not derived easily and has evolved considerably over time. We first naively assumed school districts would find value in the simple virtue of helping teachers better manage the student behavior in the classroom. However, we quickly learned that school districts were less concerned about disruptive students, especially those who were defined as having an emotional disorder (ED). As you will recall my earlier story about Gerald, these students were placed in special education classes.

Today, as was the case thirty years ago, special education continues to be a kind of warehouse for children who present noteworthy behavior problems in the regular education classroom. Further with the subjectivity of the diagnostic criteria for ED (Tester, 2007), the regular education side of school has perhaps opportunistically been eager to move such children to special education programs that are funded with federal dollars. In many school districts, special education programs appear to be oversubscribed, often exceeding the epidemiological projections that only two to three percent of the student population would meet the diagnostic threshold for emotional disturbance. With the cost of educating special education students at twice the rate of regular education students, there is a clear value proposition for special education directors with now dwindling federal support to, at least, facilitate the return of students back to the regular classroom when appropriate.

Compounding the problems in special education, the United States ethnic minority populations are expected to continue to grow (Zhou, 2003), and there is extensive documentation that these student populations are over-represented in special education (Tester, 2007). Two national datasets maintained by Office of Special Education Programs (OSEP) and the Office for Civil Rights (OCR) provide evidence that African American students, especially males, are disproportionately referred to and continued in special education. As a result, some suggest that disability status and special education placement contributes to historical patterns of segregation and racial discrimination (Tester, 2007).

Therefore, facilitating the return of inappropriately placed minority students, coupled with the corresponding cost savings, serve as two important value propositions to school districts related to the purchase and use of our behavior management software system. A third proposition value for our software system is the improvement of student achievement through the improvement of student behavior.

Thus a prevention focus is on early intervention with disruptive behavior to prevent future academic difficulty. Nearly thirty years of research support the intuitive notion that the elimination or improvement of misbehaving students will likely improve the academic achievement of these students and the achievement of their classmates. We have made considerable ongoing effort to document whether, indeed, the use of software supports these three value propositions.

How does our software program help to address these concerns? Our system automates the teacher paper and pencil tasks necessary to maintain a consistent and systematic reward and response cost procedure for students with behavioral problems. Specifically, our program guides the special education teacher through the development of an individualized Positive Behavioral Intervention and Supports (PBIS) plan, a much researched and empirically validated form of classroom and school wide approach for behavior management (Colvin, Sugai, Good, & Lee, 1997. Kartub, Taylor-Greene, March, & Horner, 2000. Nelson, Martella, & Marchand-Martella, 2002. Taylor-Greene, Brown, Nelson, & Longton, 1997). This approach meets the best practice guidelines of prevention (Hage et al., 2007). Developing an organized way to identify problem behavior and intervening meets the main principles of secondary prevention. In addition, this problem empowers teachers and school administrators to take ownership of the preventive interventions. Thus it is ensured that the interventions are specific and relevant to the context of the school and classroom. Finally, this approach ensures a thorough needs assessment and follow-up on changes in behavior.

Such plans include: (1) the identification of a limited number (3-4) of problematic student behaviors, (2) identification of more acceptable positive replacement behaviors, (3) collection of relevant data from multiple sources, (4) summary statements, and (5) a system for monitoring student progress (Sugai, Horner, Dunlap, Hieneman, Lewis, et al., 2000). Tester, Pisecco, Johnson, Trevarthan, and Douglas (2007) note that the software program helps teachers identify specific behavioral objectives, inclusive of specific goals for each student, generates daily and summary reports and automatically charts student data for the teachers, provides "drop down" menus suggesting substitute behaviors, and offers practical strategy suggestions for teacher reinforcement of the targeted behaviors. He adds that the system provides real time tracking of implementation practices, and generates various levels of reports that district administrators and teachers can use to track students' progress, assist with treatment fidelity, and areas for possible professional development for teachers.

A more extensive effort to empirically measure the efficacy of the use of the software is forthcoming; however, it is worth noting that the system is now in use in

many of the largest school districts in Texas, and we are in discussion with a number of other large, mostly urban school districts in the United States.

From a strictly financial point of view, business is good. My colleague has left his job at the university in order to manage our company and its ever-growing number of full-time employees. Our sales leads are generated almost exclusively by word-of-mouth and by invited presentations at state and national conferences for special education directors. We are also pleased that a modified version of the software system is being used in regular education classes. Parents of students helped by the software program are also requesting an at-home version of the program. Finally, we are in the development phase of a self-monitoring program for students, with hopes that we can fully realize a prevention program that serves to teach them how to swim rather than to simply save them from drowning. Indeed, we assert with confidence and with growing amount of data that our program meets most, if not all of Hage et al.'s (2007) fifteen guidelines for prevention practice.

This presentation was by intention, not an intensive review of research literature related to counseling psychology, but more of call to arms to counseling psychologists on the value of prevention. By necessity, early in my career, I had to make some temporary adaptations to some of my closely held assumptions about counseling. Most certainly, I could not have single-handedly met the counseling needs of the many students at Ector High School, even if they had availed themselves to such services.

In a sense my career has now come full circle. I have returned to the public schools, albeit indirectly through the use of technology and with a much clearer emphasis on prevention. Perhaps I can help the next generation of Gerald's from nearly drowning.

REFERENCES

Albee, G. (1985). The contributions of clinical psychology to strategies for the primary prevention of psychopathology. *Bulletin of the Hong Kong Psychological Society, 15*, 7-23.

Albee, G. (1986). Toward a just society: Lessons from observations on the primary prevention or psychopathology. *American Psychologist, 41,* 891-898.

Caplan, G. (1964). *Principles of preventive psychiatry.* Oxford: Basic Books.

Colvin, G., Sugai, G., Good, R. H. III, & Lee, Y. Y. (1997). Using active supervision and precorrection to improve transition behaviors in an elementary school. *School Psychology Quarterly, 12*(4), 344-363.

Conyne, G. (1984). Primary prevention through a campus alcohol education project. *Personnel and Guidance Journal, 62*(9), 524-528.

Conyne, R. K. (2004). *Preventive counseling: Helping people to become empowered in systems and settings*. New York: Brunner-Routledge.

Hage, S. M., Romano, J., Conyne, R., Kenny, M. E., Matthews, C., Schwartz, J. P., & Waldo, M. (2007). Best practice guidelines on prevention practice, research, training, and social advocacy. *The Counseling Psychologist, 35*, 493 – 566.

Jordaan, J. P., Myers, R. A., Layton, W. L., & Morgan, H. H. (1968). *The counseling psychologist*. New York: Teachers College Press.

Kartub, D., Taylor-Greene, S., March, R. E., & Horner, R. H. (2000). Reducing hallway noise: A systems approach. *Journal of Positive Behavior Interventions, 2*(3), 179-182.

Morrill, W. H., Oetting, E. R., & Hurst, J. C. (1974). Dimensions of counselor functioning. *Personnel and Guidance Journal, 52*(6), 354-359.

Nelson, J. R., Martella, R. M., & Marchand-Martella, N. (2002). Maximizing student learning: The effects of a comprehensive school-based program for preventing problem behaviors. *Journal of Emotional and Behavioral Disorders, 10*(3), 136-148.

Pietrofesa, J. J., Hoffman, A., & Splete, H. H. (1984). *Counseling: An introduction* (2nd ed.). Boston, MA: Houghton Mifflin.

Romano, J. L., & Hage, S. M. (2000). Prevention: A call to action. *The Counseling Psychologist, 28*, 854-856.

Satcher, D. (2000). Mental health: A report of the surgeon general. *Professional Psychology: Research and Practice, 31*(1), 5-13.

Schwartz, J. P., & Davidson, M. M. (2006). Reducing intimate partner violence through preventive interventions promoting social justice. *Prevention in Counseling Psychology: Theory, Research, Practice and Training, 1*, 23-26.

Sugai, G., Horner, R. H., Dunlap, G., Hieneman, M., Lewis, T. J., Nelson, C. M., Scott, T., Liupsin, C., Sailor, W., Turnbull, A., Turnbull H. R., Wickham, D., Wilcox, B., & Ruef, M.(2000). Applying positive behavior support and functional behavioral assessment in schools. *Journal of Positive Behavior Interventions, 2*(3), 131-143.

Taylor-Greene, S., Brown, D., Nelson, L., & Longton, J. (1997). School-wide behavioral support: Starting the year off right. *Journal of Behavioral Education, 7*(1), 99-112.

Tester, M. (2007). *Ethnicity, grade, and behavior progress as predictors of academic outcome for students with emotional disturbance*. Unpublished Doctoral dissertation, University of Houston.

Tester, M., Pisecco, S., Johnson, S., Trevarthan, M., & Douglas, D. (2007, August). Technologically driven interventions for students with emotional and behavioral disorders. Research presented at the 115th Annual Meeting of the American Psychological Association, San Francisco, CA.

Weissberg, R. P., Walberg, H. J., O'Brien, M. U., & Kuster, C. B. (Eds.). (2003). *Long-term trends in the well-being of children and youth*. Washington, DC: Child Welfare League of America Press.

Zhou, M. (2003). Urban education: Challenges in educating culturally diverse children. *Teachers College Record, 105*(2), 208-225.