

Two Key Strategies for Teaching Prevention: Specialized Course and Infusion

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Abstract Prevention is taught only rarely in counseling and counseling psychology curricula. Failure to teach it suggests that graduates may be less likely to conduct prevention. In this article, we describe two key strategies for addressing this problem, where prevention is being taught through (a) required courses, and (b) infusion within existing courses. Four training programs, two examples of each mode, are presented from the University of Cincinnati, Pennsylvania State University, Boston College, and the University of Minnesota. We describe the processes involved in developing and implementing these key pedagogical strategies that lead, we intend, to broadened application.

Keywords Teaching strategies · Prevention · Counseling and counseling psychology · Specialized course · Infusion within courses

There is no question that the prevention of human dysfunction, whether physical or psychological in nature (or both), is an idealized goal. The technologies exist to allow for prevention to be delivered, and research studies are accumulating to show that well-crafted prevention initiatives can be efficacious. Yet prevention is

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infrequently taught in graduate training programs in the helping fields such as counseling, counseling psychology, social work, and others. This situation needs to change if preventive interventions are to become more widely employed.

A General Context for Teaching Prevention

Brief Literature Review

Calls for attention to prevention in the counseling, human development, and psychology fields have increased dramatically in the 21st century. Although a number of disciplines, such as public health and community psychology, have been engaged in prevention for decades, the extant literature on teaching prevention is meager.

A special issue of the *Journal of Clinical Psychology* (2005) examined training of clinical psychologists in the 21st century, and several authors discussed the importance of prevention training. For example, Deleon et al. (2005) outlined a “global and preventive perspective” in clinical psychology education and practice (p. 1105). In the same issue of the journal, Ingram (2005) observed that most clinical graduate programs emphasize traditional psychotherapy approaches in training and advises graduate programs to at least examine the need for prevention training in their curricula.

Eddy et al. (2005) surveyed early and later career prevention researchers about their prevention training. The results of their study showed that whereas later career professionals possessed a high degree of knowledge about traditional prevention content areas, early career professionals reported little knowledge and skills in prevention. The authors interpret this finding as indicating that prevention scientists gain most of their knowledge and skills through post-degree professional experience and self-study. They argue for increased graduate student training in prevention content and prevention research methods across disciplines so that newly minted professionals are current with prevention practice and research.

Prevention-Oriented Job Opportunities

Most university training regimens provided within counseling and counseling psychology programs continue to emphasize treatment by preparing trainees to help clients resolve existing problems and by addressing important but later-stage goals of relief and restoration (Hage et al. 2007). Even in delivering remedial services, however, prevention has a place in helping clients learn how to avoid re-engagement in dysfunctional patterns and to gain skills to become more effective.

It also is particularly instructive to realize that prevention is becoming a more common expectation for many counseling and therapy positions. For instance, community mental health centers, school clinics, and counseling centers typically expect staff to provide a range of services, even if the job position is stated generically as “staff counselor.” Although these services may be grounded in individual, direct, remedial interventions, they typically are not restricted to them.

Today's staff members, in addition to other duties, increasingly may be charged with designing and delivering prevention services such as (a) psychoeducational groups aimed at prevention and promotion, (b) consultation to families, teachers, or organizations that frequently seeks prevention outcomes, and (c) social advocacy efforts to advance the profession and to achieve social justice. Moreover, knowledge and skills in prevention are fundamental for certain other roles that are assumed by some counselors and other helpers. As staff members "move up" the career ladder in an organization, they naturally become involved with increased administrative responsibility and sometimes take on roles of supervisor, director or manager. In other cases, staff (especially with a doctoral degree) may be hired directly into administrative roles. These administrative assignments require staff to take a broader and longer perspective and demand skills in planning, coordinating, collaborating, working in groups, evaluating, acquiring and using resources, training, employee management, lowering costs, and service optimization.

These functions are consonant with a prevention perspective and with preventive practice. Therefore, administrative roles in mental health, such as that of agency director, naturally embed preventive functions within daily tasks and responsibilities. Being an effective administrator of a counseling or mental health operation, of whatever scope, requires that prevention-oriented tenets be adopted and adapted.

Finally, an increasing number of practitioners are moving into more entrepreneurial roles. These roles take on two forms. In the first, counselors and other mental health professionals often are contracted and paid by agencies in mental health, schools and universities, community, government, and business to provide ongoing training and consultation. In the second form, they are contracted to provide episodic workshops and conference presentations. In both cases, prevention is an often-represented topic. Examples of job placements assumed by graduates from one university counseling program are presented later.

The Teaching of Prevention Lags behind Practice

Despite a growing trend toward including prevention in roles and functions, many barriers exist to inhibit the application of prevention in counseling and counseling psychology (Conyne 2004; Matthews and Skowron 2004; Romano and Hage 2000a). With a few exceptions (noted later in this paper), a major blockage results from the nearly complete failure in these disciplines to include the systematic teaching of prevention in their curricula.

In surveys, Matthews (2003, 2004) discovered that 74% of counseling psychology programs and 69% of counselor education programs did not offer any prevention-specific courses. However, despite the low frequency of course offerings in prevention, 70% of the programs indicated that prevention should receive increased attention in training.

Our contention is that if graduate students complete their training largely unexposed to prevention, they enter careers unprepared to do prevention. The result is that prevention's promise remains unmet, and the incidence of human suffering in all of its forms continues largely unabated.

An important means for breaking this “prevention logjam” is to include prevention within training curricula. Once equipped with basic knowledge and competencies in preventive counseling, graduates will be in a position to apply prevention through their chosen work. The publication of this special issue on teaching prevention is an important step in bringing increased awareness to pedagogical approaches.

We are reminded that the importance of prevention training for counselors, psychologists, and other mental health specialists has been articulated for at least 20 years (e.g. Conyne 1997; Kelly 1992; Perry et al. 1996; Romano 1995; Sandler and Chassin 1993). Some counseling psychologists have begun to focus attention on articulating methods for teaching prevention (e.g., Hage et al. 2007; Horne et al. 2008; Matthews et al. 2003; O’Neil and Britner 2008). More of this kind of attention to prevention training is needed.

Repeated requests have been made to increase prevention training in graduate curricula, either as stand-alone courses or as an infusion across the curriculum. Indeed, in their “Call to Action” to the specialty of counseling psychology, Romano and Hage (2000b) emphasized the need for more opportunities for prevention training in counseling theory and practice courses. These themes were further reinforced in a special issue of *The Counseling Psychologist* that specified the need for greater collaboration between the specialties of school counseling and counseling psychology (Romano and Kachgal 2004).

However, including prevention within the standard curricula in the training of counselors and psychologists has been challenging. Faculty support is not universal. Curricula are always overcrowded, with many competing and justifiable demands for including additional areas for study. External forces, such as accreditation and licensure, exert strong pressures for what should and should not be taught. Faculty competencies and experience may not align with prevention. All of these and other forces need to be creatively and persistently addressed in order to generate the support and to find the space for including prevention in the curriculum.

Teaching Strategies in Prevention

Essentially, three key strategies exist for teaching prevention: (a) A specialized course or sequence of courses in prevention offered by the home program or department, (b) infusing prevention concepts and approaches within existing courses of the program or department, and (c) developing support area possibilities in prevention by integrating courses from other disciplines. In the latter instance, whether these support area courses would be required or elective is a matter of program philosophy and curricular flexibility. These strategies also can be combined to result in stronger and more in-depth study.

In this paper, we focus on the first two key strategies, a specialized course and the infusion of prevention within existing courses. The varied organizing structures described represent the intuitional-specific approaches of four different psychology and counseling training programs in which we teach. That spectrum of approaches, we would also argue, also represents the current state of training at the broader

level, and can thus inform our perspective on the discussion around larger issues of training in our field.

Regarding key strategy one, specialized courses in prevention are rare in counseling and counseling psychology, especially as required courses in programs (Matthews 2003). These courses are expensive because they take time and expertise to create and to teach, they may not target concrete accreditation or licensure demands, and they take up space that could be assigned to other more traditional courses. Offering a specialized course or courses also may pose some challenge in helping students develop an understanding of how prevention connects with “mainline” courses devoted to diagnosis and treatment. Conversely, when offered they provide a clear focus on prevention and allow students to gain knowledge and skills and to appreciate the value of prevention in their future work. We describe two specialized courses in prevention along with syllabi extracts comparing the two approaches.

In terms of key strategy two, infusing prevention concepts and methods within existing required courses is a less expensive alternative. Because prevention is “built in,” students may be able to grasp with some felicity how prevention and remediation can complement each other. We describe two approaches to teaching prevention through infusion.

Our intent is that readers will be encouraged to explore teaching prevention through their exposure to the approaches described in this paper. As larger numbers of students learn about prevention through their coursework and research projects, the possibility of applying prevention in their professional careers increases. Widening prevention practice can lead to improved life circumstances for consumers, as health is promoted and dysfunction is thwarted.

Prevention Competencies to Guide Curriculum Development

Whether prevention is taught through a specialized course or by infusion, student attainment of prevention competencies is important. Despite the generally sparse literature on teaching prevention mentioned earlier, various authors have contributed to an understanding of the competencies thought to be needed to be able to deliver prevention in various fields and applications, including health professionals in violence prevention (Sege and Hoffman 2005), prevention scientists (Eddy et al. 2005), teaching (Meers et al. 1995), clinical training (Ingram 2005; Snyder and Elliott 2005), and community psychology (Cowen 1977; Price 1983; Zolik 1983).

Following an extensive interview and survey process with prevention scientists from several fields (but not including counseling and counseling psychology and other disciplines, such as public health and medicine), Eddy et al. (2005) identified 13 areas judged to be important for prevention training: (a) History and context of prevention efforts, (b) basic research, (c) program design, (d) developmental timing of interventions, (e) gender and culture issues, (f) scientific collaboration on projects, (g) community collaboration on projects, (h) design of preventive intervention trials, (i) funding of prevention science, (j) administration and management skills, (k) economic analysis of preventive impact, (l) program evaluation, and (m) ethics. These areas are highly consistent with those developed

within counseling and counseling psychology using alternative methodologies. The researchers concluded their study with a recommendation that prevention training could benefit from a transdisciplinary conference, similar to the 1949 Boulder Conference in psychology that set the directions for 50 years of clinical research and practice. This recommendation seems both timely and important as a next step for clarifying and consolidating training directions.

With regard to counseling and counseling psychology, Lewis and Lewis (1981) initiated consideration of prevention competencies. They identified three skill clusters: (a) education, (b) program development, and (c) change agency. Matthews (2003) proposed that general guidelines exist regarding what should comprise prevention competencies. How such competencies are realized in training programs then becomes a vital task. Matthews and Skowron (2004) emphasized the importance of ethical and multicultural skills, program development, program evaluation, and gaining an appreciation of the science and practice of prevention. O'Neil and Britner (2008) suggest that teaching prevention include (a) attention to a problem solving process model, (b) theoretical frameworks embracing a “before-the-fact” orientation, a multidisciplinary focus, and a social justice perspective, and (c) nine skill areas: therapeutic, interpersonal, and professional skills; diversity and multicultural skills; group skills, including consultation and collaboration; political, organizational and environmental assessment skills; diagnostic and conceptualization skills; program development, including marketing and decision making skills; intervention skills; research and evaluation skills; and ethical skills.

Over 15 years, Conyne (1997, 2004) and his students developed a checklist that students complete toward the end of a course. In part, this checklist provides students with a self-appraisal of their strengths in key areas of prevention as well as areas that still need growth. In reality, this checklist also guides the instructors in the assessment of how well students are doing at training and imparting prevention competencies across 13 target domains (These domains are discussed under self-appraisal later in this paper). Along the way, valuing students' input provided a critical function in the ongoing development of this checklist. Instructors request that students suggest additions and revisions to the checklist to more fully reflect fundamental tenets of prevention.

In a seminal contribution to prevention in counseling psychology, Romano and Hage (2000a) delineated eight training domains for prevention in psychology: (a) community and multidisciplinary collaboration, (b) knowledge of social and political history, (c) protective factors and risk-reduction strategies, (d) systemic interventions, (e) understanding of political and social environments, (f) psycho-educational groups, (g) prevention research and evaluation, and (h) prevention ethics. These five sets of defined competencies in prevention (i.e., Conyne, 1997, 2004; Lewis and Lewis 1981; Matthews 2003; Matthews and Skowron 2004; O'Neil and Britner 2008; Romano and Hage 2000a) are in considerable agreement. Together, they form the foundation for a prevention pedagogy in counseling and counseling psychology with broad implications for other related fields. Moreover, building on the work of Albee (e.g., 1986) and others, Hage et al. (2007) suggest, among many other points, that social justice links substantially with prevention. Social justice entails attention to strengthening or empowering individuals, families

and communities as well as reducing those oppressive social structures and policies that create and sustain social inequities (Albee 1986; Prilleltensky and Nelson 1997). Social justice provides an additional important foundation for teaching prevention, as shown in the Boston College approach described later in this paper.

Key Strategy One: Teaching Prevention Through a Specialized Course

This section features two specialized courses in prevention: the Preventive Counseling course of the Counseling Program at the University of Cincinnati and the Prevention course at Pennsylvania State University.

Model 1: Preventive Counseling, University of Cincinnati

The Counseling Program of the University of Cincinnati (UC) has been offering the Preventive Counseling course since 1984. It is believed to be among the earliest and longest continuing specialized prevention courses in counseling and counseling psychology. Its evolution may be of interest to readers intending to develop a specialized course in prevention.

In 1984, Robert Conyne developed and began offering Preventive Counseling as a “special topics” course. This category of courses exists at the University of Cincinnati to allow for some experimentation with new and unique curricular approaches. Enough students took this course to justify turning the special topics course into an elective course, which it remained for about five years, doing quite well in enrollment and attracting students from some other related disciplines, such as school psychology, social work, and nursing. Given this positive track record, Preventive Counseling was designated as a required course for masters degree students in community counseling, and then to those in its successor program, mental health counseling. Students from other disciplines continued to take the course, as did some school counseling majors and doctoral students in counseling. In the last year the course also has become required for school counselors. Over the last 10 years of teaching the course, Conyne involved doctoral students in the counseling program as “co-instructors” to provide them with a teaching experience, as well as to continue their adherence to a “prevention mind-set.” These co-instructors were students who had shown particular interest in prevention and had taken the Preventive Counseling course. Upon Conyne’s retirement from the University in July 2006, doctoral graduate Mark Newmeyer has assumed teaching responsibilities. He, too, has involved as a co-instructor a doctoral student who previously completed the course.

A number of pedagogical methods are interwoven through the course; altering one often impacts the others. As mentioned previously, Conyne involved as co-instructors doctoral students who had previously taken the course. In this role, these students developed as prevention educators by contributing prior to the first class in planning how the course will unfold. Their efforts continued throughout the life of the course in predictable ways including lecturing, evaluating students’ performance, and providing feedback about small group functioning.

Other pedagogical benefits emerged from the co-instructor model. A co-instructor allowed a greater number of students to enroll in the class, while retaining a quality student-to-instructor ratio. In most cases the additional students were drawn from other related disciplines such as school psychology, social work and nursing. In an era when courses can be eliminated because of insufficient enrollment, valuing students from related disciplines endorses a diversity perspective while contributing to course sustainability. Instructors have often observed that students from other disciplines make important contributions to the learning of all by expanding the perspectives of the content being explored.

Over the last seven offerings of the course, a specific focus has guided the learning process during each semester. Taking the opportunity to use real-world events, from proximal to distal, the co-instructors have structured each semester course around one or more of these naturally occurring presses (e.g., community change, health and mental health status, optimizing well being, healthy schools and families, advocacy, people who are poor, and positive psychology). Involving students with real-world opportunities creates an engaged learning context that we believe fosters a closer connection with prevention (Conyne 2002; Conyne and Newmeyer 2008; Conyne et al. 2007).

To assist in accomplishing course objectives, students work in small groups. This method, we believe, instills the importance of collaboration, learning from one another and developing group leadership skills—all of which are important attributes for prevention work (Conyne 1997, 2004; Hage et al. 2007). The groups are challenged with carefully crafted assignments that are at times purposefully ill defined. This approach, known as Problem-Based Learning (PBL) (Duch et al. 2001), creates a set of dynamics in which students must work as a team in determining what it is they are to accomplish and how they will go about this task. For example, when the course theme centered on advocacy, teams were provided information about advocacy, but for their final group product, team members had many decisions to make (e.g., acting on behalf of versus acting with, micro-level advocacy versus macro-level advocacy). In this effort, co-instructors work as floating facilitators, moving from team to team and helping guide the respective teams as they do their work.

Final team products are both individually- and team-based. Individually, team members submit a 10- to 12-page paper regarding their respective group's topic. As a team, the final product is a poster, which is presented at a poster session (usually the last class of the academic quarter). This poster session is conducted similarly to those at the American Psychological Association or the American Counseling Association to provide students with beneficial practice at making a scholarly presentation. Students also are encouraged to apply social marketing strategies they learn about in the course to invite people from outside the course to attend the poster session.

Conducting research and developing evaluative abilities are also emphasized throughout the course. The following criteria (Conyne 2004) provide a sample of important content that students are expected to integrate into their individual and group work as they develop and evaluate prevention programs.

Criteria for Evaluating Preventive Counseling Programs

- Purposes: What is being prevented or promoted? Is the program's purposive strategy system change, person change, everyday prevention?
- Population: Who is the target population? Are the program participants functioning well, at-risk, early stage of a problem?
- Methods and settings: What methods are used? Education, organization, media, consultation, advocacy? What settings (family, work, school, neighborhood, other) are addressed?
- Timing and appropriateness: Is the program before the fact, early stage? Is developmental and contextual appropriateness addressed?
- Gradients: How is the gradient of Stressors + Organic Factors + Exploitation/ Self-Esteem + Coping Skills + Support involved?
- Role: What is the program deliverer's role or roles: Direct service counselor, group facilitator, consultant, evaluator?
- Collaboration: To what degree is collaboration manifested?
- Planning and evaluation: To what degree are program development and evaluation steps represented in the program? Does evaluation address both process and outcome?

Evaluation also requires self-appraisal. The following also provides a sample of the self-assessment domains used at the end of the course to help students evaluate and attribute personal meaning regarding their learning and areas still requiring growth and development (Conyne 2004). Students are instructed to rate their skills as either "OK Now" or "Needs Growth," with space available for making comments.

Sample of Self-Assessment of Domains in Preventive Counseling

- Primary prevention perspective: Ability to understand and appreciate before-the-fact orientation, reduction of incidence, healthy/at-risk targets, and empowerment.
- Personal attributes and behaviors: Ability to be persistent, flexible, organized.
- Educational skills: Ability to set educational goals, select appropriate training materials and formats, involve individuals in active learning, involve groups in active learning, provide clear feedback.
- Program development skills: Ability to assess ecological needs, define a problem, identify attainable objectives, develop a variety of intervention options, plan and coordinate detailed implementation, evaluate process and outcomes of program implementation.
- Change agent skills: Ability to recognize the need for change in a given system, analyze system resources for change, work effectively as a member of change-oriented teams, advocate for target, negotiate for change.
- Ethical skills: Ability to implement ethical code, protect privacy of targets, involve target members.
- Marketing skills: Ability to appropriately promote, use telecommunications, appreciate/apply social marketing strategies.

- Multicultural skills: Ability to be aware of own cultural values/biases, be aware of target's worldview, apply multicultural awareness and skills appropriately.
- Group facilitation skills: Ability to perform core group work skills, lead a team, be a good group member.
- Collaborative skills: Ability to function interdependently, problem solve with others, include others' expertise, synthesize diverse inputs.
- Organization and setting skills: Ability to gain access to environments, apply organizational development principles and processes.
- Trend and political dynamic skills: Ability to understand public policy, respond to system supports and barriers, and predict future trends.
- Research and evaluation: Ability to assess, design research, apply statistical methods, use data programmatically, write grants, evaluate social validity.

Considering the evaluation criteria and the self-assessment of skills, students are expected to progress in many areas during this course. However, priority is placed on developing an appreciation for a *primary prevention perspective*. It is our assumption, which we clearly state to students, that traditional counseling training provides a basic foundation for all forms of counseling, including preventive counseling. It is adopting a primary prevention perspective that is significant, being able to use existing competencies—and some particular to prevention, such as marketing—in new and flexible ways. Embracing a primary prevention perspective transforms one's view and eventual application of counseling to include not only an “after-the fact” responsive orientation, but also a “before-the-fact” anticipatory one. Conceptual broadening of this kind is significant in the teaching of prevention.

Applying Prevention Learning

Having recently talked with a Master's degree student who completed the course, Mark Newmeyer reported: “She indicates that she works in more traditional roles. Nonetheless, the impact of the course is always pushing her to think about prevention strategies and then evaluation/program evaluation. Her perspective is that this is how other students primarily benefit from the course.” This is a familiar report among students completing internship experiences or graduates working in the counseling field.

Indeed, graduates of the University of Cincinnati counseling program develop career paths that are consistent with their training ([Program Review Document 2003](#)). Prevention is obviously involved in job titles in which it is directly reflected (e.g., Coordinator of Prevention Programming), and it is not a stretch to assume that prevention competencies are called for in many of the other positions listed, as well, such as those in student affairs, career development and Employee Assistance Program offices, middle school counseling, and in administrative jobs.

Permanent placements for graduates of the UC Counseling Program reflect the diversity of counseling specializations for which these counselors are prepared. Counseling jobs assumed by graduates of the master's degree program represent a wide variety of school and community agencies, university offices, and other sites. Some examples of positions (with affiliations removed) include, as they were listed

in the program review document: Coordinator of Prevention Programming in a State county; Director, adult services for chemical dependency; Therapist of support facility for children in need; Counselor in an adult chemical dependency treatment center; Director of a university student affairs office; Career Counselor in a career development agency with special needs population; Middle School Counselor, public school; Assistant Director of a university career development center; and Coordinator of a university office center for women.

Graduates of the doctoral degree program find positions in settings ranging from education to community agency development. Representative roles and settings include: Director & Founder of an inner-city health and psychological services facility; Department Head of a psychology department; Vice President of Student Affairs; Director of an Employee Assistance Program; Clinical Director of a holistic counseling center; Former President of a university; Director of Student Affairs; and faculty members (or former faculty members) in multiple institutions.

As suggested, a “prevention vein” can be seen to run throughout these and many other kinds of positions assumed by graduates at the University of Cincinnati and, we believe, at many other institutions. To continue this metaphor, a “prevention circulation system” will become more prominent once prevention is taught more obviously and frequently in training programs.

Model 2: Prevention Course, Pennsylvania State University

The Prevention course at Penn State is an elective graduate course in the Counselor Education program. Similar to the course at the University of Cincinnati, it began as a “special topics course.” In the mid-1990s, the department head, who had a longstanding interest in prevention, added the course with the intention of teaching it. When unable to fulfill this obligation, Connie Matthews, who worked for years as a prevention specialist prior to entering academia, became the instructor. After being offered few times as a special topics course, it was added to the department’s permanent curriculum. Several factors contributed to making this possible. As part of the Council for the Accreditation of Counseling and Related Educational Programs (CACREP) accreditation process, efforts were made to ensure that all courses currently being taught had permanent course numbers. In addition, through a collaborative process the university’s continuing and distance education program was working with the department to offer coursework to train counselors and others regarding addictive behaviors. In an effort to broaden the appeal, courses were offered that covered both prevention and treatment. Because the prevention course was the only offering that specifically addressed primary prevention, it was included in that program. Having the course as part of the permanent curriculum made it easier for Matthews to offer it on a regular basis.

Because the course was an elective, it was offered biannually, in the spring semester, always with the stipulation that it could be cancelled if it failed to draw enough students. Although there was a sustained interest in the course among the counseling students, especially those in the elementary and secondary school counseling tracks, students had few electives built into their program. Furthermore, graduate school policy required all students to take six credits outside of their major.

Because almost all of the required courses were within the major, students often used electives to meet the out-of-major policy. Given that an ongoing interest among school psychology students also existed, Matthews worked with the school psychology faculty to have the prevention course cross-listed in that department, thus allowing counseling students to register for the course under school psychology. This move also met the needs of school psychology students who benefited by being able to register for the course through their own department. The Prevention course regularly drew students from a variety of other departments as well, including Human Development and Family Studies, Leisure Studies, Higher Education, and Agricultural Extension Education. Indeed, the course often mirrored the multidisciplinary involvement characteristic of prevention work in the field.

From the beginning, Matthews believed that for students to take the course as an elective, students would need to conceptualize the course as immediately useful. Thus, she designed the course so that students would have a tangible product at the end of the semester. During the course, each student's central task required the development of a proposal for a prevention program that he or she might use in a work setting upon graduation. Although students developed individual proposals, they did so in consultation with others in the course. As students chose topics they were assigned to small groups composed of others with similar or related topics. Class time was then divided between learning about various aspects of prevention and meeting in small groups to apply the concepts to their own projects. Students consulted in the groups and offered each other feedback on their work toward their proposals. The instructor circulated among the groups primarily as a facilitator but also provided "expert" input where needed.

As an additional learning process, students submitted their proposals in segments, including a plan for conducting a needs assessment in their school or community, an empirically supported plan for a comprehensive prevention program, and a plan for program evaluation. Each section is then graded, with considerable instructor feedback. At the end of the course, students again submit the full proposal after incorporating instructor feedback. Students may either develop their own program or choose from established programs; however, in either case students must provide empirical support from the literature that the approach has promise of being effective. Drawing on information gained from the needs assessment (which is hypothetical at this point), the plan must also be tailored to the school or community in which it will be implemented. Due to the length of the semester and the fact that almost all of the concepts are new to students, their proposal is simply that, a plan. Time is limited and does not allow for implementation. Nonetheless, the criteria for a successful proposal rests on the premise that if a school or community board or funding source instructed the student to implement the proposal he or she would instantly know what immediate next steps would need to occur. A final component of the course is an oral presentation that includes both a description of the proposal and demonstration of some small element of the proposal, with the class taking the role of the intended audience and then providing feedback. Student feedback consistently has pointed to the practical usefulness of the course, as well as the opportunity to directly use the concepts they were learning in class for something important to them.

Syllabus Extracts from the Two Specialized Prevention Courses

Examining course syllabi can be helpful for learning how subject matter is taught. Syllabus extracts from the prevention courses at Pennsylvania State University and the University of Cincinnati are presented below in Table 1. We retain the language and approach used.

Major subjects covered in both syllabi include defining prevention, its conceptual foundations, prevention programming, prevention strategies, prevention evaluation, and prevention ethics. In placing an emphasis on primary prevention, both courses require the same main text, though supplemental readings somewhat differ. At PSU students are evaluated seven times, compared to four at UC; semesters provide PSU an additional five weeks of classes. The PSU course is primarily delivered through a seminar format, while UC utilizes group work and problem-based learning. The PSU course employs traditional academic approaches, including library work and papers. The UC course typically engages students in real world situations through the Problem-Based Learning method and occasionally brings experts to the class. Copies of these course syllabi are available by request from the authors.

Key Strategy Two: Teaching Prevention through Infusion

This section demonstrates two ways to teach prevention in counseling and psychology using infusion: Models at Boston College and at the University of Minnesota.

Model 1: Boston College Infusion Model with a Focus on Social Justice

The Boston College infusion model is premised on the understanding that professional training to design, implement, and evaluate prevention programs is complex and multifaceted (Conyne 2004; Romano and Hage 2000a). Fortunately, with regard to infusion approaches, many skills critical to prevention work, such as group dynamics, multiculturalism, and helping skills, are taught in mental health counseling and counseling psychology programs; other relevant knowledge bases can be infused in existing courses, such as professional issues and life span development (Conyne 2004; Matthews and Skowron 2004). Students who are taught a range of prevention skills either through a seminar course or infused approach may nevertheless have limited opportunities to apply those skills in formal field experiences or internships. Many clinical sites are reimbursed for treatment, rather than prevention, and the process of documenting training hours to meet state licensing requirements favors direct client service, rather than indirect service, such as consultation, collaboration, and systemic change, that are important dimensions of prevention work (Kenny and Gallagher 2000). As such, programs may need to deliberately structure field experiences where such training will be offered.

In recognition of the limited opportunities for psychologists-in-training to practice skills other than direct service as part of their formal internships or practica, the doctoral training program at Boston College developed for first-year students a non-traditional requirement designated as the First Year Experience (FYE). This

Table 1 Comparison of courses as examined by syllabi

University	Pennsylvania State University	University of Cincinnati
Course name	Prevention	Preventive Counseling
Instructors	One Instructor (Faculty)	One Instructor (Faculty) and Doctoral student
Length of class	Academic Semester (16 weeks)	Academic Quarter (11 weeks)
Course description	This course is designed to familiarize students with prevention program development, implementation, and evaluation, as well as with the theoretical and empirical underpinnings of such programming. While the focus will be on substance abuse prevention, the course will look at prevention from a broad perspective and, as such, will address a range of issues. The course will also address ethical and professional issues and multicultural issues related to prevention work	Presents counseling students with conceptual knowledge and practical applications of prevention to assist late adolescent and adult clients in averting educational and psychological problems. This course is designed especially for masters degree, certificate, and doctoral students in counseling who have a special interest in primary preventive applications. It has been found appropriate and of interest, also, for other professional helpers, recognizing that prevention draws from and applies to a wide range of disciplines and professions
Course objectives	<p>Upon successful completion of the course, students will:</p> <ol style="list-style-type: none"> 1. Become aware of the scope and extent of problems and issues that are the focus of prevention programming. 2. Become familiar with the theoretical and empirical bases for prevention work. 3. Develop a critical knowledge of direct and indirect counseling strategies for prevention of chemical dependency and other social and personal problems. 4. Be able to conduct a needs assessment for use in prevention program planning. 5. Be able to develop a prevention program appropriate for a specific population around a specific issue. 6. Be able to develop an evaluation plan appropriate for a prevention program. 7. Develop an understanding of a variety of cultural factors that may influence successful prevention programming. 8. Develop an understanding of ethical and professional guidelines related to prevention work. 9. Gain practice presenting a prevention program 	<p>This course, which expresses the Program Vision (ecological counseling with diverse and underserved populations), attempts to integrate preventive origins with other models of prevention, and with contemporary approaches that professional counselors, and other professional helpers, can use to reach prevention goals. It seeks to present a balance between understanding prevention conceptually, which is still an issue of confusion in the mental health and educational fields, and studying some stellar illustrations of preventive practices that hold promise for counselors. By so doing, students will gain a better understanding of how professional counselors can help individuals and groups avert certain psychological, educational, and health problems through “before-the-fact” preventive counseling interventions</p>

Table 1 continued

Required text	<p>Conyne, R. K. (2004). <i>Preventive counseling: Helping people to become empowered in systems and settings</i> (2nd ed.). New York: Brunner-Routledge</p> <p>Various articles, including Albee, G. W. (1986). Toward a just society: Lessons from observations on the primary prevention of psychopathology. <i>American Psychologist</i>, 41, 891–898</p>	<p>Conyne, R. K. (2004). <i>Preventive counseling: Helping people to become empowered in systems and settings</i> (2nd ed.). New York: Brunner-Routledge</p> <p>Payne, R., DeVol, P., & Smith, T. (2000). <i>Bridges out of poverty: Strategies for professionals and communities</i>. Highlands, TX: Aha! Process, Inc.</p> <p>Various articles including Hage, S., Romano, J., Conyne, R., Kenny, M., Matthews, C., Schwartz, J., & Waldo, M. (2007). Best practice guidelines on prevention practice, research, training, and social advocacy for psychologists. <i>The Counseling Psychologist</i>, 35, 493–566</p>
How learning occurs	<p>This course will be primarily run as a seminar. Thus, the emphasis will be on reading and discussion, with supplemental information provided by the instructor in class</p> <p>In addition, a number of out-of-class activities will be assigned to give students further opportunity to gain insight into and experience with prevention work</p>	<p>This course consists of instructor presentations, viewing a film of prevention programs, readings, discussion, outside work on electronic blackboard, presentations by special local and national guests, small-group task force work, and a Class Poster Session. It focuses effort on a major prevention issue (People Who Are Poor). Therefore, a variety of means will be employed to learn about prevention and its application to people who are poor</p>
How students are evaluated	<p>Risk and Protective Factor List (20 points)</p> <p>Problem Statement and Needs Assessment Plan (30 points)</p> <p>Prevention Program Plan (40 points)</p> <p>Evaluation Plan (30 points)</p> <p>Prevention Program Proposal (100 points)</p> <p>Class Presentation (30 points)</p> <p>Class Participation (50 points)</p>	<p>Class Interaction (15%)</p> <p>Group Poster Presentation (20%)</p> <p>Individual Paper (50%)</p> <p>3 Brief Quizzes (15%)</p>

experience builds upon traditional counselor coursework and field experiences, yet seeks to engage students with schools and communities in efforts to effect change at a systemic or policy level. As such, the experience strives to provide those specific elements of prevention training, including multidisciplinary collaboration, systemic intervention, and political and social advocacy, that are typically neglected by programs focused on the training of mental health clinicians (Conyne 2004; Romano and Hage 2000a). This knowledge is especially pertinent to prevention efforts that seek to challenge the status quo and foster social justice and social change.

The Boston College Counseling Psychology Program Handbook describes the FYE as (a) engagement in interprofessional collaboration; (b) advocacy or community collaboration with underserved populations; or (c) the design, delivery and evaluation of preventive interventions with underserved populations; which will (d) increase student awareness of systemic factors impacting mental health, psychological growth and career development (Boston College 2003; Goodman et al. 2004). Needless to say, these goals are ambitious, and the experience of a single student may not meet all of the designated criteria. Nevertheless, through six hours per week of related fieldwork and participation in a seminar that meets every other work over the course of the academic year, students can develop skills that further their capacity and commitment to prevention and social action. We present the coursework that prepares students for this experience and the seminar that accompanies the experience and provide several examples of student placements so that other training programs might consider ways to develop their own prevention-related field experiences.

Related Coursework

Prior to entering the first year experience, students typically have completed a variety of foundational courses in counseling, including counseling techniques and theories, group processes, family counseling, life span development, psychopathology, ethical and legal issues, interpretation and evaluation of research, and multicultural issues, as well as masters level practica in mental health or school counseling. Although these courses do not explicitly focus on prevention, all are relevant to prevention work and many include components specific to prevention. In addition, students also enroll in an Advanced Seminar in Psychopathology, which focuses on the identification of risk and protective factors as related to general well-being and as related to the etiology of specific disorders. Implications for prevention are emphasized. Research and Design in Counseling and Applied Developmental Psychology addresses issues in the design and evaluation of prevention programs. Additionally, a course entitled Critical Perspectives on the Psychology of Race, Gender, and Social Class provides analysis of the current social and political landscape and history in a way that informs prevention and social action.

Seminar

The seminar that accompanies the first year experience (FYE), Counseling Psychology in Context, provides students with an opportunity to reflect on their

work and the challenges of collaboration and systems change. Students complete a common set of readings relevant to community action, prevention, and the pursuit of social justice and discuss these in relation to their experiences. At the end of the year, students present a review of their yearlong efforts to their classmates and faculty, during which the entire community of graduate students and faculty reflect on the social, psychological, cultural and political aspects of this work.

Examples of Prevention Experiences

Students enrolled in the first year experience have participated in a variety of field experiences, many of which are created as a product of student, faculty and community collaboration. We describe several of the placements that have been ongoing and evolving over several years and then describe how the FYE requirements are manifested through each of these placements. The placements described are related to collaborative projects between Boston College faculty and local schools and communities. Not all FYE placements, however, reflect faculty projects. Many students have taken the initiative, with faculty supervision, to develop their own projects or to join existing community prevention, advocacy or social action programs.

Boston Connects and Tools for Tomorrow are both products of collaborations among the local public school system, community agencies and the university. Boston Connects seeks to promote systemic change in the way in which educational and support services are provided to children and their families. By delivering a coordinated, comprehensive and systemic approach to the provision of non-academic supports for learning (e.g., health care, after-school programs, mentoring, tutoring, social competence and obesity prevention curricula, etc.) across nine urban elementary schools, the program seeks to reduce the impact of poverty on academic achievement. At the student level, the program includes components of universal prevention (such as curricula to promote social competence and prevent obesity) for all students, early intervention (such as tutoring and mentoring) for some students, and more intensive services (such as mental health counseling) for a smaller number of students (Walsh and Park-Taylor 2003). Tools for Tomorrow (TFT) is a psychoeducational intervention developed in partnership among faculty and students of Boston College, central administration of the local public schools, and teachers and students from these schools (Hartung and Blustein 2002; Kenny et al. 2007). Both of these initiatives have provided opportunities to fulfill the prevention training goals of the first-year experience.

Both TFT and Boston Connects have included myriad opportunities for students to collaborate with other professionals in program development and delivery. The ideas that contributed to the content and structure of TFT were generated through a series of active discussions among school administrators, teachers, graduate students and university faculty, and community agencies. As the ideas evolved and were piloted within the schools, graduate students actively collaborated with school personnel and high school students to refine the content and to devise ways to deliver the content that would be engaging and culturally relevant for urban high school students.

As part of Boston Connects, counseling psychology graduate students have collaborated with teachers and administrators in the public schools, parent groups as represented in the school community centers, and community agencies, such as the YMCA. Collaborations also were forged with professionals across the university, including law students and professors who offered legal services within the schools to parents, and nursing students and faculty, who coordinated health services in the schools. As the program evolved, collaborations with faculty in the marketing division of the Boston College management school were forged as we developed partnerships with local business foundations to fund, promote, and disseminate our work. As part of the universal prevention, social competence and healthy development components of Boston Connects, counseling graduate students have collaborated with teachers, nurses, and parent groups in program development, delivery, and evaluation.

Boston Connects and TFT also have actively involved counseling students in the design, delivery and evaluation of preventive interventions. Students involved in Boston Connects in its early stages participated in needs assessments, which significantly shaped the direction of the program. Both of these programs are in constant transformation with input from all stakeholders, including our graduate students.

The ongoing collaborations with school and university partners generate data that is used to inform program content and delivery. One graduate student, for example, who participates in the Boston Connects program, meets weekly with the classroom teachers who deliver the social competence and health programs to develop and adjust the intervention. Graduates students are also involved in more systematic aspects of formative evaluation such as conducting interviews and focus groups with teachers, parents and administrators at the schools. They have also been heavily involved with formal evaluations procedures by working with teachers to identify measures that are developmentally and culturally appropriate, administering questionnaires and conducting focus groups with small groups of school children, and providing feedback from the evaluation to school and family collaborators. Some students have been involved in the analysis of system-wide data, which suggest that the provision of preventive and early intervention services has decreased student referrals for more intensive services, such as counseling and special education.

With regard to parent outreach, counseling psychology students also have collaborated with teachers to develop a newsletter to inform parents about the work of Boston Connects and the findings of the evaluation. Counseling students are part of a planning committee for a Health Week held in the spring that brings together parents, school personnel, and community agencies in a variety of activities designed to promote academic progress and healthy physical, social and emotional development among school children.

Graduate students working with TFT partner with classroom teachers in delivering the intervention. In the process, graduate students and teachers learn to integrate the educational and psychological growth fostering components of the program. Counseling graduate students are also involved in the evaluation of TFT, including qualitative and quantitative research. As with Boston Connects, students

engage as part of a multidisciplinary team in selecting quantitative measures. Students are also involved in designing, conducting and analyzing qualitative interviews with high school student participants and subsequently using the findings of these studies to inform program development and identify areas for further evaluation.

Reflection on Systemic Issues

Graduate students' experiences and observations in the schools and in reviewing evaluation findings contribute to reflection on and discussion of systemic issues. This occurs both within the FYE seminar and in discussions with peers and collaborating faculty. Being involved in program development and evaluation has enhanced student awareness of their own privilege and of systemic barriers that impact the lives of culturally diverse urban youth from low-income families. It is evident that the financial resources allocated to these schools differ from those granted to the schools attended by many graduate students.

The physical and psychological climate of the schools inevitably emerges as a topic of discussion. Students seek to understand the perspectives of the teachers and the students and the role of larger social structures in determining their respective positions. Discussion of the impact of institutional racism on the psychological development of youth of color has led one graduate student who participated in TFT to focus her dissertation on the role of critical consciousness (Watts et al. 2003) in fostering academic motivation despite the presence of racism.

Similarly, graduate students who have participated in the Boston Connects health project have learned about the limitations of nutritional knowledge in determining the diet of urban school children. In addition to the clear fact that parents often determine meal choices, the graduate students have also learned about the social justice underpinnings of the obesity epidemic, including differences in the availability and cost of fresh produce based upon neighborhood demographics and the saturation of fast food restaurants and convenience stores in urban neighborhoods. This awareness has led another doctoral student to study the role of individual and contextual factors as determinants of nutritional behaviors among urban adolescents. Through first-hand experience in prevention programs, students are learning about the benefits and limitations of person-focused prevention and the need for systemic change as well (Conyne 2004).

Evidence of FYE Impact on Prevention Training

Although many counseling graduate students enter professional training to prepare for careers as individual and group psychotherapists, our program evaluation data suggest that experiences such as FYE stimulate student interest and commitment to prevention work and to social change. It is clear, as evidenced by comprehensive exams and dissertation topics, that students complete their training with increased awareness of the impact of systemic barriers on the lives of many Americans. As part of an anonymous survey completed in advance of a recent accreditation site

visit, current students and graduates strongly endorsed the statement that the program increased their awareness of social justice issues.

The job titles of our graduates, as gleaned from annual surveys, do not provide clear data on the amount of time devoted to prevention and outreach activities. Most are employed as psychologists in community, university, and K-12 settings. Several job titles, such as Program Developer for the World Health Organization and Director of Political Trauma Services Network suggest a significant orientation toward prevention, advocacy and outreach, as opposed to direct service. We believe that practical experience in prevention activity in conjunction with a reflective seminar that supplements the more traditional components of training in counseling psychology and mental health counseling can effectively prepare students to assume a preventive orientation and increase the number of graduates who devote at least some part of their professional to prevention, social action, advocacy and social policy.

Model 2: University of Minnesota Infusion Model

The University of Minnesota infusion model is premised on the ample evidence contained in many scientific disciplines and specialty areas that prevention is an important approach for enhancing functioning across the lifespan. One example is the publication of *Healthy People 2010*, which is the latest in a long series of government publications that set health promotion and disease prevention objectives for the nation (United States Department of Health and Human Services 2000). Recognizing the importance of prevention to yield important medical and mental health outcomes in the population, another related publication by the Substance Abuse and Mental Health Services Administration (SAMHSA) summarizes the most promising interventions for mental health and substance abuse disorders (Nitzkin and Smith 2004). Other government documents also have recognized the importance of prevention research (National Institute of Mental Health 1998) and school-based mental health services (Foster et al. 2005).

Given the difficulties of adding new required courses, plus budget limitations related to course development and instructional costs, infusing prevention content and experiences into a few core courses gives students at least minimal exposure to prevention concepts, research, and experiences. A similar argument has been made in the training of clinical psychologists (Snyder and Elliott 2005). To address these needs and challenges, prevention content has been added to several courses offered in the Counseling and Student Personnel Psychology Program (CSPP) at the University of Minnesota. The CSPP Program offers an MA degree in counseling, with specialty areas of school counseling, community counseling, and student personnel work in higher education. The MA program in school counseling and community counseling leads, respectively, to licensure as a school counselor or professional counselor. The CSPP doctoral program in counseling psychology is accredited by the American Psychological Association, as is the school psychology doctoral program in the same department. The courses where specific prevention content has been added include Master's level course work in theories of

counseling, group work, first practicum experience, and a doctoral seminar required of all first year doctoral students.

Infusion Within Masters and Doctoral Level Didactic Courses

Traditionally, theories of counseling courses in Master's level counseling programs survey the major psychotherapy theories that have historically guided the profession. The major textbooks do not include prevention content, and the texts are clearly written from a remedial perspective. Case study examples presented in the texts also are clinically oriented.

However, it is important that beginning graduate students learn a prevention perspective, which is often different from what students expect upon choosing the counseling profession. Many students enter the field with a desire to "help people fix problems," and they value the one-on-one work of counselors and therapists; so much so that upon entering the program, some students are surprised about the amount of group work expected in many counseling settings. Similar to individual theory courses, group counseling survey courses often focus on group dynamics and group processes from a clinically oriented perspective. In two MA didactic courses, counseling theories and group work, prevention concepts are reinforced at different times and in different ways during the courses. In the counseling theories course, students are initially exposed to the concept of prevention and its importance in the work of counselors, psychologists, and other human development specialists. It is relatively easy for students to understand the importance of prevention, and examples from everyday life are used to reinforce the idea (e.g. wearing seat belts, physical exercise, stress reduction, etc.). It is also important to give students an understanding of how traditional theories of counseling and psychotherapy can be used as theoretical frameworks for prevention. For example, behavioral strategies such as relaxation training and cognitive behavioral techniques can be used as interventions to prevent and manage psychological stress reactions.

Later in the course, more specific readings and class sessions give greater focus to prevention content and discussion. Students are taught ways to conceptualize prevention (e.g. primary/secondary/tertiary; universal/selective/indicated; importance of addressing client strengths and protective factors as well as deficits; and the need for public policy advocacy to enhance well-being). In addition, a discussion about the global importance of a prevention perspective is conducted as cultures and societies must attend to global pandemics such as HIV/AIDS, and other major social problems (e.g. interpersonal violence, poverty, depression). This global perspective is important as many graduate programs enroll international students.

These discussions and presentations are supplemented by selected readings. Although the readings may change with different offerings of the course, they are general and conceptual in nature and written at a beginning graduate student level. For example, required readings have included articles from the special issue of *The Counseling Psychologist* on prevention and counseling psychology (November, 2000), positive psychology (Seligman and Csikszentmihalyi 2000), and the theory of change by Prochaska et al. (1992).

To give students exposure to psychological theories that can be used as possible frameworks for prevention work, other theories such as the theory of reasoned action and planned behavior (Armitage and Conner 2001) or Albee's (1986) theory of social justice may also be required reading. Romano and Netland (2008) have argued that students in applied psychology graduate programs need more exposure to theories of change that lend themselves to a prevention perspective. In a survey course on counseling theory, only a limited amount of prevention content can be infused, but at least students receive some exposure through supplementary readings and class discussions. This information can inform a prevention perspective and present theoretical models to guide prevention work.

A group work course is an especially good venue to present prevention content and skills because prevention interventions require strong group skills. In Romano's group course, he especially emphasizes the importance of psychoeducational groups in group work and prevention. Indeed, prevention activities are often implemented through psychoeducational groups, especially in educational institutions.

Traditionally group counseling texts have not given much attention to psychoeducational groups. However, students entering the counseling profession with an MA degree will facilitate psychoeducational groups in schools, on college campuses, and in community settings, perhaps more so than therapy groups. Therefore, it is important that students learn psychoeducational group skills.

In psychoeducational groups, some of the group activities are similar to traditional counseling groups (e.g. developing goals and objectives, identifying participants, setting space and time needs, etc.). However, psychoeducational group leaders also need to be attentive to group content and activities that address group goals, practice skills as appropriate to the group goals, give sufficient time for participants to process information delivered (either through break-out groups or in the total group), and attend to emotional and relationship issues that may surface during the psychoeducational group. A list of referral sources for participants may be necessary, and at the end of the group an evaluation members should complete an evaluation to assist the group leader in planning future groups.

The effectiveness of psychoeducational groups can be maximized if the group leader attends to these issues. In psychoeducational groups it is important to give time for participant interaction and incorporate active learning strategies. Too often psychoeducational groups are conducted as a lecture with all of the communication being one-way (i.e. leader to group members). Depending on the nature of the graduate student course assignments, students practice delivering a psychoeducational group during their group work course class presentation assignment.

At the doctoral level, prevention science readings and assignments can be incorporated into doctoral theory and research seminars. As with the Master's level course work, appropriate readings can be assigned for seminar discussion and presentation. Examples of readings may include special issues of the *American Psychologist* (e.g., [Prevention that Works for Children and Youth 2003](#)) and *The Counseling Psychologist* (e.g., [Multicultural Competencies, Social Justice, and Counseling Psychology: Expanding Our Roles 2003](#); [The Strength-Based Counseling Model 2006](#)), examples of prevention research (e.g. [Prochaska et al. 2007](#)), and the *APA Task Force on Socioeconomic Status* (APA 2007). The selection of

readings will depend on the orientation and interests of the instructor. However, including such content in doctoral course work in applied psychology is very important, as students may not otherwise have exposure to prevention science in their doctoral training (Snyder and Elliott 2005).

In addition to doctoral seminar readings and discussions, doctoral students are required to write a research proposal that focuses on either a prevention science or social justice issue that is aligned with the student's professional interests and career goals. In addition to typical components included in such proposals (e.g. brief literature review, research questions, methodology, etc.), students address ethical issues that are important to consider when implementing the proposal. This assignment helps students think through a potential prevention research project, receive feedback on it from the instructor and seminar peers, and perhaps actually implement the proposal as one of their doctoral training requirements (e.g. pre-dissertation research requirement).

Infusion into Practice Components of Training

In addition to classroom experiences, students also need to experience the ways that they can use prevention knowledge and skills in field placements and practica. Practice experiences at the beginning and advanced levels are highly dominated, if not exclusively, by remedial client care and crisis counseling skills.

To give master's degree students at least a minimal experience, Romano has assigned students to engage in a prevention and/or social justice activity while at their practicum site. The assignment itself raises questions during weekly seminar sessions and provides further opportunities to dialogue about prevention work. If necessary, readings are assigned to supplement discussions about prevention in earlier course work. Students discuss their prevention activity assignment with their on-site practicum supervisor, and they may complete the assignment as a group project either with peers in their training program or practicum site colleagues. Of course, the activity must meet the needs of the practicum site.

Some of the ways that students can fulfill this practicum assignment are through a community outreach activity in a community served by the practicum site (e.g. community includes neighborhood, school, or cultural group), conducting a needs assessment germane to the practicum site and clientele served, engaging in government and/or legislative action, or developing a prevention intervention based on its importance to the population served by the practicum site.

At the end of the semester, students write a paper about the prevention assignment, including goals and objectives, what they did and with whom, what they were trying to prevent or promote, and the outcome of the project. In addition, students reflect on what they learned through this assignment, including skills they used, sources of support and resistance in carrying out the assignment, and how they evaluated their strengths and limitations in completing the assignment.

Over 10 years ago, Romano (1995) conducted a pilot qualitative study of graduate students in counseling and counseling psychology who participated in prevention research projects. Student comments about their experience in the projects were enlightening. They indicated that the projects offered them a different

framework for helping and increased their interest in prevention. Students also wrote that their work in prevention strengthened their total constellation of skills when seeking employment after graduation and helped them to think more systemically and holistically as a counselor. Finally, students wrote of the need for graduate programs to offer more training in prevention as part of their education, as the strong training emphasis on crisis and treatment leaves students with little opportunity to explore prevention concepts and engage in prevention practice.

Summary

Hopefully, as the 21st century advances and the needs of society become increasingly complex, more course instructors and graduate programs will strengthen the amount of prevention science content and practices offered in their curricula. Educators of newly minted professionals in counseling, psychology, and human development must be major leaders in the delivery of instruction and development of skills in prevention science to adequately meet human development needs of the 21st century. They must also be knowledgeable to infuse an appreciation of prevention into the students' value system as students assume professional careers.

Prevention in mental health is a critically important practice that is underutilized and rarely taught. We emphasize that both of these conditions need to be changed. One way to increase the delivery of prevention programs is for more training programs to include prevention in their curricula. The publication of this special issue on teaching prevention represents an important forward step. In addition, the recommendation for a transdisciplinary conference (Eddy et al. 2005) to consolidate and forecast knowledge and approaches in prevention training seems well worth pursuing.

In this paper we have provided examples of two key strategies for teaching prevention: (a) through a specialized prevention course, and (b) through infusing prevention knowledge and skills in existing courses. A third viable strategy, on which we did not elaborate, is for building prevention support areas through interdisciplinary courses and experiences. These approaches are not mutually exclusive.

Each pedagogical approach is presented uniquely, with no attempt to impose a common reporting structure. This decision reflects the current stage of prevention teaching, where variety exists in emphasis and approach.

May other approaches to teaching prevention flourish. The *Call to Action* issued by Romano and Hage (2000b) still reverberates loudly.

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