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ABSTRACT

This document reports on a study to analyze the success of a revised health/wellness course at Gettysburg College (Pennsylvania). The research focused on two questions: (1) what increased knowledge and behavioral change students report once they have completed their health course; and (2) after a period of time, what students will say about the effectiveness of their health classes in knowledge gained and behaviors changed. When the senior class of 1995 entered college as freshmen in 1991, all were enrolled in the redesigned health class (N=423) which emphasized a discussion-oriented curriculum. Students were surveyed at the end of the course and again four years later to see if they were pursuing healthy lifestyles. Respondents in 1995 (27 percent, N=114) indicated that the course made a positive difference in three areas: knowing where to go on campus for help with academic or personal issues, encouragement to reach out to teachers, and getting to know other students. The top five health areas in which students reported behavioral changes in both 1991 and 1995 were time management, fitness, goal setting, nutrition, and stress reduction. These were also the areas seniors in the 1995 survey listed as "becoming aware of and would like to act on, but haven't," and are important areas to focus on when working with college students to change their behavior. (ND)

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HEALTH KNOWLEDGE AND BEHAVIOR FOUR YEARS LATER

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Health teachers will attest to the fact that knowledge doesn't equal behavioral change. Students read about smoking, promiscuous sex, drinking, sunbathing and numerous other health risk behaviors. They take tests on the information and pass health courses. Yet, many still engage in activities where their knowledge is adequate enough for them to stand up and say, "I know this isn't healthy for me." Recognizing this, health textbooks and instructors have attempted to address behavioral change as part of each health unit covered, dating from the early 1980's and into the 1990's (Carlson, DeJong, Robison, & Heusner, 1994; Cottrell & St. Pierre, 1983; Dwore & Matarazzo, 1981; Everly & Girdano, 1980; Petosa, 1984; Stainbrook & Green, 1982).

With this emphasis on behavioral change, the following two questions arise: (1) Once students have completed their health course, what increased knowledge and behavioral change do they report? and (2) After a period of time, what will students tell us about the effectiveness of their health classes in knowledge gained and behaviors changed?

1991 and 1995 Surveys

It was with these questions in mind that a two-part research study was designed to analyze the success of a revised health/wellness course at Gettysburg College. In 1991, the Senior Class of 1995 entered the college as freshmen. All students were immediately enrolled in the redesigned health class whose emphasis was on a small-seminar style setting with a discussion-oriented curriculum. This curriculum was:

> "based on the premise that a preventative, whole person, self-responsible lifestyle is the most effective way to overall, lasting wellness. Furthermore, if a student believes in these concepts and is challenged to examine behaviors, the student will be better equipped to handle issues which affect him or her physically, emotionally, spiritually, intellectually, socially or environmentally." (Lottes, 1995, p. 30).

At semester's end, the course was evaluated utilizing a student survey, an instructor survey and student journal entries. Results of the surveys and anecdotal journal information indicated students did increase their health knowledge and, to a lesser degree, became aware of problematic behaviors in their lives. In addition, they acted to improve certain health-risk behaviors (Lottes, 1995).

But, did these same students have lasting behavioral change? As seniors, how will they respond to survey questions initially answered by them as freshmen? Will the results be consistent or will there be a change in students' health knowledge and behavior since course completion four years ago? The author found a void in the recent literature when researching the answers to these questions. We do not know if college students are pursuing healthy lifestyles in the years subsequent to the completion of a health course. To address this question, seniors in the Class of 1995 (N=423) were mailed a survey. The rate of survey return was 27% (N=114).

Results of Student Survey

In the open-ended section of the 1991 survey, students' indicated four main benefits of having taken the course during

the first semester of their freshman year. In the 1995 survey, seniors were given the four benefits and asked to indicate how these statements applied to their experience in the course.

TABLE

BENEFITS	PERCENT AGREED
1. I found out where to go on campus if I needed help with academic or personal issues.	78%
2. My instructor was compassionate and caring which encouraged me to reach out to my other teachers.	73%
3. I got to know others in my class which helped me to adjust to being at Gettysburg.	72%
4. It was a place I could ask questions I couldn't ask anywhere else.	48%

A histogram showed that the respondents believe that the course made a positive difference in their lives in the first three areas and were undecided in the fourth.

The second section listed topics covered in the course. Participants in the 1995 survey were asked to respond to each topic listed by indicating if it was covered in class, and, if it was, was information gained on the topic. Over half of respondents gained information on: pregnancy, sexual victimization, chemical health, eating disorders and occupation wellness. Over 40% of the respondents also gained information on STD/birth control, environmental wellness, death/dying, sexuality/relationships and diversity. Less than 40% of the survey participants indicated that they gained information on the

remaining topic areas.

In comparison, on the 1991 survey, topics which students reported the greatest increase in knowledge after course completion were stress management, time management, nutrition, sexual victimization, fitness, STD/birth control, chemical health, eating disorders and goal setting. Topics listed on both surveys were sexual victimization, chemical health, eating disorders and STD/birth control. It is interesting to note, that the other top topics which respondents listed in 1991 as having gained the most knowledge from, are now listed by the respondents as among the lowest. Goal setting, fitness, time management, nutrition and stress reduction, listed in the top nine in 1991, were listed in 1995 among the bottom seven.

At the outset, we said that health educators are interested in their students making healthy behavioral change. What areas have the seniors self-reported acting on during their college years? The top five health behavioral changes listed by seniors in the 1995 survey were time management, fitness, goal setting, nutrition and stress reduction. When compared to the 1991 survey results, these were also the top five areas students had reported they reevaluated their behavior on and acted on during the fall semester of their freshmen year. Interestingly, these were also five of the bottom seven areas that students in the 1995 survey said they gained knowledge on in their 1991 class. Students in 1991 ranked these five areas high in gaining knowledge and reevaluating behavior and working on behavioral change in their

lives. But, in 1995, they ranked them low in having gained knowledge but still high in both "becoming aware of", "becoming aware of and would like to act on, but haven't" (new '95 category) and "acted on while in college"!

Although not statistically significant, there are a handful of students in each area who became aware of a problem in their lives in 1991 and would like to have acted on it but still haven't. These areas include self-esteem, occupational wellness, eating disorders, environmental wellness, values/beliefs, sexuality/relationships, communication skills, STD/Birth control, chemical health, death/dying, diversity, pregnancy and sexual victimization. A question to be answered from this is, "How can we help students to act on areas that they know are problematic to them and want to take action on, but haven't?" Even though only two students listed sexual victimization, four listed pregnancy and five listed diversity, these are individuals who want to act and have not. Also, these numbers are for 27% of the senior class. Taking into account the total college population, freshman through senior classes, 12-14 times as many students may be walking around on campus wanting to act on these and other areas of their lives. How to help these individuals, is a question that needs to be explored.

"Well" Behaviors

In an open-ended question, freshmen and seniors', top responses to what they currently did to be a "WELL" person centered around exercise and nutrition. Other areas noted by

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respondents were relax/sleep, stress reduction, time management, goals, studies, relationship, religion, communicate and sports.

Course Improvement

The final survey question asked how the Health/Wellness class could be changed for future Gettysburg Students to support them in making healthy decisions in their lives. Thirty-eight percent of comments focused on ways to improve the quantity and quality of class discussion. Students indicated that there was less class discussion than they desired. Additionally, discussion needed to include how topics related to the campus environment. More small group work in class was also recommended. In addition, some class instructors are still primarily lecturing (It should be noted that this is contrary to the class design and against all training they have received). To enhance class discussion, students suggested they be placed in class sections by common interests or residence halls.

Nine percent of the students perceived their professors as not having the skills and/or caring needed to teach the class. As one student stated, it "all depends on the professor" if the class was successful or not. This ties in closely with the students wanting and needing an interactive, discussion-based classroom environment.

Nineteen percent of respondents said the course was "fine way it is". Other comments mentioned by one or two people included suggestions on topics to emphasis (time management and issues involving sex), class structure improvements (involve

upperclassmen in course, speakers, films, not meet in classroom but in informal setting, grade course rather than pass/fail, class longer than one semester) and suggestions focused on outside of the classroom (field trips, follow-up course, plan activities, professors available to same students all four years of college).

Two percent said they couldn't remember specifics of class to comment on and two percent said that the class had been a waste of time.

Conclusion and Recommendations

Time management, fitness, goal setting, nutrition and stress reduction were listed as the top five health behavioral changes by students when they were freshmen in 1991 and when they were seniors in the 1995 survey. In addition, these were also the top five areas seniors in the 1995 survey listed as "becoming aware of and would like to act on, but haven't". These may be important areas to focus in on when working with college students on behavioral change. Students are self-reporting that they have been most successful at working on improving their health in these areas and, if they haven't, they desire to do so.

As health educators, we must also look past the "numbers" to students who are struggling with other critical health issues. Even though not as many students are dealing with them as the "big five" listed above, sexual victimization, pregnancy and diversity are important issues to students.

Future longitudinal studies with students would do well to

continue to track health behavioral change. In addition, future studies could look at health behaviors students would like to act on and haven't and self-reported reasons for their in-action. This information may prove useful in addressing these areas while students are still in health class, and thus help students who do want to enact behavioral change.

When all is said and done, the health educator can only set the stage for learning. This means doing everything in her/his control so that students have the best opportunity to gain knowledge, evaluate behavior and understand how to effect behavioral change. Then it is up to the student to come to the water and drink... As one student in the 1995 survey commented when asked "How could the health/wellness class be changed for future Gettysburg Students to support them in making healthy decisions in their lives?", "It (class) serves its purpose as it is structured- either students will appreciate what it has to offer or they won't."

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