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**If Health Education Had *Vital Signs*, Then Where Would We Take Its Pulse?**

*Robert J. McDermott*

**Introduction**

Good afternoon everyone. I am proud to be the recipient today of the Eta Sigma Gamma Honor Award. It is indeed a special occasion for me, elevated in importance that much more by virtue of this being the 40th anniversary year of the creation of Eta Sigma Gamma. ESG's three founders, Dr. Warren E. Schaller, Dr. William Bock, and Dr. Robert J. Synovitz, were gifted in their vision of inspiring and seeing through a dream to bond women and men in pursuit of the ideals of health education teaching, research, and service. All of us here today are extensions of these three gentlemen; all of us are firm in our quest to fulfill the ideals for which Eta Sigma Gamma stands; and all of us are steadfast in our representation of a vital profession called health education. I am told that the Eta Sigma Gamma Honor Award is presented to individuals who have made major contributions to the profession. Whereas the floor may belong to me today, indeed, everyone who follows in the footsteps of this organization's founders shares this honor with me. But because I do have the floor, for the next several minutes I am going to share with you some thoughts about our profession, including some things that I think we need to do to keep it *vital*. I will try to leave you with some thoughts that I think we need to consider as we attempt to respond effectively to the challenges that lie before us now, and face us in the future. Whereas I want my comments to strike a chord especially with individuals still in professional preparation, I hope too that they are relevant for my peers with years of savvy and experience. Because I have less than a half hour, I will only be able to scratch the surface; but, I am going to try to scratch it with the same edginess that one might get from encountering the sound of fingernails traversing a chalkboard. Anyway, here goes.

**What Does it Mean for Our Profession to Have Vital Signs?**

I have to admit that it intrigued me some to think metaphorically about the answer to this question. As human

beings we have a heartbeat, and respiration, and body temperature, and a handful of other signals that tell us we are alive, and to some extent, the degree to which we are thriving. As educated persons we even know that there are a modest number of things that we can do and take control over to steer us in a direction that keeps those vital signs, well, *vital*.

Perhaps it is even possible to estimate the vitality of our profession. How do we tell whether our profession is thriving? What are the indicators that we are on the right course? With health education, what is our collective destination?

***How Do We Know If We Are Getting Anywhere?***

I am concerned that some of us still haven't figured out who we are or how we fit into this professional world we call "health education." As a graduate student more than 30 years ago, I found it disconcerting to have to explain to others the meaning of my future job title. My brother was a banker. My uncle was a truck driver. My next door neighbor was an attorney. I had relatives who were dentists, welders, nurses, professional athletes, and carpet layers. To the best of my knowledge, none of them ever had to provide much of an elaborate explanation of what they did for a living when others asked. Well into my early professional life, I admit to struggling to give a cogent and coherent explanation of what I did for a living. The Role Delineation Project of the early 1980s, the unveiling of roles, responsibilities and competencies of health educators in the mid-1980s, and the advent of credentialing in the late 1980s helped, but unfortunately, did not put an end to my ineptness at clarifying my vocational endeavors.

This lack of exactitude continues to challenge us today and is exacerbated by the rise of new occupational titles. We are in an industry in which we compete with job titles and professional endeavors that confound and confuse who we are and what we do. After all, there is *health education, health promotion, wellness, health science, health behavior, health behavior science, prevention science, health psychology, behavioral health, socio-health, health counseling*, and perhaps, others that I have forgotten or have yet to encounter. Our professional preparation programs are at least partially responsible for imposing this confusion on us, thereby voiding some of the major initiatives to clarify what health education is and what health educators do.

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Attempting to unify professional preparation into a set of roles, responsibilities, and competencies did not prevent this name-game confusion from coming about. Establishing and evolving a professional certification system did not prevent it, nor did organizing a professional code of ethics and operating principles.

William Shakespeare (circa 1597) asked: “What’s in a name?” Although I did not do well in my university studies of the classics, I can extrapolate enough to know that Shakespeare’s question would get a different answer from a *philosopher* than from a *marketer*. Therefore, if we are trying to *brand* our profession, we had better link roles, responsibilities, and competencies to a name, whatever we decide to call ourselves, and stay with it. When people attend dental school they may emerge with a DDS, a DMD, or some other degree, but they are all called “dentists.” Some of these practitioners may eventually specialize, but they all start out being called dentists – not *oral promoters*, *mouth wellness technicians*, *holistic molar men* and *bicuspid women*, or just “*tooth fairies*.” Why has health education differentiated itself in this way? Moreover, what is the impact of doing so on our recognition as a profession outside our own professional friends and colleagues? I believe that at least some of our future success in determining our identity will be determined by how we answer these questions.

#### ***What is the Status of Professional Preparation Programs?***

One measure of our professional vitality may be the existence of health education-related degree programs at institutions of higher learning. To assess this measure I counted the number of programs listed in the *American Association for Health Education Directory of Institutions Offering Undergraduate and Graduate Degree Programs in Health Education* for 1997 (AJHE, 1997), 2001 (AJHE, 2001), and 2005 (AJHE, 2005). These results are shown in Table 1. Although this source may contain some reporting flaws (problems with interpretation of questions by respondents, non-respondent institutions and programs not accounted for, and inclusion of programs whose titles are

not health education, etc.), it is a gauge of the “growth status” or maintenance of professional preparation programs in higher education. Whereas some programs may have gone out of existence in the past decade or so, others have taken their place. Despite the assertion drawn upon anecdotal information that health education programs are being diminished in size and scope (Glover, 2004), there is compelling evidence to suggest that professional preparation is *alive*, and possibly, even *well*. There are some good vital signs – in the past ten years there has been some proliferation of undergraduate programs, a modest increase in master’s degree programs, and a slight amplification of doctoral programs. Being well, though, does not mean being “safe” from scrutiny of critics within our own institutions, and being well does not mean that improvement is not possible. Examination of the evolution of professional preparation programs should be something about which we have ongoing vigilance and regular review.

#### ***What is the Status of Doctoral Education Programs?***

Doctoral education is one aspect of professional preparation that deserves some special emphasis. Several health education scholars have highlighted the need for improving the research capacity of the health education profession to enhance its professional respect and clout (McDermott, 2000; Glover, 2004; Young, 2006). Some of this emphasis for improvement has to occur among professional preparation programs (AAHB Work Group on Doctoral Research Training, 2005). At least two attempts have been made in recent years to apply criteria to ranking health education doctoral programs (Notaro, Eddy, & O’Rourke, 2000; Chaney, Eddy, & O’Rourke, 2004). One of our fellow professional groups, the American Academy of Health Behavior, has launched an initiative to identify specific research competencies and assess institutions for the extent to which students in training have opportunity to meet these competencies. Leadership from somewhere is needed to prevent there from being 43 completely different models for training people for advanced leadership in research.

Table 1

#### ***Health Education Degree Programs 1997-2005***

Year Sampled	Associate	Baccalaureate	Master’s	Doctoral
1997	1	175	134	38
2001	1	186	139	41
2005	1	199	139	43

Source: American Association for Health Education Director of Institutions Offering Undergraduate and Graduate Degree Programs in Health Education

### *What is the Status of Our Professional Organizations?*

Professional organizations are challenged these days to sustain membership and membership services, and to do so at a cost that is neither prohibitive to individual members nor counterproductive to the goals and objectives of the organization. How well our professional organizations sustain their membership numbers may be a vital sign that is worthy of attention (Table 2). If we look at some of the organizations that form the Coalition of National Health Education Organizations (CNHEO), we see that school health education may be at special risk in terms of its constituent groups. The number of persons whose primary affiliation within APHA is the SHES section has hovered around the 300 mark for a decade, a threshold that actually challenges the existence of its section status within the parent organization. The ASHA figures shown represent only persons who self-identify as health educators, but demonstrate a decline in membership of 55% in a decade, and membership among other professionals within ASHA has fallen off as well. The composition of AAHE is down more than one-third in the past decade. *These are our primary school health-related organizations and their strength of numbers is dwindling!* These declines affect the ability of the organizations to have the kind of effectiveness in advocacy and lobbying that they need to have. Is it ironic or a coincidence that some of our key youth health behavior indicators have stalled or worsened over this same time period? I will come back to that later.

The membership losses are not just in school health education. SOPHE's membership number today is also down, although the drop-off is a modest 4.5% from ten years ago. Among our key groups, only ACHA and the PHEHP section within APHA demonstrate net gains in membership over the previous decade, and as the data show, even they have experienced significant ups and downs.

The reasons for our declines may be job market related or influenced by other economic factors. Membership has its associated costs. Organizations experience increased labor costs, printing costs, and mailing costs. The price of putting on conferences increases. And, as we can readily testify, the expense of traveling to these meetings, the cost of lodging, and the price of food all rise. The ability of higher education institutions, governmental agencies, school districts, and NGOs to reimburse travelers is negatively affected. Consequently, activity stalls. As health education professionals we must find ways to address the organizational losses and recover and build our power to influence policy and decision making. However, as a professional group (health educators) and as organizations we should strike a non-competitive chord, so as to avoid, as John Nash said "[getting] stuck in a local maxima of the common good, arbitrarily far from the greatest possible common good" (Nash Equilibrium, 2004)). In other words, the success (or failure) of any one organization may become contagious. Therefore, it is vital that organizations work in harmony for mutual success across the profession.

Table 2

*Membership in Selected CNHEO Member Organizations by Year: 1997 – 2006*

Organization	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<sup>1</sup> APHA-PHEHP	3606	3290	3587	3582	3710	3397	3625	3699	4331	3996
<sup>1</sup> APHA-SHES	375	322	341	323	379	307	290	292	290	334
<sup>2</sup> ASHA	1593	1510	1281	932	894	913	821	744	686	710
ACHA	2601	2422	2267	2459	2630	2627	2579	2727	2922	3315
<sup>3</sup> AAHE	8100 <sup>4</sup>	7100 <sup>4</sup>	7000 <sup>4</sup>	6000 <sup>4</sup>	5245	5505	5499	5302	5249	5379
<sup>5</sup> ESG	--	--	261	1082	893	1085	828	939	1013	1116
SOPHE	2138	--	--	--	--	--	--	--	--	2050
DHPE	--	--	--	--	--	--	--	--	--	280
SSDHPER	--	--	--	--	--	--	--	--	--	--
AAHB	33	--	--	--	--	--	--	--	--	144

<sup>1</sup> Primary affiliation within the organization.

<sup>2</sup> Number of members who self-identify as health educators; overall membership 1997 (3211) to 2006 (1758).

<sup>3</sup> Primary and/or secondary affiliation within the AAHPERD alliance of organizations.

<sup>4</sup> Estimate of membership totals.

<sup>5</sup> New initiates only

### ***What is the Status of CHES Certification?***

Today there are about 7,500 active CHES-certified health educators (Lysoby, personal communication, October 17, 2007). Two states (Arkansas and New Jersey) require the CHES credential for employment in State-funded positions. One state (South Carolina) has required CHES for eligibility for third party reimbursement through the Medicaid Adolescent Pregnancy Prevention Services (MAPPS) program. These are indeed some positive indicators about CHES certification, and whereas no one can mount a defensible argument against the benefits of having a credentialing process, more than 18 years after the launch of CHES, the profession has almost no compelling data about the impact certification has had on the acceptance and perceived importance of health educators. If it is not already the case, persons such as myself who are engaged in professional preparation are going to have to have elaborate and concrete data to support and substantiate the recommendation of credentialing to our students. Otherwise, why will anyone want to become certified? Although NCHCEC may be responsible ultimately for demonstrating the utility of the credential, who is going to do the research and what will the relevant and measurable indicators be that build a bottom line case for certification, and furthermore, how long will it take to do so? The answers to these questions are fundamental to any strategic initiative that the profession may contemplate launching.

### ***What Has Been the Impact of Prevention Programs on Health Behavior among Adults?***

It is a fair question to ask how much impact health promotion programs and other preventive health endeavors have had on adult health behavior. The Behavioral Risk Factor Surveillance System (BRFSS) is the world's largest, on-going, cross-sectional, random-digit-dialed telephone health survey system, tracking health conditions and risk behaviors among adults 18 years and older in the U.S. yearly since 1984 (CDC 2007a). Conducted by the 50 state health departments as well as ones in the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands, the BRFSS provides state-specific information on a wide range of health issues and health behaviors. Health officials and researchers at all levels use this information to track health risks, identify emerging problems, and prevent disease. What do the BRFSS data tell us about our vitality as a profession?

Whereas the percentage of adult cigarette smokers in the U.S. declined steadily between the mid-1960s and the late 1980s, the proportion of adults who smoke cigarettes (persons have smoked greater than/equal to 100 cigarettes lifetime and reported smoking every day or some days) has fluctuated little since 1990 (CDC, 2007b). The median percentage of adult smokers among 45 states assessed in 1990 was 23.0%; among 54 states and territories in 2002, the median percentage was – you guessed it – 23.0%.

Similarly, we can see what has happened with respect to alcohol consumption – in this specific instance, binge drinking (5 or more drinks on an occasion one or more times in the past month) over this same period of time. Among 45 states in 1990, the median percentage of adult binge drinkers was 15.3%; among 54 states and territories in 2002, the median percentage had risen to 16.1% (CDC 2007c).

The news on the leisure time physical activity front is better, if only by a little. In 1990, among 45 states, the median percentage of adults reporting no leisure time physical activity was 28.7%; among 54 states and territories in 2002, the median percentage of adults reporting no leisure time physical activity had dropped to 24.4% (CDC, 2007d).

Finally, we can look at the adequacy of fruits and vegetables (less than/equal to 5 servings per day) in the adult diet over the period of 1994 through 2002. In 1994, the median proportion of adults across 50 states reporting less than/equal to 5 servings per day was 78.0%; in 2002, that proportion across 54 states improved only to 77.3% – clearly, no improvement at all despite the Five-A-Day initiative and the construction of food pyramids by the USDA's "health pharaohs" (CDC, 2007e).

I think the conclusion from these data is not a difficult one to draw. There has been little movement of the needle in the last decade or so on some of the key health behavior indicators for adults. Certainly, health educators alone are not to blame for this rather miserable state of affairs, but neither should we be engaging in a lot of chest thumping or high fives to celebrate these dubious achievements.

### ***What about the Impact of Programs on Youth Health Behaviors?***

The Centers for Disease Control and Prevention developed the Youth Risk Behavior Surveillance System (YRBSS) in 1990 and began conducting biennial surveys of youth health risk taking in grades 9 through 12 in 1991 (CDC, 2006). The YRBSS monitors behaviors related to tobacco use, alcohol and other drugs, sexual risk taking, physical activity, dietary practices, and intentional and unintentional injuries.

We would hope that after 15 or so years of monitoring these risky behaviors and allocating monetary, temporal, and human resources to their reduction, we would be able to show excellent results. Unfortunately, for a number of the key indicators, that is simply not the case.

For example, if we look at "current smoking" by youth, we have reduced the figure from 27.5% nationally in 1991 to 23.0% in 2005 (CDC, 2006). However, when adjusting those figures for error measurement and taking 95% confidence intervals into consideration, it is possible that we have scarcely moved the needle. In a number of urban areas and even in some less populated areas, the condition is basically unchanged, and there is at least one urban area (Dallas, TX) where smoking actually has increased among youth.

We have made a little more national progress with "current drinking" – down from 50.8% in 1991 to 43.3% in

2005 (CDC, 2006). Nevertheless, in some regions of the U.S., there are no differences between the 1991 and 2005 figures. The picture is approximately the same when we examine recent “binge drinking” – down nationally from 31.3% to 25.5% – but unchanged in a number of urban areas and predominantly rural states (CDC, 2006).

The news is discouraging when we turn to youth participation in vigorous physical activity. There is no meaningful change nationally – 65.8% in 1993 versus 64.1% in 2005 (CDC, 2006). Among 25 states, territories, and metropolitan areas monitored between 1993 and 2005, 23 are unchanged. One state (New Hampshire) has shown an increase in physical activity, and one state (New York) has shown a decrease in physical activity. If health education and promotion programs exist in these venues, they have shown little impact.

The news with respect to diet is even more discouraging. Nationally, the proportion of youth consuming five or more fruit and vegetable servings per day has declined from 23.9% in 1999 to 20.1% in 2005 (CDC, 2006). Among 26 states and metropolitan areas tracked during this same time interval, 11 have remained unchanged and 14 have worsened.

Regarding sexual behaviors, there has been no change between 1991 (37.5%) and 2005 (33.9%) in the proportion of youth reporting sexual intercourse with multiple partners in the previous three months (CDC, 2006). On a more positive note, there has been a slight upswing in condom use by youth during the most recent sexual intercourse in 9 of the 10 regions monitored, and the U.S. as a whole – 46.2% in 1991 versus 62.8% in 2005 (CDC, 2006). Sexual risk taking among youth continues to be a “mixed bag” of results.

Whereas I cannot predict how others read the sum of these data, I would have to say that I am not overwhelmed with optimism that prevention programs are giving an Academy Award performance on these measures. Then again, perhaps there are still too many barriers that stand in the way of better implementation of these programs, and thus impede development of the “dose” required to offer better effect. However, the persons in charge of prevention and intervention programs cannot just argue that they can do more and niftier things leading to better results simply by throwing more time, money, or human resources at the problem. That type of plan is too reminiscent of a Vietnam era or Iraq era mindset to solve wars gone awry. Convincing politicians that better results can be achieved will require more sophisticated plans and logic models mapped tightly upon an evidence base. I do not know if we are ready for such action at this point but I believe that as dollars get tighter, we will be asked to make a better case for funding what we do.

### **How Can We Respond to the Challenges to Keep Health Education Vital?**

Far be it for me to be the soothsayer of how we address all of the challenges before us now and the ones likely to confront us in the near future. I am the first to admit that I do

not possess a crystal ball, but I am confident that we can take at least five actions that will ensure that we will continue to have a professional pulse and vitality.

#### ***1. We Need to be Responsive to the Public Health's Workforce Development Needs***

In 2003 the Institute of Medicine of the National Academies published the book *Who Will Keep the Public Healthy?* – a book about educating public health professionals for the 21st century (IOM, 2003). In it the authors suggested eight emerging areas of skill and understanding that will be required of the future public health professional – *informatics, genomics, communication, cultural competence, community-based participatory research, global health, policy and law, and ethics*. Across health education programs today, how many can say in good faith that their current professional preparation enrollees are receiving *heavy educational doses* that lead to developing these skills? Perhaps some programs *are* doing these things, but alas, probably far too few, and probably, more at the graduate level than at the undergraduate level. If we are not careful, we may find ourselves turning out zealous and spirited graduates, but ones who received an obsolete education that prepared them to take their places in a workforce whose actual needs they cannot be responsive to.

How do the language skills of health educators compare with other members of the workforce – especially foreign language skills? How many professional preparation programs require competence in another language? It is, perhaps, no coincidence that people who speak another language often communicate better with a broader range of people, demonstrate greater cultural competence as occasions call for it, and attain more acceptance when community-based participatory work is involved. This is not rocket science – it is common sense. Thankfully, some of our traditional responsibilities and competencies *do* respond to these expected demands, but these skills will need to continue to evolve, and perhaps, do so at an accelerated pace.

#### ***2. We Need to Advance the Political Action Skills of Health Education Professionals***

Like most of you, I pick and choose the professional events I attend because of time, cost, and overall interest. One annual event that has impressed me, one soon to be in its eleventh year (March 2008), is the Health Education Advocacy Summit, sponsored by the Coalition of National Health Education Organizations. I recommend it to anyone interested in learning more about the legislative process, especially at the federal level. I have attended three of these conferences and have learned a lot at each one. The conferences are always in March and, as you might guess, always held in Washington DC. It is a shame that the majority of attendees appear to be students – although that could be a good thing, too. I just happen to think that many of the

health educators in my age cohort know far less about the specifics of interacting with politicians than they would like us to believe – and thus, more should be attending a training opportunity like this one.

### **3. We Need to Broaden the Way in which We Define Health**

When I started my career as a health educator I was *indulged, indoctrinated, and inculcated* with the definition of health that forms the preamble to the constitution of the World Health Organization (1948). We all know it by heart:

*Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.*

That definition of health is taught worldwide and has remained unchanged for more than 59 years. Is it possible, however, that admirable as it is as a definition, it has outlived its usefulness?

Many years ago I was inspired by the brilliance of Godfrey M. Hochbaum's (1979) more liberal definition of health:

*Health is what helps me to be want I want to be, and to do what I want to do [and] what helps me live the way I would like to live (p.199).*

Hochbaum's definition may not be acceptable to some health educators who view it as giving too much latitude for behavior. Nevertheless, it is a customer-centered, reality-based definition, no matter how much some might care to protest. I have said this before (McDermott, 2000), but in this day and age, I think that *that* definition has more relevance to the diversity of audiences that we are challenged by in health education than the more classic WHO definition, and its adoption could certainly alter how we approach the practice of health education. Consequently, it provides us with more useful guidance for communication, ethics, cultural relevance – you name it. As health educators we cannot afford to be seen by so many fairly decent people, who happen to have made a few negative health behavior decisions as, what the late [Robert] Russell (1963) called, “warriors against pleasure.”

At an extreme, perhaps we even have to give some credence to yet another particularly insightful philosophy of life that I can only attribute to an anonymous source:

*Life should NOT be a journey to the grave with the intention of arriving safely in an attractive and well preserved body, but rather to skid in sideways, chocolate in one hand, martini in the other, body thoroughly used up, totally worn out and screaming WOO HOO, what a ride!*

Anyway, as health educators, we need to lighten up just a little because as some of the evidence I offered earlier demonstrates, our current messages are being missed. We have to be more in touch with the people whose health needs we are trying to serve.

### **4. We Need to Advance the Research Foundation and Evidence Base of the Profession**

As researchers, we are guilty of performing too many descriptive studies in which we ask how many of what kind are doing what and where. Our research rarely is directed at seeking out the “whys” and the “hows” that takes us to another level. We also study too many academic issues that defend our existence as a profession, rather than taking on the problems of the world around us that require serious research applications in the pursuit of solutions. In the current funding environment, studies that fail to have clear links to real problems and people will not garner much attention in the research-to-practice world. If we figure out the links between knowledge and behavior through research, we won't have to worry about our self-esteem as a profession.

### **5. We Need to Develop a Strategic Plan for the Profession**

Strategic planning is a systematic process of envisioning a desired future, and translating this vision into broadly defined goals or objectives and a sequence of steps to achieve them. In contrast to long-term planning (which begins with the current status and lays down a path to meet estimated future needs), strategic planning begins with the desired-end and works backward to the current status (BusinessDictionary.com, 2007). I would like to see our leading professionals and our professional organizations work in unison to develop such a plan – envisioning the most highly desired *state and status* of health education – a vision that includes demonstrated improvement in the public's health and health behavior.

### **Summary**

In conclusion, I have tried to give an overview of some performance features that I believe tell the tale of how we are doing as a profession. There is clear evidence of some successes that can be celebrated but other evidence to suggest we are not fulfilling our promise. Naturally, the choice of what we measure and report plays an important role in how we judge our professional vital signs. I think health education has a pulse, and sometimes its heartbeat is phenomenal. As I look around me and see the faces in this audience, I am confident that there exists the will and the desire to elevate ourselves professionally and achieve things that people like the founders of Eta Sigma Gamma envisioned for us. I think it is possible. Thank you.

## References

- AAHB Work Group on Doctoral Research Training [Alphabetical Listing: Baldwin, J., Beck, K. H., Black, D. R., Blue, C. L., Colwell, B., Gold, R. S., McDermott, R. J., Murdock, P. O., Olds, R. S., Sciacca, J. P., Simons-Morton, B., Thombs, D. L., Torabi, M. R., Wells, M. J., & Werch, C. E.] (2005). A vision for doctoral research training in health behavior: A position paper from the American Academy of Health Behavior. *American Journal of Health Behavior, 29*(6), 542-556.
- American Journal of Health Education. (2001). American Association for Health Education Directory of Institutions Offering Undergraduate and Graduate Degree Programs in Health Education. *American Journal of Health Education, 32*(3), 153-168.
- American Journal of Health Education. (2005). American Association for Health Education Directory of Institutions Offering Undergraduate and Graduate Degree Programs in Health Education. *American Journal of Health Education, 36*(6), 345-360.
- BusinessDictionary.com. (2007). *Strategic planning*. Retrieved October 31, 2007, from <http://www.businessdictionary.com/definition/strategic-planning.html>
- Centers for Disease Control and Prevention. (2006). *Healthy Youth! YRBSS Trend Fact Sheets 1991-2005*. Retrieved October 22, 2007, from <http://www.cdc.gov/HealthyYouth/yrbs/trends.htm>
- Centers for Disease Control and Prevention. (2007a). *BRFSS - Turning Information into Health*. Retrieved October 30, 2007, from <http://www.cdc.gov/brfss/>
- Centers for Disease Control and Prevention. (2007b). *BRFSS Data*. Retrieved October 10, 2007, from <http://apps.nccd.cdc.gov/brfss/Trends/trendchart.asp?qkey=10000&state=US>
- Centers for Disease Control and Prevention. (2007c). *BRFSS Data*. Retrieved October 10, 2007, from <http://apps.nccd.cdc.gov/brfss/Trends/trendchart.asp?qkey=10100&state=US>
- Centers for Disease Control and Prevention. (2007d). *BRFSS Data*. Retrieved October 10, 2007, from <http://apps.nccd.cdc.gov/brfss/Trends/trendchart.asp?qkey=10020&state=US>
- Centers for Disease Control and Prevention. (2007e). *BRFSS Data*. Retrieved October 10, 2007, from <http://apps.nccd.cdc.gov/brfss/Trends/trendchart.asp?qkey=10150&state=US>
- Chaney, J. D., Eddy, J. M., & O'Rourke, T. (2004). Ranking of doctoral programs of health education: Methodological revisions and results. *American Journal of Health Education, 35*(3), 132-140.
- Glover, E. D. (2004). A new health education paradigm: Uncommon thoughts about common matters. *American Journal of Health Education, 35*(5), 260-271.
- Hochbaum, G. M. (1979). An alternative approach to health education. *Health Values: Achieving High Level Wellness, 3*(4), 197-201.
- Institute of Medicine. (2003). *Who Will Keep the Public Healthy?* Washington DC: The National Academies Press.
- Journal of Health Education. (1997). American Association for Health Education Directory of Institutions Offering Undergraduate and Graduate Degree Programs in Health Education. *Journal of Health Education, 28*(5), 281-295.
- McDermott, R. J. (2000). Health education research: Evolution or revolution (or maybe both)? *Journal of Health Education, 31*(5), 264-271.
- Nash Equilibrium. (2004). Retrieved October 23, 2007, from <http://c2.com/cgi/wiki?NashEquilibrium>
- Notaro, S. N., O'Rourke, T. W. & Eddy, J. M. (2000). Ranking doctoral programs in health education. *Journal of Health Education, 31*(2), 81-89.
- Russell, R. D. (1963). Are health educators "warriors against pleasure?" *Journal of School Health, 33*(5), 201-204.
- Shakespeare, W. (c.1597). *Romeo and Juliet* (II, ii, 1-2).
- World Health Organization. (1948). *Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19 June - 22 July 1946*. Retrieved October 30, 2007, from <http://www.who.int/suggestions/faq/en/>
- Young, M. (2005). Enhancing research productivity in health education: What, why, and how. *American Journal of Health Education, 36*(6), 322-330.



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