TO TEACH IS TO LEARN

William L Winters
From Methodist DeBakey Heart Center and Baylor College of Medicine, Houston, Texas

How often have you heard someone say, "I learn more from preparing a lesson than my class will ever learn from listening co me deliver it"? It's no secret that sharing personal experiences with others who have had similar experiences reinforces rhe message shared. Teaching and learning may be delivered in a variety of formats, especially in the field of medicine.

I recently attended a superb conference structured around the discipline of echocardiography. As a disclaimer, I do admit co some bias toward echocardiography, having been seduced by the potential by-product of cardiac ultrasound some 40 years ago and then befriended by Ors. Inge Edler and Helmuth Hertz, whose fairly simple idea has blossomed into an extraordinary science.

The message delivered at this conference was well prepared and presented. Some information was new, some old and revisited with new perspective, but when delivered expertly it is always worth hearing again. What has stuck with me after leaving that conference has been the message from the many case reports - including a brief clinical review and reports of the laboracory, ECG, X-ray and echocardiography findings - char were presented each morning.

Echocardiography provided the opportunity to visualize the problem, discuss the parhophysiology, make differential diagnoses and highlight the important features. Each report was followed by a brief discussion directed by the case presenter and the moderator. The experience was absolutely spellbinding and guaranteed to have everyone awake and eager for the first lecturer.

Upon my return, I came across an editorial by Dr. C. Richard Conti, editor-in-chief of ***Clinical Cardiology.'*** For those of you who enjoy reading editorials, I believe his are among the most interesting and informative around. His copic is case-based teaching and learning. He and 1 are of an era when presemations of clinical cases by students to mentors, followed by brief discussions by all involved, was a major modus operandi for teaching clinical sciences. That put the onus on all parties to be prepared. Over the years, as the sheer volume and complexity of medical information has increased, nor to mention the array of diagnostic capabilities and therapeutic options, it is my perception that didactic lectures are now the scandard when planning educational programs - albeit with fascinating technical computer cricks to keep attention focused.

In years past, medical grand rounds at The Methodist Hospital was a major weekly event where physicians vied for the opporcunity to participate. Slide lectures were important, but the really entertaining and educational programs were those in which clinical cases were presented and discussed. I don't believe that has occurred for the past 20 years.

Roughly 35 years ago, in an attempt to stimulate an educational collegial spark among chose interested in cardiovascular education, a small group of us from the American Heart Association's Physicians' Education Committee formed the Housron Society of Cardiology. The format required participation on a rotating basis of physicians interested in cardiovascular medicine. Phy s icians, students and trainees from each major hospital in the city, most of which **were** in the Texas Medical Center at that time, **were** all invited to participate. Attendance at chose monthly meetings often exceeded 100 individuals - far exceeding our expectations. Most presentations involved case reports, and it proved to be one of the most exciting and interesting educational enterprises I've ever been associated with. Prominent physicians joined in, among them cardiologists, cardiovascular surgeons, radiologists and pathologists. Rather than leccures, the cardiovascular surgeons presented fascinating surgical problems, the radiologists some unbelievable X-ray problems, and the pathologists chose beguiling things we often overlooked as clinicians. On one occasion, Dr. Miguel Quinones and I presented a rown-meeting-type program around the discipline of echocardiography. We each stood at one side of a large screen and presented echocardiographic cases to each other with audience participation. It was a howling success, being entertaining as well as educational.

Then a funny thing began co happen. After a number of years, respected guest lecturers began to appear in place of case reports. The requirement for program presentation by participating hospitals was dropped, and soon attendance at the meetings declined co the point where the American Heart Association lost interest and ultimately declined further support - ironic, given that the idea was originally conceived in the AHA Physicians' Education Committee. I have al w a y s believed that a major culprit in the Houston Cardiology Society's demise was the loss of local physician participation from the major hospital groups and the case-based teaching and discussion.

As I read the edirorial by Dr. Conti, I was reminded how echocardiography is the heart of cardiovascular imaging.

Continued on page 28

Continuedfrom page I

(You are free co take issue - if you dare.) There is no better technique to complement and augment the cardiovascular physical diagnosis. It provides a wonderful unifying discipline upon which to conduct case-based educational programs. It is safe, noninvasive and relatively inexpensive. It epitomizes the old adage, "A picture is worth a thousand words." If it becomes sufficiently compact, it may one day become an extension of the stethoscope.

What I hope for most is that the various applications of echocardiography will provide a fuundation co return co more case-based teaching by virtue of its ability co define structure and function of the heart and blood vessels, something no other discipline has been able co do. If that should happen, then the fun and usefulness of a vanishing arr (the art of auscultation) may be resurrected by combining the auditory and visual senses at the bedside.

REFERENCES

1. *Conti, CR. Case-based teaching and learning. Clin Cardiol. 2006;29:1-2.*