Notes from the Editor
by Arthur Jones, EdD, RRT

Teaching is not a lost art, but the regard for it is a lost tradition.
– Jacques Barzun

Colleagues, please note the above quotation. Although I have my own thoughts concerning the accuracy of this statement, I think it would be more interesting to relate the comments from other members of this collective. Have your students changed considerably over the years? If so, in what ways? Even more importantly, how must educators adjust their practices to ensure competency in future graduates of respiratory care programs? How must we adjust our own attitudes to preserve our integrity and sanity as we do this?

If you would, please email your objective thoughts on this important topic to me by October 10. I'll do some kind of compilation and try to arrive at a general consensus (as well as the perfect solutions to all of our problems). This is not intended as a research project; it's just intellectual curiosity. Your names will not be attached to any statements unless you want to claim authorship. If I receive a large enough response by the October 10 deadline, I'll publish the results in the November-December issue, which will be my final issue as Bulletin editor. Thank you, in advance.

Notes from the Chair
by David W. Chang, EdD, RRT

Anyone can hold the helm when the sea is calm.
– Publilius Syrus (first century B.C.), Maxim 358

A recent study showed that quitting smoking has had a dramatic effect on the number of British lung cancer deaths. In fact, quitting smoking at any age helped to reduce smoking-related deaths by 50%. On the flip side, one billion people will die in the 21st century if current smoking trends continue. In Britain alone, six of 12 million smokers will be killed by tobacco unless they stop. If similar mortality rates are applied to the United States, where 50 million people smoke, 25 million will die from smoking if they do not quit. With an estimated 1.1 billion smokers worldwide, the number of potential tobacco-related deaths is alarming.

According to Professor Richard Peto, of the Imperial Cancer Research Fund, “it pays to stop smoking at any age.” Smoking cessation is the most vital key to longer life expectancy. It is also by far the least expensive way that health care professionals can help the public. Smoking cessation can easily be built into our tight RT curriculum. For instance, this topic is suitable in respiratory physiology, pathophysiology, pulmonary function, or rehabilitation. Clinical experience in smoking cessation may be gained in the pulmonary function lab, physician’s office, smoking cessation classes, etc. The payoff may not be immediate; but including a topic on smoking cessation in our curriculum is essential for our students and crucial for our health care consumers.

Computer Conferencing as an Active Learning Tool
by Ellen A. Becker, PhD, RRT, respiratory care division, Long Island University, Brooklyn, NY

One method of actively involving all students in problem-solving activities is to organize students into computer conferencing groups. In computer conferencing, students communicate with one another through electronic messages. The conferencing software allows students to group together messages that relate to a single topic. This ability to group related messages makes it easier for all participants to follow the discussion.

Over the past two years, I have utilized computer conferencing with junior baccalaureate degree students. Each week, groups consisting of four students each address an application or analysis level question related to the current course content. Each group member posts an original response to the question on the computer conferencing board during the first half of the week. At least one more posting...
that clarifies or extends the messages of the stu-
dent’s team members is due from each group
member sometime during the remainder of the
week. Each posting counts as a single home-
work assignment and, as such, impacts the final
course grade.

The design of this learning activity encour-
ges participation by all group members.
Students who either do not think as quickly as
their peers or are not comfortable articulating
their ideas can take extra time or utilize exter-

Our 2000 Specialty Practitioner of the Year
Nominations
by Terry S. LeGrand, PhD, RRT, chair, Education Section Specialty Practitioner of the Year Committee, University of Texas Health Science Center at San Antonio, department of respiratory care, San Antonio, TX

The nominations for the 2000 AARC Education Section Specialty Practitioner of the Year award are in. This recognition is given to Education Section members who have made a significant contribution to the profession as respira-

tory care educators and/or who have served the Education Section in some capacity.

This year’s nominees are Debra J. Leaf, MEd, RRT, program chair for respiratory care and EMT

at Cincinnati State Technical and Community College in Cincinnati, OH, and William F. Galvin, MSEd, RRT, program director for respiratory care at Gwynedd Mercy College in Gwynedd, PA. Congratulations to both of you on your nomina-
tions. The recipient of the 2000 AARC Education Section Specialty Practitioner of the Year Award

will be announced at the AARC International Congress in Cincinnati, OH in October.

Favorite Website
by Arthur Jones

http://www.iondata.com/health/pedbase/index x.htm

This website is of particular interest to those who teach pediatric respiratory care. From the
site, you can download a database of 509 differ-
ent pediatric conditions which includes an outline of important information for each condition. The
database, called “Pedbase,” was designed by Dr

Allen Gandy, who is a pediatric specialist on Prince Edward Island, Canada.

Pedbase is shareware, so you can download it

at no charge. It occupies about 9.4 MB hard drive
space, and it would be very interesting and useful
for instructors, students, and practitioners. A reg-
istered version, with additional features, can be
purchased for $50.

Summer Forum Abstracts

Editor’s Note: The following are two of five education abstracts presented at the
Summer Forum last June. The remaining three abstracts will appear in our
November/December issue.

The Modified Borg Dyspnea Scale: Like
Pulling Numbers from a Hat?
by Terry S. LeGrand, PhD, RRT, Anna Gales, and David C. Sheldon, PhD, RRT, University of Texas Health Science Center at San Antonio, San Antonio, TX

The Borg scale is frequently utilized during asthma, pulmonary, or cardiac education pro-
grams to quantify patient’s progress in learning
disease management. The Borg scale was
designed in 1982 to rate perceived exertion dur-
ing exercise and was modified in 1982 to mea-
sure a patient’s perceived intensity of dyspnea
using a 12-point scale.

Conflicting results have been reported in stud-
ies designed to correlate the modified Borg
scale with indices of pulmonary and physical
function. For example, there was no significant
difference between Borg scores before and after a
preliminary rehabilitation program in which
there were significant increases in metabolic and
physical function parameters. Another study
showed that Borg scores demonstrated a positive
correlation with VO2 and VE measurements, yet
lacked within-subject reproducibility.

The objective of our research was to deter-
mine...
Our results showed that there was no significant difference between mean dyspnea scores reported by asthmatics and randomly assigned controls (4.2 ± 2.7 vs 4.74 ± 2.9, p = 0.38).

We conclude that while the modified Borg scale is a useful tool for quantifying outcomes associated with disease management education programs, Borg dyspnea scores may be a better predictor of the patient’s subjective level of distress during a given episode of asthma, as it is more sensitive to the effectiveness of disease management education programs. Respiratory therapists who teach disease management programs and routinely use the Borg scale should be aware of its limitations, and that it may, in fact, be no more significant than “pulling numbers from a hat.” The unreliability of Borg scores found in this study, coupled with limitations shown in other studies, demonstrates the importance of using objective measures of progress, such as exercise tolerance, pulmonary function, and standardized measures of health-related quality of life, to determine the effectiveness of disease management programs.  ■

### The Effectiveness of Standardized Self-Assessment Examinations in Predicting Graduate Pass Rates on the Certification and Registry Examinations

**By Terry S. LeGrand, PhD, RRT, and David C. Sheffey, PhD, RRT, University of Texas Health Science Center at San Antonio, San Antonio, TX**

Pass rates on the NBRC national board examinations comprise an important respiratory care education program outcome that reveals the degree to which school programs prepare students to perform competently in the clinical setting.

Our objective in this study was to define program-related factors associated with improved graduate outcomes by determining if pass rates for the certification self-assessment examination (CRTT-SAE), the written registry SAE (WRTT-SAE), the clinical simulation SAE (CSE-SAE), and employer/graduate cognitive evaluations correlate with pass rates on the actual CRTT, WRTT, and CSE. Data reported on the 1996 accreditation Report of Current Status for all currently accredited respiratory therapist programs (n=300) was provided to the researchers in a blinded fashion so that specific program names and personnel could not be identified. Correlation coefficients were calculated for predictor variables for CRTT-SAE, WRTT-SAE, and CSE performance.

Correlation coefficients by specific program factor are shown in Table 1. The CRTT-SAE was a moderate predictor of the CRTT percent pass rate, accounting for 20.25% of the variance, and a weak predictor of the WRTT and CSE percent pass rates, predicting 4.4% and 7.3% of the variance, respectively. The WRTT-SAE was a very weak predictor of the CRTT percent pass rate, accounting for 0.25% of the variance. The CSE-SAE was not predicted the WRTT or CSE performance at all.

There was no relationship between CSE-SAE performance and national exams pass rates, nor did employee or graduate cognitive evaluations demonstrate such correlations.

In conclusion, our study showed that there were significant correlations between CRTT-SAE and CSE performance. This study was not designed to determine factors that increase CRTT-SAE and CSE performance. It is questionable that CSE-SAE performance is limited to the CRTT percent pass rate. This discrepancy may be due to the fact that some programs actively prepare students to take the WRTT-SAE and CSE-SAE, while others use the stated deadline if any changes need to be made. The baseline, however, should be subjective level of distress during a given episode of asthma, as it is more sensitive to the effectiveness of disease management education programs. Though respiratory therapists who teach disease management programs and routinely use the Borg scale may be a useful tool for quantifying outcomes associated with disease management education programs, Borg dyspnea scores may be a better predictor of the patient’s subjective level of distress during a given episode of asthma, as it is more sensitive to the effectiveness of disease management education programs.