



# Education

Sept./Oct. '99

Bulletin

2

The NBRC School Score Report: *How Accurate Is It?*

3

School Score Reports: *The NBRC's Response*

Get Ready for Increased NBRC Exam Fees in 2000

4

Summer Forum Abstracts

Providing Interdisciplinary Team Practice Through Computer Conferencing

7

Personal Variables and Self-Assessed Critical Thinking Behaviors of Respiratory Therapists: *Is There a Relationship?*

Favorite Web Sites

8

Request for Assistance: *New Technology*

Respiratory Care Education Annual: *Call for Papers*

Submission Guidelines for *Bulletin* Articles

American Association for Respiratory Care

## Notes from the Editor

by Arthur Jones, EdD, RRT

Summer Forum, 1999 is now history. In my humble opinion, it was one of the best to date. The location was pleasant and the Forum itself was productive and beneficial for the participants. Of course, at the Education Section meeting, I made my plea for contributions for this publication. I will extend that plea now to those of you who were unable to attend. Hopefully, the result will be more submissions to the *Bulletin* over the coming year.

The Forum featured a number of excellent presentations. Among those that rated high in my book was the presentation/workshop conducted by Tom Barnes and Jackie Long-Goding on authoring test items. They described how the NBRC categorizes items and provided some practice on item-writing, with feedback. The NBRC also provided us with the opportunity to try out its new computerized testing at this year's Forum, allowing us to experience first hand what will soon confront

our graduates. These are only two examples of the NBRC's assiduous efforts to work with RC educators to provide the kind of preparation for students that will optimize their chances for success on NBRC exams.

Interestingly, I received a submission for the *Bulletin* from Sandra McCleaster, from Passaic County Community College in Paterson, NJ, that points out possible shortcomings in the operations of the NBRC with regard to reporting scores. Because the ramifications of such errors are important to us all, I have included this submission in this issue. I have also given the NBRC the opportunity to respond to the submission. Steve Bryant, NBRC executive director, graciously agreed to address her concerns, and his response is included here as well. It is my hope that those who read the submissions will benefit from them. There is no intention on our part to impugn either the NBRC or Ms. McCleaster. ■

## Notes from the Chair

by David W. Chang, EdD, RRT

*We can do no great things, only small things with great love*  
— Mother Teresa (1910 - 1997)

The 1999 Summer Forum in Phoenix, AZ, was a big success, as all presentations were well-attended. "NBRC Computerized Testing," "Adding Pizzazz To Your Lectures," and "Trends and Issues in Recruitment of Qualified Students" were just three of the many interesting and useful topics for educators. In addition, over 100 people attended the research abstract presentations this year — the highest attendance I can remember. Thanks to our sponsors (Delmar, F.A. Davis,

Mosby & W.B. Saunders, Prentice Hall-Simon & Schuster), the attendees at the abstract presentations enjoyed breakfast while learning the results and implications of many educational research studies.

Indeed, Summer Forum is a time for educators to get together and find out what is developing across the country. So is the AARC International Respiratory Congress, scheduled for December 13-16 in Las Vegas. Both of these annual meetings provide a unique opportunity to learn new things and network with your colleagues.

"Notes" continued on page 2

### 1999 Calendar Deadline

Respiratory Care Educational Annual: Paper deadline.....December 1  
AARC International Respiratory Congress.....December 13-16

"Notes" continued from page 1

However, if you were unable to attend this year's Forum, you may still sign up to serve on one or more of the following Education Section committees. Committee membership is for 2000 and 2001. Please contact the following committee chairs if you are interested in serving or finding out more about these committees.



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Practitioner of the Year Committee, Terry LeGrand, legrand@uthscsa.edu



Program Planning Committee, Tim Op't Holt, topholt@jaguar1.usouthal.edu



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## The NBRC School Score Report: How Accurate Is It?

by Sandra McCleaster, Passaic County Community College, Paterson, NJ

I'd like to share with the *Bulletin* readership a concern that I believe has significant consequences for the respiratory care educational community: namely, the accuracy of your program's NBRC school score report. I detailed my concerns at length in a recent article entitled "Keeping Tabs on Your School Score Report," which was published in the Winter issue of *Focus Journal for Managers and Educators of Respiratory Care*. In summary:

My own suspicions, along with a side-by-side comparison of several consecutive written and clinical simulation exam score reports, brought me to the realization that for three consecutive years, my school score reports had been rife with errors. My investigation revealed the following:

- Wrong graduation dates applied to graduates
- New candidates reported as repeater candidates
- Repeater candidates reported as new candidates
- Candidates from other schools misassigned to my report
- Candidates lost (apparently misassigned to another school's report)

In the process, I also came to the realization that unless exam candidates are identified by name, one might never suspect that reported information is incorrect. Indeed, it's not until *all* members of a particular graduating class are accounted for on a school score report that some errors become apparent. This means that if one or more graduates choose not to sit for an exam, errors may never come to light. At the other extreme, it is not until

the NBRC reports more new candidates under a given graduation date than you know ever existed that another type of error becomes noticeable.

It seemed unlikely to me that, as one of 400+ respiratory care educational programs, mine could be the only one showing a consistent pattern of inaccuracies. Subsequent to publication of the *Focus* article, six program directors reported to me similar suspicions with regard to the accuracy of their school score reports. This leads me to believe that this problem may be widespread. I strongly suspect that program directors don't scrutinize their school score reports — instead, applying a good faith presumption of correctness to the information provided by the NBRC.

Particularly troubling to me is the difficulty in working with the NBRC in having alleged errors investigated and/or corrected. Although the NBRC requires any suspected errors to be detailed in writing before being investigated, they do not provide official return written documentation in rectifying those errors.

To my mind, the seriousness of this situation lies in the fact that CoARC is now holding programs to threshold levels of success. Small numbers of graduates can easily skew percentages. A misassignment of even one exam candidate can put a program on the losing side of the threshold. Exam pass rates will, in large part, form the basis of re-accreditation decisions. It's frightening to think of these decisions being made based on information that has often proven to be

"NBRC" continued on page 3

"NBRC" continued from page 2

flawed. I believe it also raises some legal questions.

I feel that the educational community should appeal to the NBRC to provide the names or social-security numbers of

test-takers. This would immediately bring errors to light. And equally important, we should ask that the NBRC be more responsive in dealing with reported errors.

Any thoughts or comments? I'd appreciate hearing from my fellow pro-

gram directors about their experiences with NBRC school score reports. You can contact me at Passaic County Community College, One College Blvd, Paterson, NJ 07505-1179, (973) 684-5280, smccleaster@pccc.cc.nj.us. ■

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## School Score Reports: *The NBRC's Response*

July 20, 1999

Arthur Jones, EdD, RRT  
University of Texas  
Health Science Center of San Antonio  
7703 Floyd Curl Drive  
San Antonio, TX 78284

Dear Dr. Jones:

This is in response to your letter of July 7 regarding the manuscript you received about the NBRC's score reports to education programs. I appreciate the opportunity you have provided for the NBRC to respond to the concerns expressed in the manuscript.

While I am not aware of errors occurring in a significant number of program score reports, and we have not received a large number of contacts asserting this from programs, we may sometimes make clerical errors in processing candidate applications that can result in incorrect data appearing on individual program reports. The mistakes noted in the manuscript can certainly occur, and we need

the assistance of program directors in correcting them. Careful review of the school score reports and direct contact with the NBRC to describe any discrepancies that are noted are two things program directors can do to assist us.

Contrary to the manuscript, we are most interested in correcting any errors on these reports, and we realize the increasing importance correct data may have for programs under the proposed new CoARC standards. We can and do provide corrected documentation when errors occur, so programs should not have to "live with" an incorrect report.

As I noted at the recent Summer Forum, I will ask the Board of Trustees to again review the issue of whether or not the NBRC can provide the names of examination candidates, along with their examination results, to programs. However, I believe this may be a separate matter from correcting errors on the current school score reports. It is possible for programs to track graduate performance without having the names identified by the NBRC and, historically, the Board

has declined to provide individually identifiable results due to the potential for legal entanglements arising out of candidate privacy issues.

I hope your publication of the manuscript and this response will encourage program directors to closely review their school score reports and advise us if they encounter any questionable information. To do this, program directors may contact me; Gary A. Smith, associate executive director; or Erika Knoblock, business manager; by phone, letter, or e-mail (sbryant@nbrc.org, gsmith@nbrc.org, knoblock@nbrc.org). We will investigate any items reported and ensure that corrective action is taken. In the meantime, we will also remind the staff of the significance of school score reports and do our best to avoid data entry errors that could affect the accuracy of these reports. Thank you again for this opportunity to respond.

Sincerely,  
Steven K. Bryant  
Executive Director ■

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## Get Ready for Increased NBRC Exam Fees in 2000

by Ray Sibberson, MS, RRT, professor of respiratory care, The University of Akron

The following information was disseminated at the AACR Summer Forum in Phoenix. I thought I would summarize what I learned about the increased NBRC exam fees. As we recently learned, the fees for NBRC exams will be increasing as a result of the move to computerized testing in 2000. The CRT exam, which has been \$120, will increase to \$190. The written RRT exam will also increase from \$120 to \$190. The clinical simulation exam will increase from \$130 to \$200. The examination fees for all other exams will increase by \$70, as well. The new fee for the Pediatric Specialty exam is \$250. The CPFT exam will cost \$200, and the RPFT exam will cost \$250. These fees all take effect in 2000.

The NBRC says their costs of administering these exams and operating this system is anticipated to be \$1.75 million. They had to purchase the hardware and software for each of the offices across the country, plus rent office space and

personnel in the H&R Block offices they are using for the exams. They had to purchase their own software company to assure that they would have exclusive use of the software. They also noted that in a previous survey, 80% of respondents indicated that an additional fee of >\$50 was reasonable.

The NBRC indicated that they are working at a break-even budget. They will be using about 80 locations across the country and anticipate that there will be one to two locations per state. Each location will have three to five computers. They indicated that many other national certification programs charge around \$200, some charge up to \$400, and one (the APTA) charges about \$1000. Ours, of course, will be \$580, because although each individual exam is \$190-200, it will still take passage of all three to get the RRT.

The good part is that there will be no application deadlines; once an applicant

applies, there is a 90-day window in which to take the exam. Applicants can also change appointments one time with no penalty. School reports of graduate performance will be sent out twice a year, with an end-of-the-year summary. In the near future, schools will be able to access their school reports from the NBRC web site. Self-assessment exams will also be available on the NBRC web site. New study guides will be available this fall, with computerized sample exams. Official NBRC self-assessment exams will be offered in CBT format in a runtime version for your PC.

Candidates will have six opportunities per year to take the CRT exam, since there is a 60-day waiting period between attempts. The waiting period for other exams is 90 days. There are multiple forms of each exam, and the information is tracked so candidates will not be

"Increased Exam Fees" continued on page 4

“Increased Exam Fees” continued from page 3

repeating the same exam. In fact, even in the same room, two candidates will likely have different forms of the same exam. Even if the same exact exam is taken by two persons in the same room, it would

be difficult to copy from someone else because the questions display in a random fashion. The candidate’s photo is taken at the beginning of the exam and displays on-screen during the entire test, so observers will be able to see if anyone has switched seats during a test.

Probably the best part is that candidates find out immediately if they have passed the exam. They receive a printed copy of the results (with photo) when they are finished. ■

## Summer Forum Abstracts

*Survey and analysis of faculty salaries in respiratory care programs in the United States*

by Mike Tissue, MS, RRT, Austell, GA

Few published surveys have addressed faculty salaries in respiratory therapy programs in the United States. The purpose of this study is to provide descriptive survey for salary levels of respiratory therapy educators in the United States.

A one page survey instrument was developed to address the research question: What is the current status of salary levels for faculty in respiratory therapy programs in the United States? Four volunteer respiratory therapy educators were sent the initial draft of the survey instrument as a pilot trial. The survey was mailed to 314 respiratory therapy programs in the United States that offer an

associate degree or greater. A second copy of the survey instrument was mailed as a follow-up to increase the response rate.

Of 309 programs that could be included in the total sample and after correcting for closures, 180 surveys were returned for an overall response rate of 58%. There were 144 (80%) associate and 36 (20%) baccalaureate programs. All salary figures are adjusted to a 12-month base. The mean (standard deviation) of salaries by rank across all programs nationally was: \$45,908 (13,182) for instructors, \$50,951 (9,696) for assistant professors, \$56,320 (10,614) for associate professors, and \$69,034 (16,055) for full pro-

fessors. Classified by faculty degree, salaries were: associate \$39,167 (11,500), bachelor \$47,269 (13,298), master \$55,089 (12,510), and doctorate \$66,046 (15,909). Classified by faculty position, salaries were: program director \$58,542 (14,342), DCE \$49,204 (12,573), and faculty \$45,498 (14,798). The mean annual 12-month salaries for AS programs is \$51,361 (15,246) and for BS programs is \$53,898 (13,192).

The response rate with the survey was adequate to provide national salary data for respiratory therapy educators that can serve as a benchmark for 1999.

Annual 12-month salary by PROGRAM LEVEL		
	Associate	Baccalaureate
Mean	\$51,361	\$53,898
Standard deviation	\$15,246	\$13,192

Table 4.7: Annual 12-month salary by program level.

HOSPITALRCPs	Department Directors	Therapists
	\$56,709	\$47,212
EDUCATORS	Program Directors	Faculty Instructors
	\$58,542	\$45,498

Table 5.1: National annual salary comparison between hospital respiratory therapy department directors and program directors in educational facilities and between respiratory therapists in hospitals and faculty instructors in educational facilities projected from 1992 AARC study.

## Providing Interdisciplinary Team Practice Through Computer Conferencing

by Ellen A. Becker, PhD, RRT; Anne Hiller Scott, PhD, OTR, FAOTA; Sharon Gutman, PhD, OTR; Linda Zelski, MA, RN, CS; Stacy Jaffee-Gropack, MS, PT; Camille Kiefer, RN, RPAC; Luis Riquelme, MS, CCC-SLP; Mary McMaus, PhD, RPh; Evelyn Nieves, MSW, CSW

Interdisciplinary teamwork is essential for quality health care delivery; however, little in the respiratory care literature addresses interdisciplinary team training. The researchers tested whether computer conferencing could support student interdisciplinary team practice

and identified RC student attitudes toward interdisciplinary teamwork.

A total of 176 students from seven different health professions’ programs (25 RC students) participated. Student teams with membership from three or four different professions jointly developed a

patient care plan over a four-week period. Pre- and post-survey data were obtained from four different measures.

A distance education measure indicated that RC students had positive views

“Computer Conferencing” continued on page 5

“Computer Conferencing” continued from page 4

toward each scale item prior to the project with neutral scores afterwards. The computer conferencing evaluation revealed that RC students were adequately trained in using the conferencing system. However, they had trouble accessing the system and felt the project should not be continued in the future. Possible contributing factors to this outcome may have been the number of simultaneous computer-based assignments coupled

with occasional failures of the conferencing system. On the Interdisciplinary Education Perception Scale, the majority of RC students felt positive about most of their interdisciplinary beliefs pre- and post- project. The modified Health Team Stereotype Scale yielded stereotypes. Respiratory care students rated themselves higher than nurses on 12 of the 23 items. Conversely, nursing students rated themselves higher than RC professionals on 15 items. A comparison of the pre- and post- measures of each discipline was

stable, except that RC students found nurses more open-minded and more comprehensive after the study.

Overall, the project succeeded in providing “in class” interdisciplinary practice and identification of RC interdisciplinary attitudes and beliefs. Students negotiated the technology; however, they preferred in-person interactions. Although students didn’t perceive computer conferencing as a better way to collaborate, conferencing facilitated effective communication across disciplines.

**Attitude toward Distance Education Pre- and Post Project\***

Distance Education Scale Items (Scale Range 1-7)	Significant Pre- Project Items Differing from Neutral <sup>†</sup> N = 22 (Mean/Std Error Mean)	Significant Post Project Items Differing from Neutral <sup>†</sup> N = 22 (Mean/Std Error)
interesting-boring		
affordable-costly		
useful-useless	2.48/.31 <sup>†</sup>	
appropriate-inappropriate	2.65/.26 <sup>†</sup>	
time saving-time consuming		
creative-unimaginative	2.52/.34 <sup>†</sup>	
successful-unsuccessful	3.00/.29 <sup>†</sup>	
practical-impractical	2.96/.35 <sup>†</sup>	
non-threatening-threatening	2.59/.33 <sup>†</sup>	
active-passive	2.96/.34 <sup>†</sup>	
simple-complex		

\* 7 point Likert scale, 4 = neutral value; Cronbach’s alpha = .89

† One sample t test, 4 = test value, \_ = .01; Blank cells are not significant

**Significant Respiratory Care Interdisciplinary Beliefs**

Beliefs from Interdisciplinary Education Perception Scale*	Pre-Project Beliefs Differing from Neutral, N = 23 (Mean/Std Error)	Post-Project Beliefs Differing from Neutral, N = 22 (Mean/Std Error)
Individuals in my profession are well-trained.	4.13/.0095 <sup>†</sup>	3.71/.17 <sup>†</sup>
Individuals in my profession are able to work closely with individuals in other professions.	3.96/.13 <sup>†</sup>	3.57/.19 <sup>†</sup>
Individuals in my profession demonstrate a great deal of autonomy.	3.91/.12 <sup>†</sup>	3.77/.15 <sup>†</sup>
Individuals in other professions respect the work done by my profession		
Individuals in my profession are very positive about their goals and objectives.	3.83/.21 <sup>†</sup>	3.50/.18 <sup>†</sup>
Individuals in my profession need to cooperate with other professions	4.24/.15 <sup>†</sup>	3.73/.18 <sup>†</sup>
Individuals in my profession are very positive about their contributions and accomplishments.	4.00/.15 <sup>†</sup>	
Individuals in my profession must depend upon the work of people in other professions.	3.87/.22 <sup>†</sup>	
Individuals in other professions think highly of my profession.		
Individuals in my profession trust each other’s professional judgment	3.70/.15 <sup>†</sup>	3.77/.17 <sup>†</sup>

Individuals in my profession have a higher status than individuals in other professions.		
Individuals in my profession make every effort to understand the capabilities and contributions of other professions.	3.70/.25 <sup>□</sup>	
Individuals in my profession are extremely competent.	3.86/.15 <sup>□</sup>	3.68/.18 <sup>□</sup>
Individuals in my profession are willing to share information and resources with other professionals.	4.39/.14 <sup>□</sup>	3.77/.22 <sup>□</sup>
Individuals in my profession have good relations with people in other professions.	4.00/.17 <sup>□</sup>	
Individuals in my profession think highly of other related professions.	3.86/.17 <sup>□</sup>	3.45/.18 <sup>□</sup>
Individuals in my profession work well with each other.	4.26/.13 <sup>□</sup>	3.86/.19 <sup>□</sup>
Individuals in other professions often seek the advice of people in my profession.	3.52/.24	

\* 5 point Likert scale, 1 = strongly disagree, 3 = neutral value, 5 = strongly agree; Cronbach's alpha = .86

<sup>□</sup> One sample t test, 3 = test value, \_ = .05; Blank cell are not significant

**Significant Respiratory Care and Nursing Student Stereotypes of One Another\***

Items from MTSS † (Scale Range 1-7)	RC's Pre-Project RN/RC Attitudes  RN Mean/RC Mean (Std Error Mean)	RC Post-Project RN/RC Attitudes  RN Mean/RC Mean (Std Error Mean)	RN Pre-Project RN/RC Attitudes  RN Mean/RC Mean (Std Error Mean)	RN Post-Project RN/RC Attitudes  RN Mean/RC Mean (Std Error Mean)
tactful-rude	3.71/2.33* (.47)	4.00/2.21* (.54)		
impersonal- interpersonal				
social- unsocial	4.19/2.33* (.52)	3.90/2.25* (.61)	2.28/3.22* (.34)	2.18/2.75* (.26)
independent- subordinate				2.21/2.76* (.25)
understand- confusing	3.50/2.25* (.36)	3.10/2.10* (.38)	1.94/2.68* (.26)	1.97/2.66* (.24)
kind- cruel	4.05/2.42* (.42)	3.60/2.30* (.52)		
professional- nonprofessional			1.83/2.47* (.26)	
active- passive			1.74/2.23* (.20)	
unskilled- skilled				
well-mannered- dominating	4.24/2.62* (.32)	4.35/3.05* (.61)		
narrow minded- open minded				5.79/5.03* (.26)
competent- incompetent	3.25/2.50* (.25)		1.80/2.40* (.22)	1.93/2.69* (.23)
cooperative- competent	3.37/2.11* (.28)	3.40/2.20* (.51)	2.06/2.59* (.19)	2.04/2.82* (.31)
intelligent- unintelligent	2.86/2.33* (.20)			1.83/2.52* (.24)
educated- uninformed		2.80/1.95* (.33)		1.73/2.27* (.20)
narrow- comprehensive	3.79/5.26* (.45)		5.42/4.75* (.20)	5.48/4.70* (.28)

idealistic-realistic			5.32/4.62* (.29)	5.20/4.20* (.31)
attentive-inconsiderate		3.70/2.10* (.46)		
conservative-innovative				
curious-indifferent	3.90/2.35* (.33)	3.60/2.30* (.44)		
negligent-responsible			6.31/5.49* (.26)	5.85/5.26* (.26)
inexperienced-experienced			6.19/5.75* (.20)	
important-insignificant			1.33/2.42* (.30)	1.62/2.45* (.21)

\*Significant paired samples t test,  $\alpha = .05$

□Health Team Stereotype Scale, 7 point Likert scale, 4 = neutral value, Cronbach's alpha = .65; Blank cells are not significant

RC = Respiratory Care Students,  $N = 21$

RN = Nursing Students,  $N = 29$

## Personal Variables and Self-Assessed Critical Thinking Behaviors of Respiratory Therapists: Is There a Relationship?

by Lynda Thomas Goodfellow, EdD, RRT, Georgia State University, Atlanta, GA

The purpose of this study was to determine to what extent personal variables such as number of years of experience in the profession, level of education, gender, and age affect the self-assessed critical thinking behaviors of respiratory therapists. Mishoe's (1995) identification of critical thinking skills served as the theoretical framework for this study. Mishoe (1995) determined that critical thinking in respiratory care practice involves the abilities to prioritize, anticipate, troubleshoot, communicate, negotiate, reflect, and make decisions.

The survey instrument used was found to be reliable by Cronbach's alpha (0.94) (Goodfellow, Valentine, & Holt, 1999). A nationwide random sample of RRTs was drawn from a membership list obtained from the AARC. For this study, respiratory therapists were categorized by the following job responsibilities: Assistant Technical Director, Supervisor, Staff

Therapist, and Rehabilitation/Home Care Therapist. A total of 1,971 surveys were mailed, with two follow-up mailings. A response rate of 51% was obtained ( $n = 980$ ). Respondents were mostly female (61%), and the mean age was 41 years ( $SD = 8.53$ ). Most of the respondents held an associate's degree (57%), followed by a bachelor's degree (30%). Years of experience in respiratory care ranged from 1 to 39 years, with a mean of 15 years ( $SD = 8.12$ ). Most of the therapists surveyed worked in a traditional hospital setting (87%). Response bias for non-respondents was not determined. Data were analyzed using SPSS 8.0 via bivariate correlations, both Pearson and Spearman's Rho. Independent t-tests were used for analysis of dichotomous variables.

From a total of 28 tests performed, four were found to be significant ( $p < .01$ ). These included troubleshooting and

years of experience ( $p = .000$ ), troubleshooting and gender ( $p = .000$ ), decision making and years of experience ( $p = .000$ ), and anticipating and years of experience ( $p = .000$ ).

Personal variables that are important to the self-assessed critical thinking behaviors of respiratory therapists include years of experience and gender. Age and educational level were found to have no impact on the self-assessed critical thinking behaviors in respiratory care practice. Much can be learned from investigations into particular aspects of critical thinking in respiratory care practice. Further research is needed to understand the relationship between the component pieces and the overall incidence of critical thinking in respiratory care practice.

This project received partial funding from the OT Network on Smoking and Wellness. ■

## Favorite Web Sites

For work: <http://www.refdesk.com>

This is one of the most current and comprehensive web sites for providing useful references. Some of them are very handy at work — a calendar, dictionaries (medical, computing, high-tech, Webster), encyclopedia, web search, area

code finder, etc. There are hundreds of useful sources of online information via hyperlinks. For example, the Medline link takes you to the National Library of Medicine where you can look up medical information with free search engines such as PubMed or Internet Grateful Med.

What if you are too busy working inside and wonder what the weather conditions are outside? (Remember the heat waves in July and August?) You can find that out too. You enter the postal zip code and refdesk.com gives the local temperature,

"Web Sites" continued on page 8

“Web Sites” continued from page 7

heat index, humidity, dew point, wind, barometric pressure, visibility, sunrise, sunset, moon rise, and moon set.

Since there are literally hundreds of sites that are considered useful, the advantage of [refdesk.com](http://refdesk.com) is that it provides the hyperlinks to these sites. It saves you time and effort when it comes to keeping up with the sites you use often. For its currency and comprehensiveness, this site is easily the best reference site in 1999. (Grade = A+)

### For fun — IQ versus EQ

**Intelligence Quotient:** <http://www.iqtest.com/welcometest.html>

This web site gives you a free, 13-minute IQ test with score. Of course, you have an option to pay for a “big online report” based on analysis of your answers to the IQ test. It’s an interesting test if you have not taken one before. If you want to try it, allow yourself at least 20 minutes of free time. That means no interruptions of any kind. Otherwise, you may seem to be less intelligent than you

are (i.e., a lower IQ score).

The following is a description and interpretation of IQ score from this web site:

A General Intelligence Quotient Score (IQ Score) is a statistically derived number that indicates relative and comparative abilities which can be used to obtain academic skills and knowledge. You have hundreds of specific mental abilities. Some of these abilities can be measured accurately. Some of these measurements can be reliable predictors of an individual’s academic achievements. Though an IQ test measures only a few of a human’s mental abilities, these few abilities are targeted for measurement because they are well known to positively correlate highly to many other human abilities. How high you score in one of these measured abilities will strongly indicate how high you would be expected to score on the unmeasured abilities.

Statistically, the following statements are true about IQ scores obtained by taking this test:

- An IQ of 100 is higher than 50% of all persons taking this test.
- An IQ of 110 is higher than 75% of all

persons taking this test.

- An IQ of 120 is higher than 93% of all persons taking this test.
- An IQ of 130 is higher than 98% of all persons taking this test.

(Grade = A. May not be repeated for credit)

**Emotional Quotient (EQ):** <http://www.utne.com/azeq.tmp>

This website provides a simple test to assess your emotional quotient (EQ). What is EQ? EQ evaluates the way you deal with people and situations. How does it differ from IQ? This web site explains, “Emotional intelligence gives you a competitive edge. Even at Bell Labs, where everyone is smart, studies find that the most valued and productive engineers are those with the traits of emotional intelligence — not necessarily the highest IQ. Having great intellectual abilities may make you a superb fiscal analyst or legal scholar, but a highly developed emotional intelligence will make you a candidate for CEO or a brilliant trial lawyer.”

(Grade = A. May not be repeated for credit.) ■

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## Request for Assistance: New Technology

Susan Blonshine is writing a “clinical perspectives” article for *AARC Times* on new technologies in 1999 and would like

to know what new technology this year has had the greatest impact on your specialty area and why.

Please respond by October 10 to Susan by email ([sblonshine@aol.com](mailto:sblonshine@aol.com)) or fax (517-676-7018). ■

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## Respiratory Care Education Annual: Call for Papers

The Education Section of the AARC will publish Volume 9 of the *Respiratory Care Education Annual* in the spring of 2000. The annual is a refereed journal committed to providing a forum for research and theory in respiratory care education and is listed in the *Cumulative Index to Nursing and Allied Health Literature*.

The section invites educators to submit papers for consideration. Preference will be given to papers that emphasize

original research, applied research, or evaluation of an educational method. Other topics that may be considered include interpretative reviews of literature, educational case studies, and point of view essays. Submissions will be reviewed based on originality, significance and contribution, soundness of scholarship (design, instrumentation, data analysis), generalizability to the education community, and overall quality of the paper.

Deadline for submission is December 1. Papers should be approximately six to ten pages in length and should follow the guidelines in the *Publication Manual of the American Psychological Association, 4th Edition*. Abstracts should not exceed 120 words. Submissions should be mailed to AARC Education Annual, 11030 Aables Lane, Dallas, TX 75229-4593. ■

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## Submission Guidelines for Bulletin Articles

All section members are encouraged to share information about their programs through articles in the *Bulletin*. Here are our guidelines for submission: **Article length:** *Bulletin* articles may be between 500 and 1,000 words.

**Format:** In addition to a paper copy, all articles should be submitted on a 3-inch floppy disk saved in Microsoft Word or TEXT ONLY (ASCII) formats, or e-mailed to the editor in one of those

formats.

**Deadlines:** All articles must be submitted to the editor according to the following schedule of deadlines—

- Jan.-Feb.: December 1
- Mar.-April: February 1
- May-June: April 1
- July-Aug.: June 1
- Sept.-Oct.: August 1
- Nov.-Dec.: October 1

**Article Review:** All authors may review

a copy of their article before it goes to press. If you would like to review a copy of your article, please include a FAX number when you submit it to the editor. It is the responsibility of the author to 1) request the opportunity to review the article before it goes to press and 2) contact the editor by the stated deadline if any changes need to be made before the article goes to press. ■