



EDUCATION NEWS

Michael Kost, CRNA, DNP, MSN, MS

Bette Wildgust, CRNA, MS, MSN

Joan Woods, CRNA, MS

A Model for Utilization of Academic Resources: The Philadelphia Area Nurse Anesthesia Educational Programs' Shared Curriculum Consortium

Educational consortiums possess significant academic and financial benefits. A faculty shortage has had an impact on subspecialty educational programs including nurse anesthesia. This column describes a collaborative "consortium" model of 3 individual nurse anesthesia educational programs located in the Philadelphia, Pennsylvania, area. The Philadelphia Area Nurse Anesthesia Educational Programs' Shared Curriculum Consortium

provides high quality, didactic education; decreased overall program administrative costs; and offers each participating program the ability to explore opportunities for continued growth.

Keywords: Collaborative efforts, consortium, nurse anesthesia education, shared teaching model.

The benefits of collaborative partnerships are well established in the literature. The College of Nursing at Eastern Tennessee University, Knoxville, Tennessee, developed several successful educational/clinical partnerships to increase the number and quality of professional nurses in its area.¹ Successful consortium development is not restricted to educational programs. Regional nursing organizations have demonstrated successful implementation of educational consortiums as well. The Maternal Newborn Nurse Professionals of Southeastern Michigan is an organization of nurses from more than 30 hospitals. Through its committee structure, it implemented a comprehensive, cost-effective educational program for new nurses, or nurses who are cross trained, resulting in improved resource utilization in the region.² Rice³ reported on a successful critical care consortium resulting in maximization of continuing educa-

tion dollars for critical care nurses. The critical care consortia approach enhanced program quality, reduced costs, promoted positive participant interaction, and strengthened community spirit.

There are currently 109 nurse anesthesia educational programs in the United States,⁴ many of which are dispersed throughout a wide geographical area. Pennsylvania has a disproportionately large number of nurse anesthesia educational programs when compared with other states. A total of 13 accredited nurse anesthesia programs currently exist within Pennsylvania's borders, with 6 concentrated in the southeastern portion of the state. Accredited Pennsylvania nurse anesthesia educational programs are presented in the Table.

Maintaining competent and dedicated didactic faculty members is particularly challenging in any nurse anesthesia educational pro-

gram. Financial constraints limit the ability of some programs to retain competent didactic faculty members. In the Philadelphia area, it is common that per diem clinical reimbursement rates for a Certified Registered Nurse Anesthetist (CRNA) far outweigh didactic instructor compensation rates. Additionally, many didactic anesthesia instructors do not receive reimbursement for preparation time required for course development, test construction, test review, and audiovisual formatting. An equally challenging barrier in maintaining a qualified pool of didactic anesthesia instructors occurs when a clinical staff member (CRNA or anesthesiologist) is responsible for relieving a didactic instructor from his or her daily operating room duties to teach class. Practitioner stress, excessive workload, staff shortages, and CRNA burnout also contribute to didactic instructor shortages.⁵

Allegheny Valley Hospital/La Roche College School of Nurse Anesthesia
Crozer Chester Medical Center/Villanova University Nurse Anesthesia Program
Drexel University Nurse Anesthesia Program
Excelsa Health School of Anesthesia
Frank J. Tornetta School of Anesthesia at Montgomery Hospital//La Salle University Nurse Anesthesia Program
Geisinger Health System/Bloomsburg University of Pennsylvania Nurse Anesthesia Program
Hamot Medical Center School of Anesthesia/Gannon University
Nazareth Hospital School of Nurse Anesthesiology
Thomas Jefferson University Nurse Anesthesia Program
University of Pennsylvania School of Nursing Nurse Anesthesia Program
University of Pittsburgh School of Nursing Nurse Anesthesia Program
Wyoming Valley Health Care System/University of Scranton School of Nurse Anesthesia
York College of Pennsylvania/WellSpan Health Nurse Anesthetist Program

Table. Accredited Pennsylvania Nurse Anesthesia Educational Programs

Despite these barriers, nurse anesthesia program directors are under continuous pressure to recruit, maintain, and replace didactic faculty members on a regular basis.

With the increased concentration of nurse anesthesia educational programs within a 24-five mile radius in southeastern Pennsylvania, several nurse anesthesia program directors devised an innovative shared curriculum strategy to enhance their didactic anesthesia instructor pool, improve the quality of didactic courses, decrease overall program costs, and improve didactic performance evaluations.

History of the Shared Curriculum

In 1994, a meeting between 2 program directors was held to discuss the possibility of “sharing” didactic instructors to address their shortage of qualified instructors and to decrease overall didactic workload. Traditionally, each individual nurse

anesthesia program maintained its own independent core of didactic faculty. An initial curriculum review revealed that several courses could be incorporated into a shared curriculum format. When fully implemented, the planned shared curriculum approach would redistribute overall didactic responsibilities for each program, reduce overall program administrative responsibilities, increase efficiency, and reduce individual program didactic course redundancy by approximately 30%. The initial didactic anesthesia courses scheduled for the trial phase of the shared curriculum included geriatrics, the anesthesia machine, cell physiology, anesthesia considerations for the renal patient, and medical legal implications for the nurse anesthetist.

At the end of the spring 1994 semester, the concept of the shared curriculum was well received by both programs and hospital administrations. In 1995, a third nurse

anesthesia program entered into the shared curriculum cohort. This addition resulted in the availability of several didactic instructors for cardiovascular anesthesia, pharmacology, and vascular surgical course instruction. A fourth nurse anesthesia educational program joined the shared curriculum and provided respiratory physiology instructors. The addition of the 2 programs to the didactic efforts strengthened the shared curriculum and further established cooperative learning efforts. Formalization of the shared curriculum approach culminated after a June 1995 full-day planning meeting, which included a didactic curriculum integration workshop. This meeting led to the amalgamation of a shared didactic instruction format within the 4 individual nurse anesthesia programs’ master class schedules. While each program maintained its own identity, the shared curriculum meeting resulted in maximal utilization of a shared didactic instructor pool without exhausting individual program resources. The shared curriculum approach is not a rigid, fixed system. It remains flexible, allowing nurse anesthesia programs with specific needs the ability to share educational resources with any or all of the participating programs. It should be noted that 1 nurse anesthesia educational program withdrew from the shared curriculum format in 2004 secondary to a move into a new university setting.

Requirements for Consortium Implementation

Implementation of the didactic shared curriculum format resulted in an innovative strategic approach that resolved faculty shortages. Continuous review and ongoing educational collaboration is required to ensure success. General requirements associated with maintaining the shared curriculum consortium include:

- Joint curriculum meetings

- Didactic evaluation, analysis and course review
- Evaluation of methods to identify competent didactic instructors
- Managing ongoing contemporary issues (classroom space, speaker time constraints, coordination of scheduling efforts)

Curriculum Meetings

A curriculum meeting is held twice per year at the conclusion of the fall and spring semesters (December and May). Representation from each participating nurse anesthesia educational program includes the program director, assistant program director, program coordinator/administrative assistant, and 1 or 2 nurse anesthesia students. The curriculum meetings are chaired by 1 elected program director on a rotating basis. The chairperson presents each course taught from the previous semester for collective review. Each program director then presents his or her students' summarized didactic course evaluations for discussion. Participating student representatives provide additional collective input. Recommendations for didactic course enrichment are also presented and reviewed.

At the conclusion of the didactic course review, policy and procedures are in place and enforced based on the following criteria:

- If the course evaluations and student feedback are positive, the didactic instructor is retained for the following year.
- If course evaluations and student feedback contain recommendations for course enhancement, the didactic instructor is counseled by 1 program director nominated by the group. Recommendations to enhance course quality are presented to the faculty member.
- If course evaluations and student feedback are below average or unacceptable, the didactic instructor is counseled and mentored by 1 elected program director. Mandated requirements are implemented that

will result in enhanced didactic course quality. If course quality does not improve over a 2-year period, the didactic faculty member is not invited back to participate in the shared curriculum the following year.

Didactic Course Evaluations

At the completion of each semester, didactic course evaluations are completed by the nurse anesthesia students from each program. These evaluations are entered anonymously into a centralized computer system, summarized and forwarded to each program director before the scheduled curriculum meeting. Didactic course evaluations are used as a conduit for implementing effective didactic curricular change.

Identifying Competent Didactic Instructors

When a didactic vacancy exists due to attrition, turnover, or faculty replacement, the program directors elect 1 shared curriculum consortium committee member to facilitate the search for a new faculty member. The committee member selected to chair the search for a new didactic faculty member functions as a mentor to the potential faculty member in his or her new role as a didactic instructor.

Contemporary Issues

As nurse anesthesia programs continue to evolve, enrollment has risen significantly. Following this trend, all of the nurse anesthesia educational programs currently participating in the shared curriculum consortium have increased their collective enrollments. Previous shared curriculum consortium class sizes of 25 to 35 students in 1994 have increased to more than 65 students. The increase in class size resulted in physical space limitations for didactic class instruction. To manage the space limitations, a task force was charged with evaluating a variety of web-enhanced distance education platforms to

incorporate into the shared curriculum consortium. In the spring of 2007, OnSync Technology (Digital Samba, York, Pennsylvania) was selected to provide a browser based web-conferencing platform. The use of synchronous audio and video format allows each program the ability to house its own student body at its respective institution, while the didactic class is broadcast from a separate physical location. Use of this technology has virtually eliminated physical space limitations.

Summary

The nurse anesthesia educational programs shared curriculum consortium approach was born out of necessity in 1994. Since its inception, it has yielded an effective didactic educational mechanism that continues to evolve. The nurse anesthesia educational programs participating in this venture maintain a collegial relationship. The shared curriculum consortium approach to didactic education remains successful. The current cohort of 3 nurse anesthesia educational programs implements and initiates changes based on formal evaluation tools, student feedback, monitoring program outcomes while addressing contemporary issues that develop over time. The initial contact between 2 nurse anesthesia program directors in 1994 continues to provide specific benefits and opportunities for growth. Demonstrated advantages include an increase in the number of CRNA program graduates who have directly participated and observed the effectiveness of the shared curriculum approach. A decrease in didactic instructor and overall administrative costs associated with each program provides an opportunity to explore other avenues for continued program growth. Since the inception of the shared curriculum consortium, didactic instructor costs have decreased by 66%, when all 3 programs participate, and 50%,

when 2 programs participate. Through the process of collaboration, quality of didactic instruction has increased.

Additional verification of the overall success of the Philadelphia area shared curriculum model has been validated by the positive feedback shared with each individual program during Council on Accreditation of Nurse Anesthesia Educational Programs onsite reviews. Onsite reviewers cited the benefits of the overall conceptual design of the consortium, the demonstrated advantages associated with utilizing such a model, and the potential for continued growth and success.

REFERENCES

1. American Association of Colleges of Nursing. AACN Issue Bulletin. Using Strategic Partnerships to Expand Nursing Educational Programs. October 2002. <http://www.aacn.nche.edu/Publications/Issues/Oct02.htm>. Accessed December 1, 2009.
2. Harris KT, Wilson CA, Sheppard Brown NL, Keys L, Wenz C, Mendler V. A perinatal education consortium: improved resource utilization. *J Obstet Gynecol Neonatal Nurs*. 1999;28(5):486-492.
3. Rice V. The critical care consortium: maximizing continuing education dollars. *Crit Care Nurs Clin North Am*. 2001;13(1):25-34.
4. Council on Accreditation of Nurse Anesthesia Educational Programs. Accredited Nurse Anesthesia Educational Programs. <http://webapps.aana.com/Ac>

[creditedPrograms/accreditedprograms.asp](http://www.aana.com/AccreditedPrograms/accreditedprograms.asp). Accessed: September 24, 2009.

5. Alves SL. A study of occupational stress, scope of practice, and collaboration in nurse anesthetists practicing in anesthesia care team settings. *AANA J*. 2005;73(6):443-452.

AUTHORS

Michael Kost, CRNA, DNP, MSN, MS, is program director at Frank J. Tornetta School of Anesthesia at Montgomery Hospital/La Salle University Nurse Anesthesia Program, Norristown, Pennsylvania.

Bette Wildgust, CRNA, MS, MSN, is program director at Crozer Chester Medical Center/Villanova University Nurse Anesthesia Program, Upland, Pennsylvania.

Joan Woods, CRNA, MS, is program director at Nazareth Hospital School of Nurse Anesthesiology, Philadelphia, Pennsylvania.