

Title : LESSONS LEARNED IN AN EVOLVING CPR TRAINING CENTER  
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**Introduction.** Anesthesiologists face an almost insatiable demand for teaching cardiopulmonary resuscitation. Nurses and doctors, even anesthesiologists, often perform below acceptable standards (1), and there is an increasing clamor for formal life support training for students in medicine, dentistry and nursing. Interest in CPR has spread to many groups of public spirited citizens who are not in the health professions. All this confronts us with an educational task which is formidable in both size and complexity.

At Loma Linda University a voluntary, each-department-for-itself approach to CPR training proved incapable of doing the job. In February 1978 the University established a new hospital department titled "CPR Training and Evaluation Center". The Center occupies 1860 square feet of space for classroom, offices, and practice laboratory. It is staffed by a part time medical director and full time secretary and instructors. On April 20, 1979 the Center had 514 trainees in training and had trained 1786 basic providers, 94 advanced providers, 135 basic instructors and 43 advanced instructors. It had recertified 37 basic providers and 7 basic instructors.

**Organization and Methods.** Successes and failures in the Center have led to its current modus operandi:

1. To maximize accessibility, the Center is open from 9:00 a.m. to 9:00 p.m. most days, with special advanced programs scheduled on Sundays.
2. For the convenience of trainees, teaching is provided in a modular system. Basic Life Support is taught in two modules of two hours each, with unlimited time between modules for supervised practice in the lab. Advanced Life Support is taught in six modules. Long exhausting sessions are avoided.
3. The standardized CPR techniques, teaching material and performance tests published by the American Heart Association (2,3) are used uniformly. All trainees aim for certification, which requires passing a written and performance test on one-and two-person CPR, infant CPR, and management of obstructed airway. There has been rigorous insistence that each trainee, regardless of background must reach high performance standards.
4. Since in this training technical skills carry more weight than cognitive knowledge it has proved possible to mix trainees of diverse backgrounds. Professors of medicine sit in the same class with student nurses.
5. Voluntary teaching personnel are rarely

used: Full time and part time instructors are adequately salaried. Physicians seldom serve as paid instructors. Non-physician instructors, most of them respiratory therapists, have proved effective and are well accepted. Success in teaching depends more on personal attributes than on professional background.

6. The Center aims to wholly support itself from tuition fees, at present \$16 for Basic Life Support, \$125 for Advance Life Support. Income has not yet reached the break-even point. Utilization is steadily increasing without active promotion in the community.

7. University professional schools, including medicine, dentistry, nursing, and allied health professions, require basic certification for all their students. Under contract the Center provides training for employees of the nearby Veterans Administration Hospital.

8. An identifiable geographic location has proved important for the Center. It serves as an information source for faculty and equipment, including projectors, mannequins and monitors are left set up, continually ready for use.

9. Teaching equipment has been procured from Laerdal. Constant use has revealed defects in design and materials, and improvements are currently being sought.

10. After final testing and certification all trainees complete an evaluation form. The modular teaching system is more acceptable to trainees than prolonged, tiring sessions which are hard to schedule. Trainees appreciate the opportunity to practice under supervision before taking the final test.

11. Our current hospital staff rules require recertification every year. Trainees originally certified through our modular training system retain more and are more easily recertified than those trained in other ways.

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**References.**

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3. A Manual for Instructors of Basic Cardiac Life Support, A.H.A., Dallas, Texas, 1977.