"If I am not at the center of things — where am I?" This is the title of an article in Teacher Magazine, February 1974, by Robert Geiser,¹ and was one of the first questions that came to mind when grappling with the concept of the "open classroom." Physical surroundings of any class in school or hospital may appear open, but learner reaction and behavior is the best index as to whether it is in fact, open! My experiences in nursing indicate different approaches to providing care: task oriented; individualized; team oriented; total patient care. All of which have been applied in areas of specialty. Each alters the structure by which care is provided but does not affect how the care is rendered. I have seen nurses change the order of what they do but not how they do it. The instructor/teacher carries the major burden for producing change. Success in introducing new methodology demands a role change and great personal commitment.

After reading Silberman's Crisis in the Classroom, I realized how limiting the traditional system of classes is to a student, whether one with a desire to learn or one with a learning disability. I define the traditional class as "happenings between the teacher and student with a little learning of subject matter taking place in the interim." How does a person go about changing this process? First, you, the instructor, need a specialized preparation in continuing education. I found such background and the help at Millersville State College, Millersville, Pennsylvania, through the expertise of Dr. Walter Kreider. For a full semester, I followed Professor Kreider through the childhoods of the United States, Russia, China, India, Japan and England. Insight concerning philosophies giving rise to educational systems and the educators who have made impact on time had profound influence on my approach to the application of adult education in the hospital world. Dr. Robert Thompson, Bradley University, Peoria, Illinois, further influenced my thoughts regarding the effectiveness and/or ineffectiveness of compulsory program attendance.

"Opening" the hospital classroom is not so different from the "open" class many parents hear their children talk about. The hospital open class is characterized by basic inherent qualities.

1. It is humanistic, allowing each person to plan for his own learning within
guidelines; self-evaluating within a framework.
2. It allows "full retention" learning by each person despite the limitations of time, space, and person. This is enabled by sequential studies geared to the pace of the learner.
3. It frees the teacher for more concentrated personal contact as well as to tutor when requested by the individual learner.
4. It is organized and planned from the most basic in learning to the most advanced in a particular course of study.
5. It utilizes a variety of methods of instruction, one to one, group, literature, audio-visual hard and software, practice modules, demonstration and performance centers.
6. It permits the student to evaluate the learning experience and become part of the change taking place.

WHY OPEN THE HOSPITAL INSERVICE CLASSROOM?

What program essential to patient care should I strive to make more effective? What program was in a rut, considered a drag by learners, yet was attended for monetary and evaluative incentive? The answer was Cardiopulmonary Resuscitation. Required every six months and "performed" for all shifts, I felt exhausted at the end of programs. Exhaustion, coupled with the ambivalence of the groups spells total disaster for any type of learning atmosphere. Clearly more active participation should replace "show, tell and do." Teacher and learners each had their reasons for somehow changing the traditional class for this program:
1. Intensive Care Unit and Emergency Room nurses did not want to practice (Cardiopulmonary Resuscitation) with other hospital personnel.
2. Each level of personnel was expected to achieve different levels of performance.
3. Goals of Cardiopulmonary Resuscitation were basically the same. Recognition of signs and symptoms of cardiopulmonary arrest and effective practice appropriate to the personnel level of functioning.

Prior to the new plan, cardiopulmonary resuscitation consisted of film or filmstrip with lecture and practice periods scheduled over a 24-hour period convenient to all shifts every three months. A "mandatory" policy of attendance of all hospital personnel every six months was in effect. The incentive was monetary gain with attendance recorded for merit increase evaluations.

To enable a more creative approach the backing of Administration, Nursing, Medical and Management Departments was essential. Basic behavioral objectives would provide direction to the program.

MECHANICS

In order to begin to adapt this concept to nursing, I re-examined my purpose, goals, attitudes and beliefs relative to my current mode of program design. Next, I took into consideration, the size of the room for inservice education, budgeted the materials required, the nature and preparation of the available personnel and their dedication. How could I design a better way of teaching cardiopulmonary resuscitation? A bit more structured than England's Summerhill, I developed guidelines because present generation adults are usually not conditioned to the freedom of exploration as are the children who are born into freedom and later in their schooling, run into oppression while trying to express freedom.

Consequently, guidelines are listed on the table inside the door of the classroom. Objectives, behavioral in nature, separate for each level of personnel with the ultimate goal the demonstration of proper technique on a manikin under the supervision of the author and another inservice educator, both state certified instructors.
One table deals with the recognition of a victim who may be either unconscious or in cardiac or respiratory arrest. A set of question-answer cards are used for self appraisal of knowledge. A point system divided into four categories is employed. Failure is not permitted as cardiopulmonary resuscitation must and will be done correctly in our institution. (The compelling concept of "you can and will do it" I heard from Dr. Thompson on April 4 of this year in Harrisburg.) Upon entering the open classroom everyone has the option to try to answer the questions on each table first to himself; if he misses, he reads the informative cards at every station related to the questions. With accurate background information he then moves on to the next table where a filmstrip projector can be automated so that reinforcement of learning occurs; clearing the airway, mouth-to-mouth resuscitation and cardiac compression can be initiated by the student. At another center, a cut-away model shows anatomic relationship of heart, lungs, sternum, head and airway which is utilized by the learner for practice. Also there are transparencies showing vital organs that are affected by incorrect cardiopulmonary resuscitation methods.

Next, there is a hospital bed with Arrhythmia Anne, an electronic manikin from the Heart Association. This "doll" has an electrocardiograph tracing mechanism attached. If fibrillation occurs (abnormal heart pattern), the Intensive Care and Emergency Room nurses administer electrode shock. Proper positioning of the paddles on the chest will automatically correct the pattern to a normal sinus rhythm. It requires two nurses to manage the system which is totally remote control and requires quick nursing diagnosis and action to convert the abnormal to normal. Also, at this station are lists of drugs used in cardiac arrests, their actions and dosages. A nurse can, if she wants, hang the drugs in the intravenous bottles and follow the medical orders as listed on the cards or read by a friend.

The finale is Resusci Anne, proper hand positioning, proper "order call," procedure, proper airway maintenance usage of bag and mask and manual mouth-to-mouth method. Proper technique is demonstrated by one rescuer, then by two rescuers. At another table, special lifesaving methods are discussed for the patient with laryngectomy, facial trauma, and pacemaker implantation. This is an optional experience as are the teaching tapes, positioned on a litter outside the classroom door, of basic heart patterns, arrhythmias, blocks and sinus atrial disturbances.

The open classroom provides for sequential learning and evaluation. A synthesis of methods proved effective in the experiencing of touching, feeling, seeing and doing, extended by the scientific method of observation and problem solving, are all essential to cardiopulmonary resuscitation.

ROLE TRANSITION

It was most difficult to change my role from traditional "teacher" to the "facilitator" "enabler" and resource" person. In fact, I found it threatening! I had to psychologically prepare myself for potential hazards such as when a staff member might perform incorrectly under stress and turn to me and say, "but you didn't tell me that!" I also realized I would have to be able to justify increased supplies and an expanded budget when questioned by administration. Further, I needed to accept rigorous peer review, the reaction and scrutiny by the learners, and the evaluative judgment of the Director of Nursing Service.

GUIDELINES FOR EXPECTED PERFORMANCE

(Note the differing expectations for each level of personnel)

I. ATTENDANT:
1. Recognizes signs and symptoms of cardiopulmonary arrest and calls "order call."
2. Initiates open airway, mouth-to-mouth resuscitation.
3. Observes vital signs and recognizes symptoms of successful resuscitation.
4. Performs cardiopulmonary resuscitation with one rescuer and two rescuers until team arrives.
5. Resumes normal assignment activities after relieved by team.

II. NURSE’S AIDE:
1. Recognizes signs and symptoms of cardiopulmonary arrest and calls "order call."
2. Initiates open airway and mouth-to-mouth resuscitation.
3. Observes vital signs and recognizes symptoms of successful resuscitation.
4. Performs cardiopulmonary resuscitation with one rescuer and two rescuers until team arrives.
5. Helps clear area of prohibiting or unnecessary equipment.
6. Assists with other patients on the floor after team takes over.

Note: Each shift must have a nurse’s aide assigned to take the defibrillator from the cardiology room to wherever the order call occurs and plug it in on arrival.

III. AUXILIARY HOSPITAL PERSONNEL:
1. Recognizes signs and symptoms of cardiopulmonary arrest and calls "order call."
2. Initiates open airway, mouth-to-mouth resuscitation.
4. Performs cardiopulmonary resuscitation with one rescuer and two rescuers until team arrives.
5. Resumes normal assignment activities after relieved by team.

IV. LICENSED PRACTICAL NURSE:
1. Recognizes signs and symptoms of cardiopulmonary arrest and calls "order call."
2. Initiates open airway, mouth-to-mouth resuscitation.
3. Monitors vital signs and recognizes symptoms of successful resuscitation.

EFFECTIVENESS RATING BY LEARNERS

The graph represents only those personnel who voluntarily rated the learning process.

4. Performs cardiopulmonary resuscitation with one rescuer and two rescuers until team arrives.
5. Remains available to circulate for needed emergency supplies during resuscitation efforts.

V. REGISTERED NURSE:
1. Recognizes signs and symptoms of cardiopulmonary arrest and calls "order call."
2. Initiates open airway, mouth-to-mouth resuscitation, both adult and infant.
3. Operates bag and mask equipment with and without O₂ attached.
4. Adept at inserting airway if necessary.
5. Observes vital signs and recognizes symptoms of successful resuscitation.
6. Performs cardiopulmonary resuscitation with one rescuer and two rescuers until team arrives.
7. Understands mechanics of defibrillation and recognizes basic heart patterns: (a) Normal, (b) Tachycardia — Bradycardia, (c) Fibrillation, (d) Asystole.
8. Establishes intravenous line and knows basic drugs used in cardiac arrest and their action.
9. Recognizes special conditions affecting technique of cardiopulmonary resuscitation application.
10. Records the use and time of administered medications.
11. Assists physician in emergency cutoff, tracheotomy and checks equipment needed to stabilize the patient.

VI. INTENSIVE CARE UNIT — EMERGENCY ROOM — OPERATING ROOM:
1. Recognizes signs and symptoms of cardiopulmonary arrest and calls "order call" or Dr. Blue.
2. Initiates open airway, mouth-to-mouth resuscitation both adult and infant.
3. Operates bag and mask equipment with and without oxygen attached.
4. Is adept at insertion of airways.
5. Establishes and maintains intravenous line and knows drugs used in cardiac arrest and their action and administers drugs on the basis of standing or stat medical orders.
6. Attaches monitoring equipment to the patient and prepares for defibrillation if necessary.
7. Monitors patients vital signs and follows established routines for care in accordance with hospital policy.
8. Performs cardiopulmonary resuscitation with one rescuer and two rescuers.
9. Recognizes special conditions affecting technique of cardiopulmonary resuscitation application.
10. Records the use and time of administered medications.
11. Assists physician in emergency cutoffs, pacemaker implants, tracheotomy and defibrillation.
12. Operates supportive life systems and monitors for patient transfer or maintenance.

REFERENCES


BIBLIOGRAPHY

American Heart Association: Instructor's Manual for CPR.