The Future of Nursing Education

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ABSTRACT

Market-driven economic policy, dramatic technology developments, changing demographics, and the knowledge explosion are rapidly changing health care and educational institutions as well as creating a climate of continuous rapid change. Nursings' contract with society requires the profession to be responsive to these changes. Four views of changes in nursing practice and therefore nursing education are presented. Changes in the role of faculty and in the nature of the curriculum are described. Twelve strategies for facilitating change are listed.

We live in an era of rapid change; an era in which change is so rapid and so profound, the past is of little help in dealing with the future. Phrases used to describe this era are: continuous paradigm shifts; the absence era, i.e., the absence of certainty, of understanding, of predictability; permanent whitewater; and nonlinear, dynamic systems.

There are differing opinions about the forces that have brought us to this point in time. Four that are mentioned most frequently in both the health care and education literature are:

- Market-driven economic policy
- Technology
- Demographics
- Knowledge explosion

CHANGES IN NURSING EDUCATION

Think of these forces as change drivers in that individually and collectively they are changing our institutions and organizations.

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Market Driven Economic Policy

For most of the 20th century, people in the United States believed in government as a vehicle for improving the lives of citizens. For example, public schools were funded with the dream of making 12 to 14 years of education available to all. Health care programs such as Medicare and Medicaid were funded with tax dollars. The government built roads and subsidized transportation. We, the public, trusted government and saw it as a vehicle to promote the common good.

However, in the 1980s the situation started changing. There was not enough money to fund the increasing demands for prisons, welfare, health care, education, transportation, etc. State after state as well as the federal government turned to the market place as the mechanism for controlling costs and ensuring quality. The predominant theme is that government is too large and is not to be trusted.

Steven Shroeder, President of the Robert Wood Johnson Foundation, summarized the relationship between the market place and health care this way:

> If there is one lesson to be drawn from the 1994 failure of national health reform, it is that the United States has opted for the market, not government, as a way to address escalating medical costs. Indeed, the story of medical care for the last two years could be labeled the triumph of the market. Enrollment in managed care plans is surging; for-profit hospitals and health plans are expanding at a much greater rate than their non-for-profit competitors; and federal, state, and local politicians of both parties promote managed care as the best way to control costs (Schroeder, 1996, p. 7).

The basic belief is that the market place will control costs and utilization issues (too many hospitals, specialists, duplicative technology).

What does this mean for us?

It means that nurse educators will work in a market driven, highly competitive, system of higher education preparing the next generations of nurses to work in a market driven, highly competitive, health care system.

Technology

Technology, another change driver, is making possible

what we thought impossible. In health care we see lives saved that a decade ago could not have been saved. It has given us tools such as the computer so we can work more effectively and efficiently. One example of how technology is changing health care comes from a nurse in Hays, Kansas (Canavan, 1996). The nurse is an interactive home health nurse who monitors patients in their homes each day without ever leaving her station at the medical center. She monitors vital signs, weight, nutrition, and medications. She has been able to prevent hospitalization and has been able to keep people in their homes. She believes that telehealth and telemedicine are growing by leaps and bounds and opening up new avenues for health care delivery.

Technology is also changing education. Administrators have been able to computerize academic records, allow students to register for classes via computer, and conduct meetings without bringing people physically into the same room. Perhaps the greatest impact of technology on education is seen in distance learning. Distance educational opportunities are developing so rapidly, the field is getting crowded. There is the California Virtual University, Britain's Open University, Western Governor's University, the Southern Regional Electronic Campus, and the most recent addition, the Distance Education Consortium coordinated by the University of Washington that involves 14 major research universities.

What does this mean for us?

It means that nurse educators will work in a world of high technology preparing nurses to work in a high technology health care environment. It means that nurse educators will be challenged to structure learning experiences in an environment of rapidly changing technology.

Demographics

The shifting demographics of this country is another change driver. The population of the oldest, those over 85, will increase dramatically. Currently Hawaii is the only state where the nonHispanic whites are in the minority. In the near future, the same will be true for New Mexico, Texas, California, and possibly Florida. The impact of these changing demographics is seen in the development of retirement communities, specialized grocery stores, and the demand for alternatives to western medicine. Health care providers can no longer assume that there is a dominant set of values and beliefs about health care. Educators can no longer assume that there is a dominant learning style.

What does this mean for us?

Nurse educators will interact with an increasingly diverse student body with diverse learning styles and goals preparing nurses to provide care that is acceptable to an increasingly diverse population.

Knowledge Explosion

The fourth change driver is knowledge development. Major scientific developments are occurring so rapidly they have become a regular part of the evening news. But even ten years ago, who would have thought that cloning was on the horizon? Considering just the impact of genetic research on the future it appears that:

- Individuals will be able to know the likelihood of developing a genetically based disease.
- Treatment programs can be based on a person's genetic makeup.
- The origin of poorly understood diseases will be discovered.

As a result, morbidity will be compressed, i.e., chronic diseases will occur later in life and quality of living will be improved.

What does this mean for us?

Nurse educators will have to spend an increasing amount of time tracking scientific developments and their evaluations and must develop nurses who are committed to remaining intellectually alive in an environment of ambiguity and change.

Perhaps the bottom line (important to consider in this era of the market place) for nurse educators is the imperative to give up notions of control and predictability and learn to enjoy change and ambiguity. Like it or not, it is indeed a new world.

As Eleanor Sullivan (1997, p. 144) stated:

> The 19th century university model, still common today, is obsolete. This model championed scholarship over application and lecture without discussion, was professor-centered rather than student-centered, and used a cumbersome system of self-governance. . . The forces of change are many and complex. They include the demand for public accountability of how society's money is spent, demographic changes, student demands for relevant experiences, the impact of economics, and technological advances. All are changing the face of higher education such that it will never be the same.

External Accountability

Before exploring specific pressures on nursing education, it is important to consider the issue of external accountability. In nursing we have accepted the notion of a contract with society. We must prepare and monitor the nursing workforce ensuring the public with the nursing care it needs. That same concept now holds for education as well. The public is concerned with the product we produce; it is focused on outcomes, not process. It is concerned with cost and quality as defined by those funding and using the system. Internal accountability may be important to those working in the system but external accountability will determine future funding. This is the most recent statement from the American Nurse's Association (1995) on external accountability (our contract with society).

Nursing, like other professions, is an essential part of the society from which it has grown and within which it continues to evolve. Nursing is dynamic, rather than static, and reflects the changing nature of societal need. Nursing can be said to be "owned by society" in the sense that "a profession acquires recognition, relevance, and even meaning in terms of its relationship to that society, its culture and institutions, and its other members."

The concept of external accountability is important as the conceptual basis for a community-based curriculum. Nursing must reflect the community in its curriculum or it cannot and does not fulfill its contract with society. Our curriculum must include learning experiences with all segments of society helping students understand the broad array of determinants of health and illness. A community-based curriculum is not essential because more care is being delivered in the community or because health care financing is changing. It is essential because it is the only way we can fulfill our commitment to serve the community. Clearly, there will be differences in the curricula across schools because they will be serving different communities.

PRESSURES ON NURSING EDUCATION

There are six trends in higher education that I believe will impact nursing education in the immediate future. They are:

1. Emphasis on Learning and Outcomes. Educational research has developed new insights into learning that must be incorporated into nursing education. These insights include active learning, personalization, individualization, contextual learning, and learning to learn. External accountability means that nurse educators must prepare nurses for the emerging health care system and not the system of the past or one that they wish were in place.

2. Competition with Virtual Universities. An increasing number of nursing courses are available through virtual universities. In the past, a school of nursing could define its target student body geographically. With little competition in the geographical area, a school could count on a certain level of student demand. Virtual universities have changed that by increasing access to education offerings for almost any potential student. Where one lives is no longer a determinant of access. Nursing programs will have to clarify a niche in the market place and work hard to maintain that student demand.

3. Seamless Education. Those reforming higher education are committed to the principle that there should be no barriers between the segments of the educational system; education from cradle to grave should be one seamless whole (Langenberg, 1997). Inherent in this principle is the assumption that education involves more than passing courses. It involves the development of personal qualities and skills associated with success in the work world, i.e., initiative, persistence, integrity, effective communication, critical and creative thinking, and teamwork. The educational system that exists is based on the notion of layers with each layer having a distinctive role. The degree associated with a given layer is a code word for the knowledge, skills, and qualities the graduate possesses. Unfortunately this system does not match reality on two counts. First, there is a great chasm between what schools claim they are doing and what is actually achieved in terms of student outcomes (the preparation of critical thinkers). Second, the current layered system does not account for what we know about learning, i.e., people learn in different ways and rates. A seamless system would emphasize student assessment and adapt the delivery of instruction of the student's circumstances. It would include linkages between and among colleges and universities. Students could take classes simultaneously from an array of institutions without penalty. Nurse educators must be prepared to defend the multiple entry multiple exit system of nursing education. Is it an asset or a fossilized educational layered cake? At a minimum, nurse educators will be pressured to clarify and differentiate the competencies of graduates from different segments of the system.

4. Benchmarking. One tool commonly used in a market driven economy, especially when outcome measures are hard to quantify, is benchmarking. Benchmarking refers to the comparison of program costs across similar institutions. If, for example, the University of Phoenix can offer quality educational programs and report profits, why can't other institutions of higher education? The University of Phoenix is part of the Apollo Group, Inc. that reported profits of $21.4 million in 1996 (Strosnider, 1997). Although some in education frequently criticize Phoenix for its approach, it has a satisfied and growing student body and positive relationships with the business community. Some traditional institutions are now designing programs after the Phoenix model. The techniques used by Phoenix to reduce costs of programs are those every institution must consider: unencumbered governance structure, standardized curricula, emphasis on teaching, more part time than full time faculty, and a mission for a specific type of learner. Not every institution should be like Phoenix but all administrators and faculty need to be prepared to justify why and how they need to be different.

5. Linking Service to Revenue. Service of one sort or another has always been an expectation of higher education. The expectation for the future is that this service will now produce revenue that can reduce the costs of education. Nurse educators and nursing students have traditionally provided significant service to the community. More often than not this has been without a return of

revenue to the institution. Some schools have responded to this pressure by creating faculty run health clinics, consultation services, etc. Although some of these services have produced revenue for the institution, others have not. It will not be easy in the current climate for nursing to produce significant revenue through services provided by faculty and students. It will not be easy because of reimbursement issues, because these services may have a history of being provided without cost, or because other faculties are also trying to develop reimbursable services. The process of developing revenue producing services requires faculty and administrators to alter the conception of the role of faculty to include revenue generation. In addition to securing research and training grants, faculty may be expected to produce a minimum amount of tuition revenue from their teaching or clinical activities, or to secure contracts with community agencies for consultation services.

6. Funding Based on Productivity. In recent months, *The Chronicle of Higher Education* carried stories of new methods of funding higher education in South Carolina (Schmidt, 1999b), New York (Schmidt, 1999a), and Oregon (Schmidt, 1999a). The new models are based on institutional performance such as student achievement, strength of academic programs, quality of campus services, and enrollments. Basically the models require institutions to serve more students efficiently and effectively. In terms of student achievement and strength of academic programs, nurse educators will probably find it easy to respond to this pressure. Most nursing programs have very positive records for graduation rates, NCLEX scores, accreditation, and job placement. However, nursing is an expensive program largely because of the costs of clinical instruction. When compared with nonclinical majors, nursing looks very expensive. Nurse educators must be prepared to defend these costs using data from accrediting agencies and comparable schools of nursing, and support from the clinical agencies used for experience.

NURSING PRACTICE IN THE TWENTY-FIRST CENTURY

Just as trends in higher education affect nursing education, so do trends in nursing practice. Four views of that future are summarized for your consideration.

McBride's Prediction

McBride predicts (McBride, 1999) major paradigm shifts in health care delivery and academia. Based on these shifts, she predicts the following ten changes in nursing education between now and 2025:

1. Schools will focus on the concept of lifelong learning, not just on academic degrees, with alumni becoming as important as students in degree-granting programs.
2. Career counseling will become increasingly important, with emphasis on having a "full" career, assuming positions beyond the discipline specific, and nursing as good baccalaureate preparation for all aspects of the health care industry.
3. Centers of excellence will take shape, and with them a growth in postdoctoral research training and in scholarship congruent with the institutional mission.

TABLE 1
Shifting Paradigms*

Health Care Delivery

Traditional View
- Nursing at bedside
- Process oriented
- Emphasis on meeting needs/oblivious to costs
- Emphasis largely on mortality and some on morbidity
- Nursing = direct care
- Nurse supports primary care provider
- Responsible for discharge planning

Expanded View
- Nursing at patient's side
- Outcomes oriented
- Emphasis on triaging needs/mindful of costs
- Emphasis on mortality, limiting morbidity, and maximizing functioning/quality of life
- Nursing = direct care; promoting self-care; directing care given by others; designing population-based health programs; and managing patient services
- Nurse provides primary care
- Responsible for managing life style change

Academia

Traditional View
- Emphasis on teaching
- Place-bound
- Scholarship narrowly defined/congruent with personal interests
- Service perceived as quasicharity
- Centralized administration

Expanded View
- Emphasis on learning
- "Virtual University"
- Scholarship broadly defined/congruent with institutional mission
- Service valued for revenue generation
- Responsibility-centered management

*Taken from McBride, A.B. (1999). Breakthroughs in nursing education: Looking back, looking forward. *Nursing Outlook, 47*(3), 114-119.

4. Consortium education will grow; programs and schools will join forces across state and national boundaries to offer collectively the full range of academic opportunities.
5. Schools/programs will increasingly operate in terms of the principles of responsibility-centered management, with a corresponding emphasis on benchmarking, economic modeling, overhead management, and entrepreneurial activities.
6. "Best practices" in health education will be established and nurses will take the lead in designing life style-change programs and a broad array of learning products.
7. There will be renewed interest in recruiting young adults into nursing, particularly in supporting research career trajectories straight from baccalaureate education through to postdoctoral.
8. Faculty roles will continue to evolve, with increasing emphasis on the concept of "faculty mix."
9. The role of the dean will become substantially external, with emphasis on forgoing community/business partnerships and fund-raising.
10. Links between nursing education and nursing service will continue to grow.

McBride also believes nurse educators will have to resolve "entry into practice" and the relationships among baccalaureate, masters, and doctoral education.

Pew Health Professions Commission

The Pew Health Professions Commission (O'Neil, 1998) has developed 21 competencies for the 21st century. The interdisciplinary Commission incorporated changes in society as well as health care financing and reform into their thinking as they identified the competencies. Many of the competencies they developed correspond to the shifts identified by McBride. In addition, they call for competencies such as:

- Embrace a personal ethic of social responsibility and service.
- Exhibit ethical behavior in all professional activities.
- Contribute to continuous improvement of the health care system.
- Continue to learn and help others learn.

To obtain the 21 competencies, the Commission identified numerous recommendations for educational experiences in the classroom and clinical setting. In addition, they recommend that nursing education clarify competencies for different educational programs; adjust educational programs to produce the numbers and types of nurses appropriate to local or regional demand rather than institutional and political needs; radically revamp the content and learning experiences in the nursing curriculum to produce graduates with the competencies needed for differentiated practice; and, integrate the research, teaching, and practice enterprises of nursing education programs to further nursing's professional and practical goals. *The Commission believes that at the present time most of the nation's educational programs remain oriented to prepare individuals for yesterday's health care system and not for the demands of the new health care system.*

U.S. Department of Labor

Since the inception of the U.S. Department of Labor (Eagles, 1999), nursing has grown and developed as a profession in direct response to the health needs of society, e.g., caring for the wounded soldiers, public health movement, American Red Cross. Today nurses are providing clinical care in all settings in which care is delivered. In addition, nurses are working as consultants, educators, administrators, case-managers, triage nurses, and advice nurses. The majority of nurses work as interventionists in high technology acute care settings in which patients are dependent on the provider.

Tomorrow the information age will modify the role of the nurse giving an emphasis to preventive care, self-care, education, and empowerment. Nursing education must be broad-based, community-based, maintaining a holistic focus, and offering alternatives to western medicine.

The U.S. Bureau of Labor Statistics identified these eight universal job skills: leadership/persuasiveness, helping/instructing others, problem solving/creativity, initiative, work as part of a team, frequent public contact, manual dexterity, and physical stamina. In a comparison of 18 professions including physicians, nursing was the only profession requiring all eight skills.

The View from Nebraska

As part of a project regarding assessment of initial and continued competence in the nursing workforce, The Nebraska Nurses Association and the Nebraska Board of Nursing conducted focused group meetings (Burbach & Exstrom, 1999) with licensed nurses, unlicensed assistive personnel, employers of nurses, and consumers. Meetings with the licensed nurses were held in workshop format and were designed to generate data that could be analyzed by trends and themes. The data produced from these workshops regarding skills the nurse will need in the future are consistent with McBride's predictions and the Pew Competencies but are also more specific. For example, Nebraska nurses identified increased assessment skills and patient teaching skills among the most important for the future. They also identified flexibility and creativity as very important personal attributes.

Startling Statistics

A recent published survey (*Nurseweek*, June 14, 1999, p. 9) of self-selected nurses in California revealed that over one-third planned to leave the practice of nursing within the next five years. The majority indicated "burned out" and "too physically demanding" as reasons for leaving. Of even greater concern is that of those surveyed,

TABLE 2
Current Faculty Job Description

Direct Activities

- Course designer who controls educational inputs (classroom content, required readings, guest lecturers, etc.)
- Lecturer delivering information amassed from research, reading, and experience
- Discussion moderator who helps students understand the material from lectures and readings
- Evaluator who writes and administers tests and decides how well students have mastered the subject

Indirect Activities

- Committee work to create, modify, and evaluate academic policy (ie, admission requirements)
- Committee work to create, modify, and evaluate curriculum and course requirements
- Committee work to fulfill internal accountability issues (i.e., promotion, tenure, and faculty welfare)
- Committee work to establish and maintain faculty's role in governance of the academic unit and institution

almost two out of every five nurses, knowing what they now know, would not choose a career in nursing.

CHANGES AND TENSIONS IN THE FACULTY ROLE

Current Description

A current typical faculty job description is shown in Table 2 (Lindeman, 2000).

Future Description

A job description of the future faculty role is shown in Table 3 (Lindeman, 2000). The changes will not occur overnight; the changes will be accomplished in small incremental steps.

Conflicts

Faculty will struggle with issues of control, governance, and their own development for this new era of education.

CHANGES AND TENSIONS IN THE ROLE OF DEAN/DIRECTOR

Current Description

A typical job description of an administrator of a school of nursing is shown in Table 4 (Lindeman, 2000).

Future Description

The changing nature of the role of the dean will require attention to relationships to faculty (a difficult area even in relatively stable times), personal/professional development, and issues of shared governance and control in a learning organization.

CURRICULUM/LEARNING OPPORTUNITIES FOR THE YEAR 2005

Considering all the changes on the horizon, where should faculty focus as they prepare for this new era of health professional education? Student outcomes and the learning experiences associated with those outcomes would be the starting point. Five student outcomes and seven curriculum changes are provided as examples.

Outcomes

The following five undergraduate outcomes are listed in priority from most important to least important.

1. Well-developed cognitive skills such as critical thinking, clinical reasoning, creativity, and deductive and inductive reasoning.
2. Personal development enabling the individual to handle ambiguity and change.
3. Professional development that includes demonstrating ethical behavior at all times and a commitment to being a life-long learner.

TABLE 3
Future Faculty Job Description

Direct Activities

- Assessment of job history, academic transcripts, career objectives, and learning style
- Custom-design educational program for individual student
- Lead discussions in classrooms and in on-line chat areas
- Serve as "guide-on-the-side" helping students learn how to analyze and synthesize

Indirect Activities

- Serve on ad hoc task forces operating in a Total Quality improvement mode

Off-Site Activities for Selected Faculty

- Courses designed and produced by teams of technology experts and professors, which are then marketed by publishers or "brand-name" universities
- Lectures replaced by multimedia CD-ROMS or World Wide Web sites that include video recordings of talks by world renowned scholars
- Grading done by an independent assessment organization, reassuring employers that evaluations were impartial and not subject to grade inflation

TABLE 4
Typical Job Description for a Dean

Typically the dean is responsible for:

- Obtaining and allocating financial and human resources
- Determining and modifying organizational and administrative structures
- Facilitating and coordinating the work of faculty, staff, and students
- Communicating within the school, university, and community
- Interdisciplinary administrative activities
- Demonstrating scholarly productivity
- Mentoring and counseling faculty, staff, and students
- Providing academic leadership
- Performing magic

TABLE 5
Future Job Description for a Dean

- Define outcome measures that address the issue of quality from the perspective of the public
- Increase faculty productivity
- Develop and maintain the databases required addressing outcomes and productivity
- Aggressively market programs designed for specific niche in the market
- Establish cooperative relationships with leaders in the industry (health care)
- Create and maintain a flexible learning organization
- Assure faculty competence
- Perform spectacular magic
- Fund raising

4. Behavioral development for membership in an interdisciplinary team functioning in a learning organization.
5. Knowledge and skill development associated with safe, effective practice.

Curriculum Changes

The following are changes regarding the nature of curriculum:

1. Increased emphasis on the process and procedure of learning (reflective practice and self-awareness).
2. Content viewed as exemplary rather than as fact or truth.
3. Greater use of group work and the communication and social skills appropriate to it.
4. Increased use of projects that require months to complete thereby providing an understanding of the complexity and nonlinearity of the real world.
5. Incorporating alternative time, gender, and other perspectives to develop broader understandings of the real world. This includes greater diversity in clinical experiences to provide contact with people from different cultures, ethnic groups, economic levels, and with alternatives to western medicine.
6. Incorporating direct access to information and learning through the use of databases and multimedia packages.
7. Faculty will view all curricula as transitory and emphasize education as preparation for the future.

ISSUES AND STRATEGIES FOR CHANGE

The transition into the new era of health profession education will not be easy. Yet our contract with society requires that we accept the responsibility for making the transition. Three common issues are listed followed by strategies to facilitate change.

Issues

1. The inadequacy of the traditional undergraduate curriculum model, which assumes six major areas of nursing practice, is acute care oriented, emphasizes interventions associated with western medicine, and is discipline specific. Even though it is inadequate for the future, faculty are comfortable with it and have vested interests in that model.
2. Faculty resistance to a community-based curriculum or a failure to understand why is essential.
3. Fear of the unknown including fear of one's ability to be successful in this new world of education and health care. Fear is probably the greatest deterrent to change and is usually masked by other objections.

Strategies

1. Continuous faculty development (realize and visualize the magnitude of the change).
2. Have a clear but dynamic vision of the "what," "why," and "how" of the change(s). Use an environmental scan to document assumptions about the future.
3. Involve the community.
4. Function as a "learning organization."
5. Use a Total Quality Management process with student/community/faculty/administration teams.
6. Communicate with attention to individual differences; we think and reason in different styles.
7. Document what you did and why as well as what you did not do and why.
8. Allow time for grieving and other emotional responses.
9. Take small but goal-directed steps.
10. Build in time for fun and celebration.

11. Be a community–knowing, doing, and trying collectively.
12. Be lavish with rewards.

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