Innovation in Nursing Education
Which Trends Should You Adopt?

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The author identifies trends that challenge the status quo in academic nursing education. She further provides a theoretical framework that can be used by nursing program administrators to determine the potential adoptability of the trend in nursing education programs. Leader behaviors that are crucial in leading and managing change are highlighted.

Trends in academic nursing education can be compared to Johnson’s parable, “Who moved my cheese?” The story illustrates the varied reactions of 4 characters who experienced feelings of uncertainty, discomfort, and discontent when faced with unanticipated and unexpected environmental change. Likewise, nursing education academic administrators may undergo similar feelings when faced with changes in academic nursing education. This article focuses on 5 trends that will have a significant impact on the status of nursing education: (a) strategic partnerships; (b) baccalaureate nursing programs offered by community colleges; (c) new models of nursing practice; (d) online education; and (e) fast track programs.

Strategic Partnerships

Strategic partnerships are synergistic models of collaboration that are being used to address both nursing and faculty shortages. The collaborative arrangements between academic and service entities allow partners to combine respective strengths in achieving the compatible goals of increasing the registered nurse workforce and the numbers of qualified faculty. Many of the strategic partnerships were initiated when unilateral efforts of service providers and academic institutions were no longer effective in resolving the nursing or faculty shortage. Many partnerships use the model whereby a healthcare entity provides a master’s-prepared clinician to teach students in the clinical setting, thus allowing the academic institution to expand student capacity by increasing enrollment. The master’s-prepared clinicians are mutually selected by partners for faculty roles based on educational preparation, clinical expertise, and the desire to teach. Many of these partnership initiatives have developed sustainable infrastructures to support both the nursing workforce and nursing faculty shortages.

The American Association of Colleges of Nursing has compiled in-depth profiles of successful nationwide academic partnerships to expand nursing education programs. Based on a review of the partnerships, successful strategic partnerships incorporate the following activities: (a) establish clear goals with specific, measurable, achievable timelines; (b) outline mutual expectations; (c) engage in mutual planning and collaborative efforts; (d) engage in open communications; (e) conduct formative and summative evaluations; and (f) ensure a balance of power.

Baccalaureate Nursing Programs Offered by Community Colleges

Community colleges are beginning to offer baccalaureate education. This trend, referred to as the upward extension community college movement, is gaining popularity across the nation. The Florida, Nevada, and Arizona legislatures have enacted legislation to allow community colleges to offer baccalaureate education. Several community colleges in states across the nation are considering offering the baccalaureate degree in nursing education. Discussions continue and legislative initiatives are underway in the states of Illinois, Oklahoma, North Dakota, and Washington.

The American Association of Colleges of Nursing support baccalaureate preparation for entry into nursing and contend community college baccalaureate degrees should follow the Essentials of Baccalaureate Education for Professional Nursing Practice. Moreover, the emergence of community college Bachelor of Science in Nursing programs support the notion that distinct competencies do exist between associate and baccalaureate degree-prepared nurses. A clear link between higher levels of nursing education and better patient outcomes has been demonstrated.

Baccalaureate-prepared nurses have higher rates of employment retention and job satisfaction than nurses prepared with the associate degree.

New Models of Nursing Practice

The Clinical Nurse Leader

The clinical nurse leader (CNL) is an emerging nursing role developed by the American Association of Colleges of Nursing, in collaboration with leaders from education and service arenas. The CNL is a master’s-prepared nurse who functions at the general level to oversee the care coordination of a distinct group of patients and who
Advocacy for the CNL is not without controversy, some believe the CNL will create more confusion for the public and profession.14 Most of the debate regarding the role of the CNL focuses on whether or not the CNL will be able to: (a) serve as an expert clinician upon graduation; (b) be viewed as a leader among registered nurses practicing on the units; (c) lead and influence practice at the systems level; and (d) possess competencies distinct from the role of the clinical nurse specialist (CNS).

Advanced Practice Nursing

The National Council of State Boards of Nursing’s (NCSBN) Vision Paper: The Future Regulation of Advanced Practice Nursing15 has sparked a flurry of debate in the profession and professional organizations. Although the vision paper is in draft form, it outlines the NCSBN’s desired model of regulation for advanced practice registered nurses 10 years into the future for nurse anesthetists, nurse midwives, and nurse practitioners. The proposed regulatory model is intended for all advanced practice registered nurses, but the majority of the proposed changes focus on the nurse practitioner and the CNS. In its vision paper, the NCSBN proposes to have three categories of advanced practice registered nurses: nurse anesthetists, nurse midwives, and nurse practitioners. The NCSBN challenges the role and scope of practice of the CNSs. At issue is whether or not the CNS functions in an advanced practice role that includes disease management and prescriptive authority or if the CNS functions within the registered nurse scope of practice. For example, some states grant prescriptive authority to CNSs, whereas other states do not. Clinical nurse specialists practicing within the scope of the registered nurse will not be considered advanced practice registered nurses. Clinical nurse specialists’ practicing beyond the scope of the registered nurse and the practice includes diagnosing and prescribing in an independent practice setting will be grandfathered and called nurse practitioners, thus eliminating the title, CNS.

The NCSBN proposes that nurse practitioners complete a standardized, broad-based curriculum that includes educational preparation across the lifespan, populations, and settings. Upon graduation, the nurse practitioner would take a core licensure examination followed by completion of a residency. Individual nurse practitioners would become specialists by attaining competency in the specialty area followed by certification.

Doctorate of Nursing Practice

The Doctorate of Philosophy (PhD), commonly known as the academic research doctorate, has a longstanding historical presence in academic nursing education. This research doctorate is known as the scientific doctorate because the focus of the degree is the study of science and scientific practice. The Doctorate of Nursing Practice (DNP) aims to have an option available for nurses who desire a terminal degree in nursing other than the research doctorate. It is anticipated that the practice doctorate will fill a void for nurses who desire to pursue doctoral education, but would prefer to focus on practice rather than research.16 Both the practice and research doctorate can coexist in the same nursing education program.16

The premises which form the basis of the practice doctorate are the need to add additional content related to knowledge, skills, and abilities in the existing nurse practitioner (NP) programs, most of which already exceed 60 credit hours and the amount of time and effort spent attaining the NP degree, which is incongruent with the degree earned. Additionally, the DNP will be comparable to practice doctorates in fields such as medicine, pharmacy, and physical therapy.

Critics of the DNP include (a) a lack of a philosophical and scientific approach to practice as an area of concern relative to the DNP, (b) concerns about whether or not the discipline of nursing should focus its energies on upgrading its status by increasing its educational standards for entry into practice instead of creating guidelines for a different terminal practice doctoral degree which require regulatory and licensure approvals remain; and (c) the issue of accreditation of the DNP programs.17

Online Education

The Web is changing the nature of education in this country by revolutionizing areas of study through increased opportunities for learning and alternative delivery formats. Online teaching is an educational methodology that allows the instructor and the student to be located in different, noncentralized locations so that instruction and learning occur independent of time and place (ie, asynchronously). This instructional methodology offers the nursing students increased educational opportunity, expanded access to resources, and greater flexibility.

Currently, there are limited prelicensure or generic programs that offer the entire nursing program via electronic format. As more generic programs consider online education as an alternative to the traditional classroom and clinical setting, there will be a need for changes in how the clinical component of the programs are delivered. The question is, “Can both the theory and clinical components of a generic program be effectively delivered through online technology with successful outcomes?” The future holds promise that online prelicensure programs will be a viable delivery option for many nursing education programs as society becomes more digitally mobile, the nursing faculty shortage looms, and more diverse populations access distance technologies.

Many online programs have joined consortiums that allow private colleges to exchange online courses for a small fee. As part of a consortium, members accept distance courses offered by other consortium members, thus eliminating student concerns about the transferability of academic credits. Students pay the same per-credit tuition they would if the course had been created at their own institution, but the home institution and the college
that created the course split—roughly equally—the tuition revenue. The institution offering the course is responsible for all costs including from faculty salaries and staffing of a helpdesk. The institution where the student is enrolled collects the tuition and awards the credit. This trend could have significant impact on nursing education programs nationwide.

**Fast Track Nursing Programs**

Fast track nursing education programs (often referred to as accelerated) are increasing in numbers nationwide as a result of the Bureau of Labor Statistics prediction of the need for 1 million new and replacement nurses by 2012. To assist in realizing that number, many nursing programs have established fast track baccalaureate, master’s, and doctoral programs.

Accelerated baccalaureate programs offer the quickest route to becoming a registered nurse with programs generally running 12 to 18 months long. These programs accomplish programmatic objectives in a shorter time frame than the traditional 4-year programs. Instruction is intense with courses offered full-time with no breaks between sessions. Admission standards are high; programs typically require a minimum 3.0 GPA and a thorough prescreening process. Employers boast higher satisfaction rates with students from accelerated programs than traditional programs.

In 1990, there were 31 accelerated baccalaureate programs and 12 generic master’s programs offered in the country. Today, there are 168 baccalaureate programs and 50 master’s programs existing with 46 new accelerated baccalaureate programs now in the planning stage. There are 32 schools and colleges offering baccalaureate to doctoral programs as of fall 2004. As the shortage of registered nurses worsens and the interest in nursing heights, the demand for accelerated nursing programs will continue to rise. Many second degree and older students view fast track programs as a quick and viable option for a career change.

**Change**

The trends identified can have a significant impact on nursing education in terms of student enrollment, faculty job opportunities, and programmatic offerings. The newer trends, community college baccalaureate degrees, strategic partnerships, the CNL, and DNP will influence nursing education on all levels. The cost of tuition at community colleges is significantly less than at private and state colleges and universities. Students may find the affordability of obtaining a baccalaureate degree at the community college tuition prices attractive, thus threatening student enrollment in the more costly institutions. Faculty who would prefer to focus on the academic missions of teaching and service may find employment at community colleges more appealing than the research and publication demands with schools associated with universities in settings where one publishes or perishes. Thus, the trend has the potential to siphon faculty and students into the community college setting, leaving colleges and universities with fewer students and faculty.

The generic master’s-prepared CNL, in addition to core baccalaureate competencies, is expected to have advanced competencies in nursing leadership, clinical outcomes management, and care environment management, all of which significantly improve the quality and delivery of patient care. Theoretically, the CNL should provide the employer with improved patient outcomes, thus making the generic master’s nurse a more preferable hire and degree than the generic baccalaureate-prepared nurse. Just as the CNL has the potential to impact baccalaureate education, so does the DNP with master’s level education. In 2004, nurse practitioner majors accounted for 52.3% (5,589) of the master’s graduates, CNS majors comprised 9.1% (978), combined nurse practitioner/CNS majors accounted for 3.0% (318) as compared to 5.9% (630) of the education master’s graduates. There are far reaching consequences to institutions that offer master’s level advanced practice programs that do not have the Carnegie classification to offer doctoral level education. These institutions may face grave enrollment declines. Moreover, master’s-prepared advanced practice faculty teaching in the master’s level advanced practice programs may be forced to enroll in a DNP or PhD program to continue teaching, thus possibly boosting the enrollment of institutions with the Carnegie classifications of Research I or II.

The longstanding baccalaureate fast track programs have been around for a while but the explosive growth is remarkable, notwithstanding, the growth in fast track master’s and doctoral programs. Online education, although not new, continues to make its presence known and will revolutionize the traditional delivery methods of higher education. Which programs will adapt to the changing environment in which nursing education finds itself and adopt the newer trends?

**Diffusion of Innovation**

Diffusion of innovation is a theoretical model that offers an explanation about the adoptability of a trend. The model provides individuals interested in an innovation with a theoretical paradigm for the process of diffusion. Diffusion, the process by which an innovation is communicated through specified channels over time among members of a profession, has 4 major constructs that establish structure and boundaries (Table 1): (a) innovation, (b) communication, (c) time, and (d) social system. When new ideas are diffused and adopted, change in the structure and function of a social system occurs. The social system has norms of behavior, opinion leaders, and change agents that can influence the rate of diffusion. Opinion leaders provide information and advice about innovations to other members within the social system. Opinion leaders, well-respected influential persons within the social system, can either lead in spreading the news of a new idea or in opposing the new idea. The opinion leaders’ influence is often grounded in their social accessibility, technical competence, and conformity to the norms of the social system. Opinion leaders are often at the center of the professional communication network. Change agents are individuals who influence an innovation decision in a direction deemed desirable by a change agency. They may be external to the social system but often use opinion leaders in a social system to steer diffusion activities.

Time is another critical element of diffusion. Diffusion of a new idea does not happen immediately. Often, a new idea even with obvious advantages...
Innovation adoption often means discontinuing the use of a familiar practice. Diffusion of innovation, in some aspects, represents a microprocess of social change in the social system. The perceived characteristics of the innovation by the social system will also affect the rate of adoption. An innovation is often evaluated based on the following attributes:

Relative advantage of the innovation—the relative advantage is generally measured in economic terms, social prestige, convenience, and satisfaction. For example, the prestige associated with being the first and foremost institution that initiated a new program, such as the DNP or accelerated fast track.

Degree to which the innovation is consistent or compatible with existing values and needs—Innovations that are incompatible with the social system will not be adopted as readily as ideas that are compatible. For example, the American Medical Association’s attempt to establish a new category of caregiving, the innovative role of the registered care technician, is an example of an innovation that failed; it was a direct affront to the nursing profession. The innovation failed to reach a critical mass.

Complexity of the innovation—New ideas that are easy to understand will be adopted more readily than innovations that require the adopter to develop new skills and understanding.

The baccalaureate fast track programs that are easy to understand and require little, if any, new skills have demonstrated exponential growth.

Degree to which the innovation may be experimented with on a limited basis—New ideas which can be tried on a partial basis or as a hybrid may be more readily adopted than innovations where the entire idea or practice must be adopted. Institutions that opt to offer one course via online technology rather than an entire online program provide an example of the experimentability of the innovation.

Degree to which the results of the innovation are visible to others—The more visible an innovation is to others, the more likely it will be adopted. Visibility promulgates discussion among members of the profession; the adopter is often asked to evaluate the merit of the innovation by others who are considering adoption. Leaders who have established programs such as the CNL and DNP are often sought out by peer leaders who are deciding on whether to implement such programs (Table 2).

In making an innovation adoption decision, the program administrators increase his or her knowledge about the innovation and its functionality. Thus, the administrator forms a favorable or unfavorable opinion toward the innovation. The opinion is the basis for whether the administrator actively chooses to adopt or reject the innovation. If adoption occurs, the innovation is implemented and the administrator further evaluates the innovation.

The rate of adoption is measured by the length of time required for a certain percentage of the profession to adopt an innovation; this time can be plotted graphically. As the adoption decisions are plotted cumulatively, the curve takes on an “S” shape, a hallmark of Diffusion Theory. The diffusion of every successful innovation follows a normal distribution, or bell-shaped curve. The timing of the adoption decision places an individual or group at a certain place on the curve. Thus, Diffusion of Innovation has 5 adopter categories (Table 3): Innovators (2.5%); Early Adopters (13.5%); Early Majority (34%); Late Majority (34%); and Laggards (16%). Empirically, the adoption decision follows an “S”-shaped curve when cumulative adoption is used: The “S”-shaped adoption distribution rises slowly at first, when there are a small number of adopters in a given time period. The curve accelerates to a maximum until half of the group within the social system has adopted the innovation. Then it increases at a gradual slower rate as fewer and fewer remaining individuals within the group adopt it. There is some variation in the slope of the “S” from innovation to innovation; some new trends will diffuse quite rapidly while others may have a slower rate of adoption, and the S-curve is more gradual rather than steep. As the early adopters adopt the changes, the majority will adopt until

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**Table 1. Major Constructs for Diffusion of Innovation**

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<thead>
<tr>
<th>Construct</th>
<th>Definition</th>
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<tr>
<td>Innovation</td>
<td>An idea or practice that is perceived as new by a unit of possible adoption</td>
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<td>Communication channels</td>
<td>Means and methods by which the idea or message is shared and transmitted from one individual or group to another in order to reach a mutual understanding. The diffusion process can be considered social in nature. The extent that the messages influence one’s actions is affected by whether the person is in the decision process, how innovative they are, how similar they perceive themselves and the source of the message to be, and whether they see the source as being an expert or opinion leader.</td>
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<td>Time</td>
<td>Involves the time taken to make the adoption decision process and the rate of adoption</td>
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<tr>
<td>• Knowledge (awareness of the innovation)</td>
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<tr>
<td>• Persuasion (attitude formation about the innovation)</td>
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<tr>
<td>• Decision (engaging in activities to determine whether or not to adopt)</td>
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<tr>
<td>• Implementation (adoption of the innovation)</td>
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<tr>
<td>• Confirmation (adopter seeks reinforcement of the innovation decision but can reverse the decision if exposed to conflicting messages about the innovation)</td>
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<td>Social system</td>
<td>The interrelated unit or group working to achieve a common goal</td>
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<tr>
<th>Trend</th>
<th>Advantage of Innovation</th>
<th>Degree of Compatibility</th>
<th>Complexity</th>
<th>Degree of Experimentation</th>
<th>Visibility</th>
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<tr>
<td>Strategic Partnerships</td>
<td>Increased student and faculty capacity of academic programs; Increased clinical teaching by practicing nurses.</td>
<td>Does the institution support collaborative partnerships between service and academic? Does the faculty support the idea of using practicing nurses to teach nursing students?</td>
<td>How will the practicing nurses learn the art and science of teaching in the clinical setting? What resources and development opportunities exist to support the teaching effectiveness of the nurses? Are faculty mentors available?</td>
<td>Is it possible to try this approach in one clinical course or all clinical courses to determine the feasibility of this approach?</td>
<td>Tangible enrollment increase; What indicators would you put in place to determine if there was a change in the student performance?</td>
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<td>Baccalaureate Education at Community Colleges</td>
<td>Increase in numbers of baccalaureate-prepared nurses; Relative low tuition costs compared to 4-year institutions.</td>
<td>Is baccalaureate education philosophically different than associate degree education?</td>
<td>Would legislative changes be required to authorize the community colleges to offer baccalaureate education?</td>
<td>Must implement an entire curriculum if initiated</td>
<td>Increased graduates; national attention</td>
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<tr>
<td>Clinical Nurse Leader</td>
<td>Increased master's-prepared nurses</td>
<td>Based on the Carnegie Classification, can the institution grant graduate degrees? Do you have clinical partners? Does the institution support collaborative partnerships between service and academic?</td>
<td>Is there sufficient faculty to offer the program?</td>
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<tr>
<td>APN Vision Paper</td>
<td>Second-level licensure ensures competence into entry-level advanced practice</td>
<td>N/A</td>
<td>Legislative changes required; Need buy-in from professional organizations and professionals</td>
<td>None</td>
<td>Schools would have state pass rates for advanced practice just as with entry-level practice.</td>
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<tr>
<td>Doctorate of Nursing Practice</td>
<td>Provides nursing with a practice doctorate similar to medicine, physical therapy, pharmacy, podiatry, optometry, and public health</td>
<td>Based on the Carnegie Classification, can the institution grant doctoral degrees? Does the institution support practice doctorates or the research doctorate only?</td>
<td>Is there sufficient faculty and student interest? How would you incorporate the existing master's advanced practice curriculum? Would you have multiple entry and exit points, BSN-DNP, post-master's option, etc.? Does the institution meet accreditation standards? Does the institution have resources to offer the DNP and PhD?</td>
<td>Limited; core curriculum must be in place.</td>
<td>Student enrollment; national attention</td>
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Table 2. Trend Adoptability
the innovation becomes common, following a domino effect. In 1971, Saint Louis University School of Nursing began the first accelerated baccalaureate program in the United States; 35 years later, the programs have proliferated nationally.

An interesting feature of the diffusion of innovation theory is that the innovation-decision to adopt depends heavily upon the innovation-decisions of the other members of the profession. Florida and Nevada as innovators with community colleges offering baccalaureate education form the base of the “S”-shaped curve as does the schools and colleges that are early innovators in offering DNP and CNL programs. The innovators and early adopters can communicate their approval or disapproval of an innovation, based

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<td>Innovators</td>
<td>Risk-takers; Adventuresome; Can imagine the possibilities; Enjoy being on the cutting edge; Active information seekers about new ideas; Often have widespread interpersonal networks extending beyond the local area, Able to cope with a high level of ambiguity. The development and implementation of the first accelerated nursing program by Saint Louis University in 1971.</td>
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<td>Early adopters</td>
<td>Respected by peers for judicious, well-informed decision making; Has a high degree of opinion leadership; Early adopters help trigger the critical mass when they adopt an innovation. The early adopter often decreases uncertainty of others about the innovation when they adopt an innovation. Nationally, there are 9 DNP programs and more than 40 additional DNP programs under development.</td>
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<td>Early majority</td>
<td>The early majority will adopt a new idea just before the average member of the profession adopts. This group has strong interpersonal networks and considered one of the most numerous adopter categories. This is the fabled “tipping point,” where a critical mass is reached so that diffusion becomes self-sustaining. There are now 92 schools of nursing and 190 practice sites in 35 states who are participating in the CNL demonstration projects.</td>
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<tr>
<td>Late majority</td>
<td>The late majority adopters will adopt a new idea just after the average member of a profession adopts. Innovation is approached with much skepticism. Most of the uncertainty about the innovation must be removed before this group will decide to adopt. This group may often adopt because of economic necessity and peer pressure. This group makes up one third of the members of the profession. Many programs now offer some form of online education or are beginning to establish fast track programs.</td>
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<tr>
<td>Laggards</td>
<td>This group is the last in a profession to adopt an innovation. Many laggards remain within their closed social system and are considered isolates. Because of the isolate status, they often lack awareness of an innovation or its demonstrated effects. Insular in nature, they are quite suspicious of innovations and the opinions of others. Their point of reference is usually in the past. This group adopts an innovation primarily to avoid becoming obsolete.</td>
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on experience with the innovation to the rest of the profession. The tipping point, when an innovation is widely adopted, happens when the “early majority” vouches for the innovation and adopts it. Professional organizations can serve as opinion leaders to activate the spread of the innovation. For example, the American Association of Colleges of Nursing’s position statement on the DNP; the Commission on Collegiate Nursing Education’s decision to limit accreditation to the practice doctorate with the DNP title; and the National Academy of Science, as change agent, lending public support for nursing to adopt the clinical doctorate influence adoption. Thus, Roger’s model exemplifies how trends may be adopted in a profession and suggests that the spread of an innovation often rests on whether or not the opinion leaders accept or reject it. If the administrator chooses to adopt the trend, there are specific leader behaviors that positively influence change.23 Visionary leaders are successful in growing the organization while leading, managing, and anticipating the effects of change by implementing the following actions:

• Staying focused on the program’s core mission and values while being responsive to changes and trends in the profession; an important consideration regarding the adoption of an innovation is its compatibility with the values, beliefs, and experiences of the institution. This involves identifying organizational needs and identifying innovations of use to the institution.

• Encouraging participation by all members in planning changes with acceptable outcomes; have open discussions regarding the feasibility of the innovation in the institution.

• Presenting the entire plan for change to all members, including the implementation plan, offering rationale for changes; discuss how the structure of the organization may be modified to accommodate the change.

• Nurturing and guiding the planned change while delegating appropriately; continually clarify and provide understanding of the meaning of the innovation within the organization.

• Ensuring that the innovation has been routinized into the daily organizational activities while continually evaluating the effects of the adoption.

Last, administrators should consider what are the positive and anticipated outcomes associated with adoption. Unknown are the negative unanticipated consequences associated with both adoption and nonadoption of innovations.

REFERENCES
5. Murray T. Expanding educational capacity through an innovative academic-service partnership. In press.