



**Curricular and Pedagogical Implications Of
The Carnegie Foundation
National Nursing Education Study
Transforming Nursing Education School of Nursing
Canadian Association of Colleges of Nursing**

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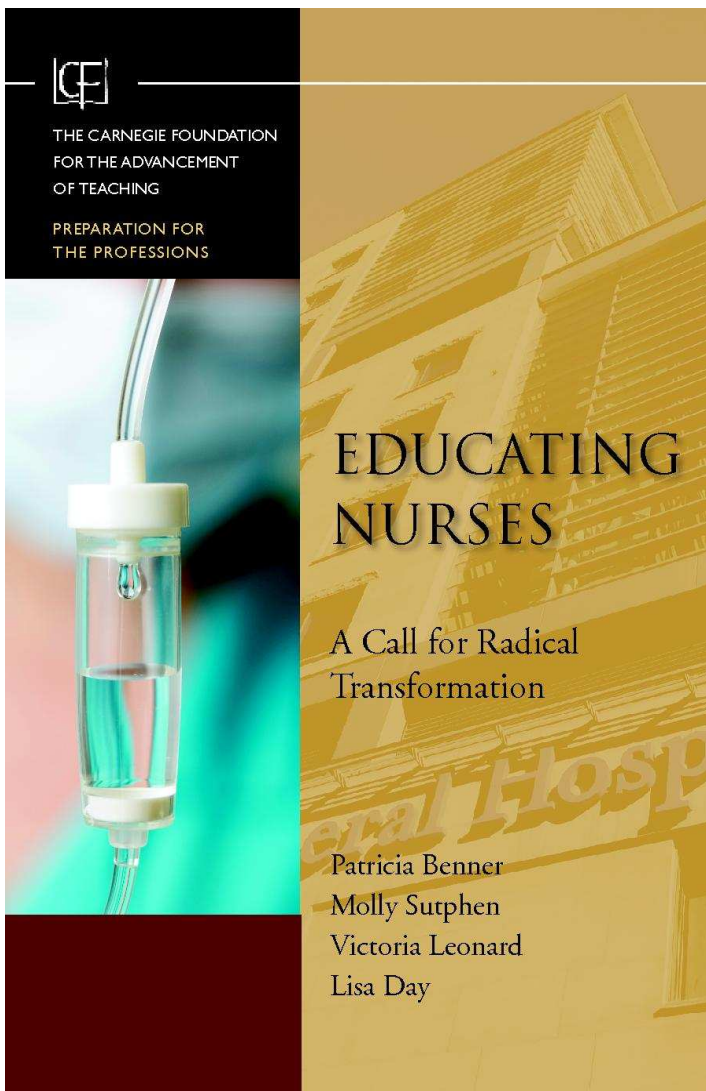
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Lori Rodriguez, Ph.D.

William Sullivan, Ph. D., Anne Colby, Ph.D. and Carnegie Scholars

The Preparation for the Professions Program (PPP)

- An integrated, comparative study of education for professional understanding, integrity, and practice in these five fields (three in Phase I and two more in Phase II)
- Clergy; Engineering; Law; Medicine; Nursing; Teaching
- Nursing and Medicine are the only two studies conducted simultaneously and in deliberate dialogue



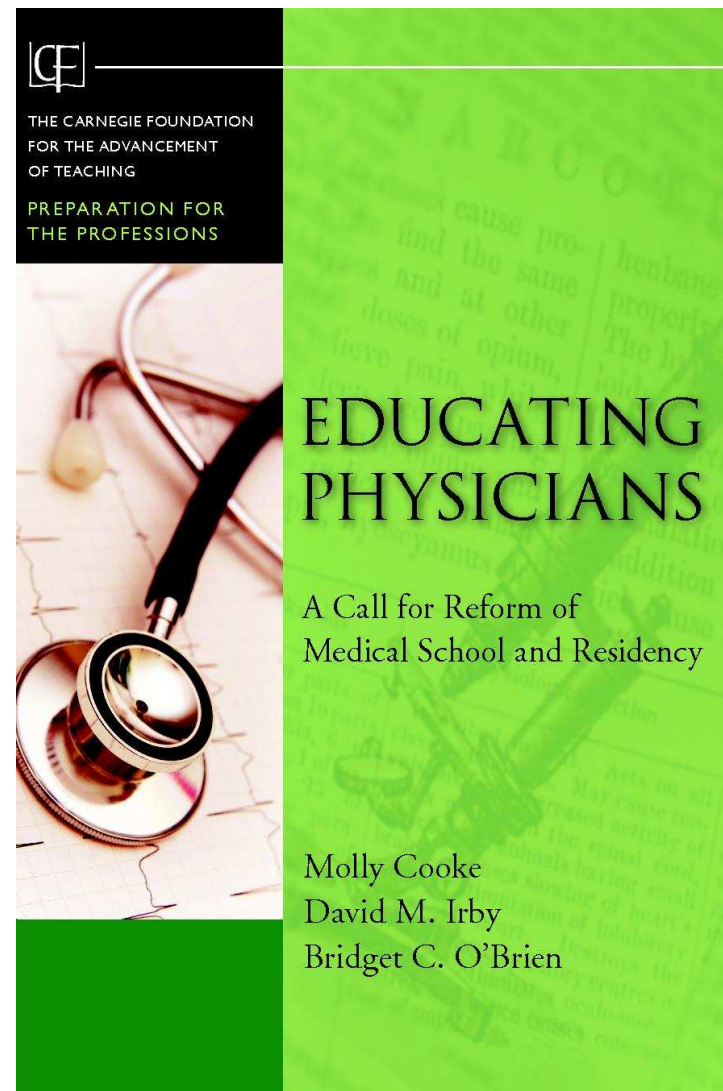
THE CARNEGIE FOUNDATION
FOR THE ADVANCEMENT
OF TEACHING

PREPARATION FOR
THE PROFESSIONS

EDUCATING NURSES

A Call for Radical
Transformation

Patricia Benner
Molly Sutphen
Victoria Leonard
Lisa Day



THE CARNEGIE FOUNDATION
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THE PROFESSIONS

EDUCATING PHYSICIANS

A Call for Reform of
Medical School and Residency

Molly Cooke
David M. Irby
Bridget C. O'Brien

Three Cross-Professional Frames for the Five Carnegie Studies of Professional Education

- Civic Professionalism rather than technical professionalism
- Focus on civic responsibilities to clients and society rather than on “technical professionalism” i.e., autonomy; control over knowledge development and participants in the profession

Three Cross-Professional Frames for the Five Carnegie Studies of Professional Education

- Teaching a Practice Requires:
 - Experiential teaching and learning
 - Situated cognition—Thinking-in-Action (The logic of practice)
 - Situated teaching and learning (Readiness)
 - Reflection on particular cases and situations
 - Development of ethical comportment (In dispositions and actions, not just beliefs and decisions)

Teaching a Practice

- Practical reasoning = Clinical Reasoning
 - Clinical reasoning is reasoning across time about the patient's changing condition and/or changes in the clinician's understanding
- Development of ethical comportment (In dispositions and actions, not just beliefs and decisions)

Student Experience of Learning a Practice

- This student summarizes her experience learning a practice:
 - * Being able to apply real world skills soon after learning them in the classroom. * Being allowed to help real patients right now. * Gaining scientific and medical knowledge. * Helping society. * I know I'm doing something important in the world.

Three Cross-Professional Frames for the Five Carnegie Studies of Professional Education

Three professional Apprenticeships:

- Cognitive : Knowledge of Science, theory, principles required for the practice
- Practice: Clinical Reasoning; Practice know-how; situated knowledge use.
- Formation & Ethical Compartment: Learning to **embody** and **enact** the notions of good internal to the practice.

The Cognitive Apprenticeship

- What we found about the cognitive apprenticeship:
 - Uneven and often inadequate teaching in the cognitive apprenticeship across types of schools
 - High variability in cognitive apprenticeship found across types of nursing schools

The Cognitive Apprenticeship

- Evidence-based literature searching and questioning weak
- Teaching as distracting entertainment rather than engaging
- Too much teaching of testing strategies for the NCLEX
- Almost no interdisciplinary teaching

Student Experiences

Teaching can be at odds with what is needed for practice:

“Classes are not taught in dynamic way. They seem to be taught in an old fashion science curriculum sort of way, when a different approach may be more suited.”

“There is so much pressure to teach to the NCLEX (everyone wants to pass and it makes the school look good) and to teach the trade/technical aspects of nursing. The human aspect of our work often gets lost or even dismissed and I've had a frustrating time finding mentorship to learn and grow in that area.”

The Cognitive Apprenticeship

- Some classes were organized around presenting diagnostic categories, signs and symptoms with elaborate descriptions and distinctions between the categories
- Teaching catalogues and taxonomies do not necessarily help students to learn patient care
- Tension between teaching “everything” a student needs for the transition to practice and teaching for a lifetime of practice, or the focal practices of nursing

The Cognitive Apprenticeship

- Catalogues and taxonomies
 - Impact was to give descriptions of classifications of diseases without strategies for approach or access to the material except description
 - Consequences for access to practical reasoning
- Maxim: “Subsuming things under categories is not the same as productive thinking.” Logstrup

Student Experiences

“So much to learn in such a short time.”

“The most challenging thing is all of the mountains of information that just has to be completely committed to long-term memory. Remembering normal lab values and drug dosages is very hard for me.”

Faculty Challenges

“My many colleagues who maintain that “we have to cover everything in lecture”; thus, too much content, boring lectures, little interaction with students, little opportunity for deeper learning. Yet, the prevailing idea around here is still that students are empty vessels and it is the good professor's duty to fill them up to the rim.”

Faculty Challenges

“Getting students to put the pieces together in a way that they can retrieve the information later and be able to use it effectively.”

The Cognitive Apprenticeship

- Learning knowledge is only one part of the apprenticeship
- Students must learn to use knowledge
- In a given situation, what is the appropriate a student must draw on?

Review of Key Findings

- Major practice-education gap
- Radical separation of classroom and clinical teaching
- Faculty development needed for classroom teaching
- Faculty development needed for more integrative teaching

Major Paradigm Shifts in Nursing Education

New ways of thinking about teaching a practice:

FROM abstract theoretical classroom teaching and *application of* that theory **TO** teaching for a sense of salience and situated knowledge use, teaching an interpretive dialogical *use* of theory in practice

Four Major Paradigm Shifts in Nursing Education

- FROM a Primary Emphasis on Critical Thinking TO.... Multiple Ways of Thinking with an Emphasis on Clinical Reasoning

Critical Thinking is Necessary, But Not Sufficient in a Practice Discipline

- Problem of conflating critical thinking and clinical reasoning
- Critical thinking and reflection for critique and deconstruction are essential
- But nurses and physicians need a way to act and use established knowledge in rapidly changing situations
 - Sullivan and Rosin *A New Agenda for Higher Education*. (2009) Jossey-Bass/Carnegie

Critical Thinking Essential for Problem Areas And Received Knowledge That No Longer Works

- System redesign for patient safety
- New patient populations with novel problems, e.g., poly trauma patients from combat in Iraq and Afghanistan
 - Creative and critical thinking needed
- Recurring clinical problems with specific patient populations

Clinical Reasoning a Type of Practical Reasoning, Phronesis

- Reasoning across time about the particular through transitions in clinician's understanding and in the patient's condition

Major Paradigm Shifts in Nursing Education

- FROM Curricular Threads/Competencies
TO..... Integration of the Three High-End
Professional Apprenticeships and
Integration of the Classroom and Clinical

Integrate Classroom and Clinical Teaching and Learning

- Classroom:
 - Situate science, theories, technology and ethics in practice examples, unfolding cases, case studies, clinical puzzles
- Clinical, simulation and skills lab:
 - Situate learning evidence based nursing practice in care of particular patients

Rethinking Integration Through Curricular Strategies and Pedagogies

- One of the difficulties of integrating knowledge acquisition and knowledge use is that knowledge and skills required in practice come from diverse domains of knowledge and it is tempting to take a hierarchical or reductionistic approach to integration, allowing one knowledge discourse to trump all others
- This approach blocks integrative learning

Integrative Teaching

Teach students:

- to recognize the *nature* of whole clinical situations
- use multiple frames of reference in particular clinical situations, e.g., allopathic medicine; psycho-social aspects of illness; patient concerns, recovery processes and patient well-being

Integration of the Apprenticeships

- Best taught in both the clinical and classroom settings
- Pressure to separate the teaching of the three apprenticeships
- Once separated, it is difficult to bring the apprenticeships back together

The Apprenticeship of Clinical Reasoning and Clinical Judgment

- A skill-based apprenticeship of practice
- Learning the habits of mind required for competent practice in the profession

Teaching for a Sense of Saliience

- Developing a Sense of Saliience for what stands out as more or less important in unstructured, under-determined, open-ended clinical situations
- A built-in crisis in continuing to break complex situations down into simple parts
- Developing a Sense of Saliience in particular clinical situations requires integrating and embodying domain-specific knowledge

The Apprenticeship of Clinical Reasoning and Clinical Judgment

- Pedagogies of being with and responding to suffering are excellent in the clinical teaching and almost absent in classroom teaching
- Students describe transformative experiences of learning from patients but faculty do not often attend to or extend this rich source of learning
- The “added value” of time for nursing care for the student nurse fosters integration of the apprenticeships

The Apprenticeship of Clinical Reasoning and Clinical Judgment

- It is difficult for students to learn to use knowledge when clinical and classroom teaching and learning are so disparate

Dianne Pestolesi

- Teaches for a Sense of Saliience

For Inter-Professional Education

Balancing Professional Adversarialism, Critique and *The Ethics of Rights in the Context of Pluralism*

(See William F. May, “Adversarialism in America and the Professions” in Community in America, p185-201, Ed. C.H. Reynolds and R.V. Norman Univ. Calif Press, 1985)

Inter-Professional Teamwork Ethics of Care and Notions of the Good; Relational Harmony

Bryk, T. and Schneider Trust in Schools: A Core Resource for Improvement
(The Rose Series in Sociology)

Integrative Inter-Professional Teaching-Learning

Teach Students:

- To recognize the *nature* of whole clinical situations
- Use multiple frames of reference (Sullivan Carnegie Business Study) in particular clinical situations, e.g., allopathic medicine; psycho-social aspects of illness; patient concerns, recovery processes and patient well-being

The Apprenticeship of Formation and Ethical Comportment

- An apprenticeship to the ethical standards, social roles, and responsibilities of the profession, through which the novice is introduced to the meaning of an integrated practice of all dimensions of the profession, grounded in the profession's fundamental purposes

Sarah Shannon

- Teaches Clinical Ethics; Emphasizes Formation

Formation

- Beyond “socialization”
- A Student as Agent Perspective
- Experiential learning that creates new capacities to “see” and to “act”

The Apprenticeship of Formation and Ethical Compartment

- A pervasive concern in classroom and clinical practice
- Language of “Bioethics” not relational and particular enough to capture ethical concerns of nursing students
- Students imagine ethics as abstract principles, and often do not recognize when their concerns in practice are ethical concerns

The Apprenticeship of Formation and Ethical Comportment

- Examples of student nurses' ethical concerns:
 - Meeting the patient as a person
 - Preserving dignity and personhood of patient
 - Responding to sub-standard practice
 - Advocating for patients
 - Engaging fully in learning to do “good” nursing practice

Deep Learning: Less is More

- Integrating knowledge acquisition and knowledge use in practice requires choosing commonly recurring clinical problems, illnesses and public health promotion
- Strengthen clinical inquiry and clinical imagination
- Avoid pedagogies of cataloguing

A Student on the Challenges We Face

“The amount of information to be learned is overwhelming, but none of the content is actually difficult. Sometimes it feels as though the tests are deliberately confusing because the material we learn is so simple that if the questions were presented in a straightforward manner everyone would get A's. First problem: standardized tests that don't test my actual knowledge or anything I value.”

Continued

“Second problem: An emphasis on skills when these are the easier part of nursing. Bedside manner, social interaction, calming difficult patients, dealing with intense emotion, communication with patients with whom you do not share a common language are all much harder than learning to start an IV, yet the emphasis on skills over theory and thought pretends otherwise.”

Formation

- Students are passionate about nursing:
 - “Many of my professors are wonderful and inspiring! And I know they earn next to nothing compared to what they could earn in the hospital so I have a lot respect for them! Nursing school is the most challenging thing I've done in my life but there are those moments with my patients when I'm reminded of why I decided to become a nurse and I feel it's worth it. I can't wait to become a nurse because I can't think of a greater career with more opportunities. I look forward to a career that I will love (most of the time) and the opportunity to provide a much needed service to society. And I feel that nursing is not just a job or even a career but part of who I am. I already feel that transformation. I'm starting to look at the world through a nurse's eyes.”