For nearly a year there has been discussion of a possible "Flexner" type study of teacher education. Indeed, a federally supported, comprehensive look at teacher education programs seems likely with the July 11, 2003 passage of H.R. 2660. This appropriations bill, which calls for the Institute of Education Sciences to look at the status of teacher preparation in the U.S., has been referred to the Senate.

The joint Research and Information Committee, recognizing the need for clarification on the nature of a "Flexner" report, invited Rose Asera, Senior Scholar at the Carnegie Foundation for the Advancement of Teaching, to write the following commentary. We welcome your comments.

Another Flexner Report?

Whenever there is criticism of or discontent with a field, there is at least one voice calling for "a Flexner Report" to solve the problem. The Carnegie Foundation Bulletin 4, *Medical Education in the United States and Canada* (published in 1910*)*, more commonly known as the Flexner Report, is widely credited with the reform and reconstruction of the entire medical school curriculum. The report cut through the profusion of private and proprietary medical schools of the time to establish scientific medicine and clinical teaching within a university base as the gold standard for teaching medicine. And that reform maintained through the 20th century, although subsequent criticisms have led to alteration—not abandonment—of the model. The reliance on scientific and clinical knowledge remains the base of professional medical education.

In our current period of conflict and controversy in teacher education it is not surprising that we hear a cry for a "Flexner Report" in teacher education. Surely such a critical and comprehensive examination of all existing programs would result in clearer recommendations and would weed out ineffective practices and programs.

But to understand the impact of the Flexner Report, it is necessary to go back into the history and look behind the simplistic explanation that has come down over time. There is more to the story than a critical report with a set of recommendations and a high measure of compliance across the field.

In 1908 the American Medical Association Council on Medical Education commissioned the recently established Carnegie Foundation for the Advancement of Teaching to conduct a study of medical schools in North America. The Foundation, with a mandate to "do and perform all things necessary to encourage, uphold, and dignify the profession of the teacher and the cause of higher education" advocated quality and standardization in higher education. So a request to study medical education was compatible with the Foundation's mission.

The Flexner Report is commonly cited as the moving force in the decrease in the number of medical schools and in the establishment of the scientific model of

medical education and curriculum. However, numerous scholars (Ellen Lagemann in *Private Power for the Public Good*, E. Richard Brown in *Rockefeller Medicine Men*) note that the trend towards elimination and consolidation of medical schools was already in progress. Moreover, in 1906 the Council on Medical Education had conducted a similar survey of all medical schools in North America and ranked the existing schools A, B, or C according to criteria including education requirements, curriculum, resources and pass rate of graduates on state examinations. This study was completed before the CME approached Carnegie Foundation.

A great deal is made of the fact that the person chosen to conduct the study was an educator, rather than a physician. However, Henry Pritchett, the first President of the Carnegie Foundation realized that a physician might have been seen as too biased or too liable to sectarian perspectives. He contracted Abraham Flexner, a former schoolmaster, to conduct the study.

Flexner had received his undergraduate degree from Johns Hopkins University and his brother Simon, who was director of the Rockefeller Institute for Medical Research, had attended medical school there, so it is not coincidental that Flexner chose Johns Hopkins Medical School as the model program to which all others would be compared. Flexner noted that "Without this pattern in the back of my mind, I could have accomplished little." Established in 1893, Johns Hopkins Medical School was modeled after the German research university. Lagemann (1983) recognizes the influence of the German education: before World War I about half of the physicians in the United States—approximately 15,000 medical personnel—received advanced training in Germany and had been exposed to the innovations in medical techniques, research orientation, and specialization.

Flexner gladly accepted the commission, and within a year, he visited all 155 medical schools in the United States and Canada. In terms of research methods, Flexner's data gathering was roughshod at best, even by his own description, "In half an hour or less I could sample the credentials of students filed in the dean's office, a few inquiries made it clear whether faculty was composed of local doctors… A single question elicited the income of a medical school." Hastily written notes summed up his observations. Not surprisingly, his findings reflected the findings of the 1906 CME study. To a great extent, Flexner's study was an exercise in foregone conclusions. It was less an empirical study aimed at discovery than a fact-finding mission dedicated to verification of the prevailing view of academics and the medical establishment that medical education was insufficiently scientific. Flexner started with the answer key and scored the programs.

The report recommended a drastic decrease in the number of medical schools, and those that remain should be affiliated with universities. Furthermore, medical schools should require candidates to have completed at least

two years of college to study biology, chemistry, and physics, before medical school. The first two years of medical school should focus on basic laboratory sciences of anatomy, physiology, bacteriology, pathology, and pharmacology, followed by two years of supervised clinical practice. To support this, programs would need laboratories, libraries, full time professors in the sciences and affiliation with clinical settings. This firmly grounded medical education in the scientific and medical knowledge of the day. This curricular form still holds, though altered slightly. Many medical schools now introduce clinical practice before completion of basic science, some blend basic sciences with clinical experience. Others have moved away from teaching basic sciences as disciplines (as Flexner recommended) and use organ systems or problem-based integrations.

Perhaps the greatest mystique of the Flexner Report is how effectively the recommendations were followed. No other single study has been as visibly successful in reshaping a field. But this is not so much of a mystery: resources followed the recommendations. Funds from philanthropic sources, including the General Education Board (supported by Rockefeller money) funded the growing expenses of the limited number of medical programs that met the standards.

The original Flexner Report was part of a broad move of professional education from the private sector to the university. When this happened, professional education incorporated the values of the academy: scientific thinking, rigor and analysis. It would be ironic if a contemporary "Flexner Report" on teacher education had the opposite effect of removing professional education from the university location and the concomitant values and rigor of scientific thinking.

Resources:

Brown, E. Richard, *Rockefeller Medicine Men,* University of California Press, Berkeley and Los Angeles, 1979

Flexner, Abraham, *On Medical Education in the United States and Canada* Carnegie Foundation for the Advancement of Teaching, New York, 1910

Flexner, Abraham, *An Autobiography,* Simon and Schuster, New York, 1960

Lagemann, Ellen Condeliffe, *Private Power for the Public Good,* College Entrance Exam Board, New York, 1983.

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