This essay suggests that helping people learn any subject better is a job for everybody who teaches that subject, from preschool to Ph.D. To do the job well at any level requires knowing what teachers and students at all the other levels need to do, and need to have done for them, subject by subject. Most educators have ignored the seamless nature of levels of learning in a particular subject. They do this because they are usually preoccupied with one particular level of schooling, and because they do not think of organizing or reforming things by starting with subject matter or curriculum. They have focused on the processes, not the content, of education. This paper argues that curriculum, the subject matter, needs to come first in educational reform. A hypothetical eighth grade history course is described in which inclusive strategies of reform have improved the course and the education system as a whole. The paper traces the work of commissions and conferences on educational reform. The importance of close collaboration based on mutual respect among practitioners at the school, college, and graduate levels is discussed. United States Department of Education standards and state frameworks are cited for the development of criteria to establish national content standards that will turn the idea of multilevel collaboration into practice. (DK)
SEAMLESS SUBJECTS, SEAMLESS REFORM:
LEARNING AND TEACHING TOGETHER, FROM PRE-SCHOOL TO PH.D.
It is, as they say, an idea whose time has come. And as usual we wonder why we didn’t think of it sooner. It seems obvious. In any academic subject, what we can learn in the middle grades depends on what we have learned in the lower grades, and upon what we are expected to learn in high school. It also depends upon having teachers in each of the grades who understand what is offered and what is expected in all the other grades. Likewise, what we can learn in college depends upon what we have learned before and vice versa—what we can learn before depends upon how well our elementary, middle, and high school teachers were educated in college. Which, in turn, depends upon how well their college professors have been educated in doctoral programs.

Why Start With Subject Matter?

A host of other conditions affect how well we learn at any level of schooling, but the subject itself—English, history, math, or science—it is by its nature seamless. Helping people to learn it better is a job for everybody who teaches it, from preschool to Ph. D. And to do the job well at any level requires knowing what teachers and students at all the other levels need to do, and need to have done for them, subject by subject. This is not a new idea. For a very long time, teachers and scholars, and not a few parents, have been talking about it to anyone who would listen.

On the contrary, professional educators, school administrators, graduate education faculties, and government agencies, have often ignored it, rarely acted upon it. First, because they are usually preoccupied with one particular level of schooling, where each day’s problems are more than sufficient for them. Second, and more important, most professional educators and officials do not think of organizing or reforming things by starting with subject matter, with curriculum. For nearly a century, they have chosen to focus on the processes, not the content, of education. Neither by their own graduate educations nor by their daily chores are they drawn to subject matter. They prefer to talk about other things.

How can curricular reform do much by itself, they ask, without attention to other matters? What of assessment and accountability; of teacher education, certification, recruitment, and “empowerment”; of school structures and schedules; of educational technology, innovative pedagogy; enhancing school culture and community involvement; smaller classes, smaller schools, lower student:teacher ratios? The answer is, of course, that nobody with any sense ever said curriculum solves everything by itself. All these things are important—and some we surely cannot do without. But none is the place to start. Curriculum, the subject matter—the purpose for all the rest—needs to come first. None of the other measures can be argued for, or sensibly designed, or put into lasting practice, without first thinking about what everybody in a modern, democratic society should know, and be able to do, from studying the core academic subjects in school.

Helping Anytown’s Schools

Again, why must we keep all levels of schooling in our minds at once? And why do we need to pull together all strands of reform, from national standards to throwing out the classroom loudspeaker? Let us take a case, hypothetical but in enough detail to show just how seamless
education ought to be:

The 8th grade United States history course in Room 2B of the Horace Mann Middle School of Anytown, AnyState USA cannot become, and remain, markedly more effective than it has been unless several related pieces are in place:

1. Its students have had good earlier instruction in American history, biography, and literature, the content of which is well known to the 8th grade teacher because the substance and sequence of courses, K-8, of Anytown schools have been worked out cooperatively with all the teachers concerned,

2. The 8th grade teacher also knows what students will confront in following years because the course content and sequences of Anytown High School have been designed in collaboration with teachers from the town's elementary and middle schools,

3. And, as a consequence, the 8th grade course has its own clear role, not as a one-year dash from the Ice Age to yesterday but as an integrated part of a two or three-year continuum. In addition, many of its themes and significant questions are linked to those of history and literature courses preceding and following it.

4. Consistent with the assigned era and main themes (both decided upon collaboratively), the teacher in Room 2B has the authority to add or emphasize particular themes, topics, and questions, to decide their sequence, to choose textbooks and other materials, to pursue various pedagogical strategies; in sum, to design the whole course according to the students and resources at hand, and out of the teacher's own strengths,

5. In preparation for such a role---in school governance, curriculum-making, and course design---the 8th grade teacher has experienced a rigorous, imaginative liberal education, with particular attention to history and related subjects, including the arts and literature,

6. And has had the benefit of instruction from university faculty members (both subject matter scholars and learning specialists) who are themselves broadly-educated, and whose knowledge of the schools' curricula and teaching conditions enabled them to design their own courses—in content and in methods—to be of particular help to prospective school teachers,

[This implies, in turn, a graduate education for college and university faculty members that is much more attentive to liberal education, and to breadth and practicality, than most doctoral programs are now]

7. For teachers already in service, the Anytown School District has a program of professional development designed and carried out by tripartite teams of equals: experienced classroom teachers; subject matter scholars; and learning specialists. Their work, like that of similar teams helping to put together the K-12 course sequences for Anytown, has been guided by national content standards for each major academic subject, and by the curriculum framework--consistent with the standards-issued by the AnyState Department of Education.

8. Finally, the Anytown School District supports the same kind of tripartite team of equals--teachers, scholars, and specialists--to restructure the daily conditions of teaching. Each change is dedicated to the better teaching of vital skills and subject matter. Each change is directly aimed at reducing or cutting away obstacles to better teaching, whether they be rigid class schedules or teacher overloads or noxious P.A. systems.

Hopeful Signs of Change

Once we think about reform in this way, we can't help but start by looking at what we teach, and what we need to know to teach it, from pre-school to the Ph. D. An early version of the idea appeared in the 1988 report of the Bradley Commission on History in Schools, Building a History Curriculum:

Nothing will be more important than the expansion of collaborative efforts among school, college, and university teachers of history.... College and university departments of history need to assume much greater responsibility than is now common for knowing what is going on in the schools, for knowing what their former students are facing as classroom teachers. Each party has much to tell the other. Only as equal partners will they succeed in producing better texts and materials, designing better courses, and constructing better inservice programs. Fully as important, college and university historians will manage to improve undergraduate and graduate preparation of teachers only by becoming sharply aware of the necessities of the K-12 classroom.

Other versions emerged from the joint FIRST/FIPSE Partner-
ship Conference of September, 1990 on school/college collaboration to articulate curriculum and teaching materials across educational levels, K-16, in the fields of biology, English, foreign languages, and history. This first-of-its-kind conference saw teachers, scholars, teacher educators, administrators, and policymakers come together to address common issues of subject matter content, pedagogy, and textbooks.

Out of it arose concrete action: a joint FIRST/FIPSE competition for 1992, "College-School Partnerships to Improve Learning of Essential Academic Subjects, Kindergarten through College." Applicants were invited to propose projects to improve the "sequencing and articulation of curricula in those essential academic subjects that are taught across all educational levels from the early grades through college." The FIPSE guidelines for applicants put the problem this way:

Low student achievement in central academic subjects at both the school and college levels has been well documented, and can be attributed, at least in part, to inadequacies in curricular sequence and articulation—across the grades, between schools and colleges, and in the undergraduate programs, whether in the major or in general education—the repetitiveness of the students' experience as they move from one grade level to another, the gaps, the arbitrariness of sequencing, the constant shifts in terminology and perspective—is well known, and has remained an unhappy feature of the American educational scene for most of this century.

The FIPSE guidelines went on to stress the need for close collaboration "on the basis of mutual respect" among practitioners at the school, college, and graduate levels, "each of whom has insights and experience likely to be unique to those at that educational level."

Stubborn Problems

The field's response seemed encouraging at first; hundreds of applications arrived. But the submitted proposals proved that very few educators, whether at the school or college level, had understood, or accepted, the essential approach: full and genuine collaboration among classroom teachers, subject matter scholars, and learning specialists, working together as equals from start to finish, in the conception, the design, and the implementation of projects to articulate curricular content across the "grades" K-16.

Why was the essence missed? In most cases, applicants were still looking at process, not at content. So they had failed to confront the prime questions: from the mountain of fact and concept piled up by each academic subject, what, after all, is most worth knowing? What is most worth being able to do? If the object is a general education? If it is to specialize in the subject? At what level can which elements be best taught? What does one need to know in order to teach them?

As the Bradley commissioners had argued, such questions could not be sensibly explored except by tight, continuing cooperation among three kinds of people: teachers, scholars, and educators well-versed in the problems of learning. Each knows things the others do not; each must learn from the others. So only together can they comprehend what is most worth teaching, at what stage it is teachable, and how it may best be taught.

By failing to confront these questions all at once, subject by subject, most applicants failed to see what was needed to knit up the jagged discontinuities that keep pushing the levels of our schooling apart, and that prevent classroom teachers, college and university scholars, and professional educators from recognizing, accepting, and acting upon, their equality and interdependence. The magic word in educational reform these days is "systemic," and most people give that name to whatever they're doing. But nothing is systemic that does not bring scholars and practitioners together, to focus on the K-16 curriculum and then go on to treat education as seamless, to be worked at from preschool to Ph.D. and back again.

Unhappily, the 1992 applicants did not have a chance to reflect and try again. The FIRST/FIPSE competition for school-college collaboration was cancelled for 1993. Whether it will be revived for 1994 and beyond will depend upon the Department of Education's priorities under the new administration. There are hopeful signs. The new Secretary of Education, Richard Riley, in his first words to the press in Little Rock, expressed enthusiasm for multilevel collaboration among educators.

Standards and State Frameworks

Meanwhile, the principle of such collaboration is set out for-
cibly in the criteria established by the Department of Education, under former Secretary Alexander, for the proper conduct of the national standards projects in the core subjects—arts, civics, English, foreign languages, history, mathematics, and science. Each project is to avoid the encyclopedic, by wrestling with the prime question of what is most worth knowing and most worth being able to do, out of the study of each subject. And the effort must be collaborative. Criterion Six could not be clearer: "Each project is to be designed and carried out by a tripartite team of equals: experienced classroom teachers, subject matter scholars, and learning specialists."

The process of establishing a national, grassroots consensus on the essentials in each subject is to be overseen by broadly representative advisory boards, whose memberships include distinguished teachers, scholars, and specialists in pedagogy, along with school administrators, parents, state and local policy-makers, representatives from the relevant scholarly and professional associations, school board members and civic leaders, recent high school graduates, and the general public. In addition, each project is to examine "standards-setting procedures and results in other advanced democratic societies elsewhere in the world."

To the extent that the Department of Education and the several projects make sure that these criteria are met, the process of establishing national content standards will help turn the idea of multi-level collaboration into practice.

A final hopeful sign is the Department of Education’s recently-announced 1993 competition for grants to support the development of state curriculum frameworks for the core academic subjects, K-12. Among the priorities set forth in the Federal Register of December 1, 1992, four directly support inclusive strategies for reform. First, the frameworks proposed "must embody coherent, non-repetitive curricula carefully designed to ensure that children study challenging subject material in every grade, K-12." Second, the "design of the framework must involve college and university scholars and specialists, as well as teachers and administrators from public or private schools, working together as equal collaborators." Third, proposed projects are to develop model guidelines for teacher education, certification, and recertification, again to be designed collaboratively by teachers, scholars, and specialists.

Fourth, all activities of the curriculum framework projects are to be overseen by advisory committees broadly representative of the professions and groups cited in the criteria for the national standards projects.

What We May Hope

It does appear, then, that the notion of seamless reform, starting with what should be learned, pre-school through Ph. D.—and carried out collaboratively by all those who have to do the work in classrooms at every level—is an idea whose time has come. At least in some places, the right words are spoken and written, the right criteria are drawn up, the right priorities announced. But how soon or persistently practice will follow, we cannot tell. The history of campaigns for educational reform in this country is not encouraging. Fashions and quick fixes have come and gone with every half-decade. The main hope that this approach to reform will be different, and will persist, is that experienced classroom teachers and committed scholars, backed up by students, parents and civic leaders, will stay together to promote and defend what is plain common sense.

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