

“Interdisciplinary” Isn’t the Answer

By Marion Brady

“A fish,” according to an old saying, “would be the last to discover water.” The extremely familiar tends to lie, undisturbed, below conscious levels of awareness.

Curriculum reform efforts illustrate the phenomenon. Most of the reformers—administrators, teachers, lay advisory committees—are products of the curriculum they’re trying to reform. As a consequence, major problems with present practice are rarely apparent. For many, genuine curricular alternatives are, in every sense of the word, unthinkable.

Reform, then, tends to be superficial. Arguments rage over the treatment of minorities in history textbooks, over creationism in science texts, over required reading lists in literature classes. Other educators argue more abstract issues: Should the focus of study be on student needs? Social problems? Cultural literacy? Multiculturalism? Themes? Something else?

Through all of this, however, runs a constant—the academic disciplines. Subject matter emphases may change. Educational objectives may change. Teaching methods may change. School organizational structures may change. But the disciplines go on forever. They’re the bedrock of the curriculum.

Not that the disciplines are perfect, the reformers agree. They give students a fragmented view of reality. But the problem has a solution. All that’s needed is for schools to adopt interdisciplinary approaches to instruction.

Wrong. Significant improvement in the curriculum isn’t that easy. Another old saying—“You can’t make a silk purse out of a sow’s ear”—suggests why. The disciplines are useful specializations, and interesting interdisciplinary intersections abound, but they aren’t the raw materials from which a comprehensive, coherent general education curriculum can be fashioned. Individually and collectively the disciplines have serious, inherent weaknesses.

Here are several problems that, no matter how interdisciplinary the curriculum design, won’t go away:

1. The disciplines, even when combined, aren’t comprehensive. Between and beyond the disciplines lie vast and important areas of knowledge, knowledge more vital to understanding reality than most of what’s now taught. Nowhere in the traditional curriculum, for example, are students led to think about the fundamental assumptions that structure their actions and undergird their emotions, assumptions about matters such as time, causation, self, others, nature, the supernatural, and the good life. Students spend their lives in extremely complicated secondary environments, yet never study how those environments affect their action and thought. They’re pushed and pulled by vast, complex social changes, but they’re never led to think about the dynamics of those changes.

2. The disciplines segment reality in awkward, artificial ways. Many educators assume that the disciplines are products of a thoughtful parceling out of responsibility for the study of various aspects of reality. They aren’t. The disciplines took shape at different times, for different reasons, at different levels of abstraction, with often-incompatible conceptual

structures. There is a logical, natural, extremely useful way to “slice” reality into intellectually manageable pieces, but that way bears almost no resemblance to the organization of the traditional curriculum.

3. The disciplines provide no comprehensive, all-inclusive conceptual structure for organizing either “school knowledge” or ordinary experience. There is, of course, no real distinction between school experience and ordinary experience. Experience is experience, and each of us deals with it using a single, vast organizing mental framework most of which we’ve borrowed from our culture. New information that fits the framework sticks with us. Information that doesn’t fit is forgotten. Because the conceptual structures of the disciplines don’t mesh with the already-in-place mental frameworks students bring to school, much (maybe most) instruction is a waste of time.

4. The present curriculum lacks universal, overarching goals. There’s no shortage of grand statements of purpose within the educational establishment. “Prepare students for meaningful, satisfying work”; “Create democratic citizens”; “Solve social problems”; “Realize personal potential”; are some of them. What’s missing are connections between the statements and what goes on in classrooms. Since the disciplines can’t be combined to form a coherent structure of knowledge, it isn’t possible for a unified statement of goals to emerge from them.

5. The disciplines don’t disclose the systemic nature of reality. It’s possible to find all sorts of shared disciplinary territory upon which worthwhile interdisciplinary lessons can be built. Unfortunately, a comprehensive curriculum can’t be fashioned from random conceptual intersections. Reality is systemic. In a truly integrated curriculum, everything relates to everything.

6. Discipline-based curricula provide no criteria for determining the relative significance of various kinds of knowledge. Scholars steeped in their disciplines tend to see reality through the windows of those disciplines. Understandably, each is convinced that his or her perspective is the most important one. In the absence of criteria for settling disputes over which knowledge is of most worth, curricula tend to be shaped by tradition or by institutional politics.

7. The present discipline-based curriculum doesn’t disclose the subjective nature of perceptions of reality. The “evidence” of ordinary experience, reinforced by ethnocentrism and faith in science, combine to convince us that reality is as we perceive it. That it looks different from the perspective of different societies may gain a measure of intellectual acceptance, but the extent to which our perceptions of reality are subjective is little understood. The traditional disciplines do little or nothing to help students appreciate the limitations of our tools for “proving” our view of reality. Neither do they provide alternative perspectives on it.

8. The present curriculum is bulky, time-consuming and inefficient. The world grows more complex by the hour, and acquiring the necessary specialized expertise to cope with that complexity takes ever longer. At the same time, the need to understand the whole of experience in order to put specialized expertise in context increases. The two are on a collision course. A general education cobbled together from the disciplines takes far too much time. If something isn’t done, “practical” specialized instruction will continue to push general education aside.

9. Discipline-based curricula disregard basic principles of learning. Students in traditional classes are inundated with information. As research expands the disciplines, textbooks

become encyclopedias, with information presented at a rate and in a form that assures little of it will make useful sense, and even less of it will have a lasting impact.

10. The traditional, discipline-based curriculum puts students in passive, information-storing rather than information-creating roles. In occasional “hands on” instructional activities, students confront reality in all its intellectually stimulating complexity. In most classes, however, students merely read or listen to “expert” opinion as it emerges from the disciplinarians via textbook and teacher, and try to remember it long enough to pass the exam. The only thinking skill demanded is recall. Rarely does traditional academic work require students to hypothesize, generalize, classify, synthesize, or engage in other cognitive processes.

11. The traditional curriculum is inherently static, with few built-in mechanisms that help it adapt to change. Education is one of the most conservative of social institutions, and the present curriculum is one of the major reasons why it’s always behind the curve. The instructional emphasis tends to be on specific, current, factual information as it emerges from the disciplinarians. Not only is such information transient, it almost always arrives in the classroom late and in a simplistic form. The emphasis shouldn’t be on passing along current knowledge, but on developing permanent conceptual equipment for processing knowledge. Get that right, and information retention will take care of itself.

12. Much of the traditional curriculum is irrelevant, and the practicality of that which isn’t irrelevant is rarely apparent to students. Formal schooling serves many purposes. Unfortunately, teaching immediately useful knowledge isn’t one of them. What’s presented usually has more to do with what the discipline-taught elders know than with knowledge that contributes in demonstrable ways to an understanding of reality.

13. The present discipline-based curriculum is institutionalized. Like every other human institution, education has an inherent tendency to turn means into ends. The disciplines are now more important to most teachers than the reality they were originally created to model.

A curriculum with any one of these 13 problems would be seriously flawed. The traditional curriculum, from the elementary level through the university, suffers from all of them. It fails. It has always failed. And as long as the disciplines serve as its core, it will continue to fail.

Here’s a quick primer on starting fresh:

1. Stop thinking of the traditional disciplines as the building blocks of general education. They’re academic specializations. Make them elective.

2 . If the school is organized departmentally, create a one-course general education department.

3. Make clear to all that the purpose of general education is to expand understanding of reality. All reality. Explain that, despite initial reaction, this is a reasonable assignment. The task isn’t to “cover” all of reality, but to build a comprehensive, integrated conceptual structure for thinking about it. Allow two or three hours a day for this.

4. Start off in the right direction. Just about everything that’s wrong with the traditional curriculum stems directly or indirectly from the awkward, artificial, arbitrary way the disciplines take reality apart to facilitate specialized study. Offer an alternative way to segment reality—the “supradiscipline” implicit in our ordinary, non-school approach. This

supradiscipline has five components. Dealing with reality, we note (a) time frame, (b) setting, (c) participant actors, (d) physical action, and (e) the states of mind that “explain” the action. When? Where? Who? What? Why?

These five “mega-concepts,” with their supporting conceptual substructures, encompass, organize, and integrate all present knowledge. All future knowledge will be a product of the exploration of relationships between them. The instructional challenge is to make our implicit supradiscipline explicit, elaborate it until it encompasses and organizes everything known, and make it our major tool for understanding reality and coping with life.

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