
Integrating the Curriculum: Re-Examination of a Near Truism

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The special office of education is to widen one's view of life, to deepen insight into relationships, and to counteract the provincialism of customary existence---in short, to engender an integrated outlook. (Phenix, 1964).

It seems an oddity, if not an irony, that Philip Phenix should use the term "integrated" in the above quote taken from his classic work of 1964 on curriculum, since his thesis in *Realms of Meaning* is that curriculum integrity is derived directly from the content fields of instruction. Actually, Phenix proposed four principles for the selection and organization of curriculum for assuring optimum growth in meaning for learners. Those four principles are:

1. "That content of instruction should be drawn entirely from the fields of disciplined inquiry."
2. "That from the large resources of material in any given discipline, those items should be chosen that are particularly representative of the field as a whole,"
3. "That content should be chosen so as to exemplify the methods of inquiry and the modes of understanding in the disciplines studied."
4. "That the materials chosen should be such as to arouse imagination." (Phenix, 1964, pp. 10-12).

He also asserts quite strongly, "Ordinary life-situations and the solving of everyday problems should not be the basis for curriculum content (Ibid., p.12)."

Phenix was not alone in his argument for the centrality of subject matter in the curriculum. Bruner's concept-centered model was designed to elaborate conceptual relationships in a variety of areas, but its natural fit to the structures of knowledge in the academic disciplines was conspicuous, and Bruner's model dominated curriculum content from the 1960's on in many content areas and still plays an important role in several today, e.g. social studies and science.

Both Gilbert Ryle (1949) and Robert Gagne (1977) elaborated network models which have been particularly effective in mapping out declarative and procedural knowledge relationships in the subject matter areas. And, Ausubel's work found its widest application in specific fields of the social and physical sciences.

None of these curricular scholars and theorists knew how problems in society were going to change and grow during the next quarter of a century. Even more significantly from a curriculum theory standpoint, they could not project how those social problems would alter the role of schools and their shifting responsibilities. For example, would Phenix perceive sex education, drug and alcohol abuse, child abuse, gun control, etc. as substantial content for curriculum or as "ordinary life-situations" or "everyday problems?"

However, the wide range of social problems besetting the schools and begetting additional "ordinary life-situations curriculum" represents only one curriculum issue facing contemporary educators. In addition to this new curriculum content for the schools, other curriculum changes are being proposed and being instituted. And, in some respects at least, they are more challenging, for they are not rooted in what is a fairly straightforward assumption--add new content to address critical social issues/problems. Instead, they derive from questions about the basic assumptions governing curriculum for decades. Curriculum theories are afoot once more; theories which in some ways are more disconcerting than the addition of "everyday problems curriculum" to the school day.

Of particular interest is a new (renewed?) call for "Integrated Curriculum." In fact, in many educational circles it appears to be an orthodox assumption that integrating the curriculum is what educators should be about.

Most contemporary professional journals regularly include articles advocating integrated curriculum. For example, the October, 1991,

issue of *Educational Leadership* is devoted to the theme of "Integrating the Curriculum." In many respects the articles appearing in this issue are typical of those which abound in the journals of many of the professional organizations of education, both those aimed at classroom teachers and those intended primarily for administrators.

In the *Educational Leadership* issue few of the authors give more than passing attention to providing a rationale or argument for why curriculum should be integrated. The closest that any of the articles in this issue of the journal gets to promoting a rationale for integrated curriculum is to present arguments against curriculum based on subject matter fields. For example,

To students, the typical curriculum presents an endless array of facts and skills that are unconnected, fragmented, and disjointed. That they might be connected or lead toward some whole picture is a matter that must be taken on faith by young people or, more precisely, on the word of adult authority. Like working the jigsaw puzzle without a picture, one can only trust that the pieces do make one, that they do fit together, and that there are just the right number and combination of pieces. (Beane, 1991, p. 9).

Another author asserts that "life's multitude of experiences" are currently "being taught in the typical splintered, over-departmentalized school curriculum" (Vars, 1991, p. 14).

In all of these instances the argument seems to be that teachers who teach content from subject matter fields do so in a fragmented fashion: the content divorced from life experiences and needs; and, facts and skills taught in isolation with no regard for contemporary relevance to students. Whether or not these stereotypes are accurate is left to personal interpretation. They certainly question the competence and, possibly the integrity, of many teachers, elementary and secondary, who happen to believe that subject matter can be taught in a nonfragmented and relevant fashion. And, that such instruction need not require the content of history, geography, science, etc. to be integrated in one fashion or another with or into some other instructional construct.

Most articles about integrated curriculum lack two things: First, a substantiated or well articulated argument against a subject matter field approach to curriculum and instruction. Stereotyped terms such as *isolated, irrelevant, fragmented, fact or skill centered*, are used with little support other than authors assuming a body of accepted tacit beliefs about such curriculum and instruction. Second, no well-articulated rationale explains why an integrated approach should be used. Perhaps again educators believe, for whatever reasons that integrated

curriculum is best, and all that is lacking is the vehicle for bringing this curriculum about. In short, no one offers well-substantiated arguments against subject matter based curriculum or proposes articulated rationales for integrated curriculum.

The array of contemporary articles lack definitional clarity when presenting various "models" for integrating the curriculum. What does "curriculum integration" mean? Operational definitions remain hidden in many of the arguments for integration. Not atypical is the assumption by an author that "integrated curriculum" and "interdisciplinary curriculum" are synonymous, e.g.,

We were three men and three women, strangers to each other, selected from across the province to develop interdisciplinary curriculums funded by the Ontario Curriculum Superintendents' Cooperative...

Then, a few lines later,

We spent nine days together over the course of a year developing integrated curriculums." (Drake, 1991, p.20).

The assumption seems to be that integrated curriculum and interdisciplinary curriculum are synonymous. Yet, one could develop an interdisciplinary curriculum according to one definition that would not integrate subject matter content but instead coordinate it where like goals existed for both or all, depending upon the number of fields involved. On the other hand, one might opt to team teach a unit on American History with an English teacher where they are addressing the political, economic and social history of Post-reconstruction 19th century U.S. They teach the political and economic history and then teach novels from the period. The novels provide substantial insight into the social conditions of the time. The content and structure of history is taught. American literature is taught. Each supplements and supports the other. Each provides unique perspectives on the other.

This would seem to be an interdisciplinary unit although there is not an attempt to integrate history and literature in ways that make each dependent upon the other.

An interdisciplinary unit with no attempt to integrate history and literature in ways that make each dependent upon the other works.

Whether or not one agrees with the above examples, some attempt to articulate the character of "integration" and "interdisciplinary", including overlap is necessary for understanding proposed curriculum models of either or both.

Definitional problems also exist in many of the weaknesses suggested in subject-based curriculum. For example, terms such as *relevance*, *fragmented*, *isolated facts and details* commonly used to identify faults in content curriculum bear as much on instructional strategy and technique as upon curriculum per se. Suggesting that science, history, art or mathematics are not relevant in today's society appears naive at best. The skill to relate curriculum to the needs of learners and to the needs of our society is determined by our teaching ability. Imaginative, creative, responsible teachers can make a variety of curricula relevant to learners. Instruction determines student perception of relevance as much as, if not more, than does curriculum.

Also to suggest that subject-based curriculum encourages fragmentation of learning and that leads students to perceive content as accumulations of isolated facts and bits of information with little relation to their own needs or experiences seems particularly strange. For, one of the primary features of academic subject areas is their internal organization; their **structures of knowledge** if you will. "Human beings are essentially creatures who have the power to experience 'meanings.'" Distinctively human existence consists in a pattern of meanings. Furthermore, general education is the process of engendering essential meanings" (Phenix, 1964, p. 5).

Millions of bits of data barrage human beings every minute of the day, far more than we can cope with if we attempt assimilation. Learning theorists and psychologists established that one of the primary activities of the mind is to attempt to categorize this collage of data into pattern and structure groups enabling us to have a manageable sense of reality (Ryle, 1949; Gagne, 1977; Collins & Quillian, 1969.) Curriculum theorists and practitioners strive for models which enable learners to conceptualize reality according to structures and patterns compatible with cognitive operations (Ausubel, 1963; Bruner, 1960; Tyler, 1950).

Yet, rather than credit academic disciplines with having coherent internal structures of knowledge, curriculum integrationists prefer to associate holistic ideas with integrated curriculum (Vars, 1991, p. 14; Drake, 1991, p. 20) arguing that integrated curriculum enables learners to see the whole more effectively and thus not perceive learning as the accrual of bits and pieces of isolated facts and information. Tangentially associated research provides some support for their argument. For example, we know that children acquire and develop language and language using abilities in a global fashion. Children learn to speak their language from "the top down." They do not work through the elements of language phonology, morphology, syntax, semantics and

discourse pragmatics in some sort of sequenced and cumulative fashion. They integrate all of these critical elements in a holistic fashion; establish overall language structure patterns and language use patterns; they gradually fine tune the smaller constituent elements (Brown, 1973; Tough, 1977; Sulsby & Teale, 1986). With a meaningful and encouraging learning environment, caring adults, and good teachers, they become facile, articulate language users.

However, an important difference exists between acquiring the skills and processes of linguistic literacy and the acquisition and mastery of the content of cultural literacy, the structures of knowledge that define our physical and mental worlds through the academic disciplines. As an unknown language philosopher once observed, language is the house in which we live. It is part of us, inseparable from our personalities, our senses. Other facts, concepts, ideas, information, skills which define the "stuff" to be learned in education are basically *mental constructs*. Even science, which we often see as quite physical (e.g. laboratories, microscopes, chemicals) represents an abstract structure of knowledge. A core bound in concepts and relationships, mastered cognitively and articulated through the second level abstraction of language. Mental constructs tied to frameworks and contents of learning are not innate to us but acquired through long term study and immersion in them. Not an encyclopedic collection of facts to be memorized but rather an active effort to make sense out of some portion of the world or of life (Ford & Pugno, 1964. p.4).

Models negating opportunities to learn within established structures of knowledge and substituting instead approaches can contribute to the notion that reality is a hodge-podge of facts, events and relationships.

The curriculum models typically suggested by integrationists tend to fall into one of two categories. One type purports to be "child-centered" or "student driven": The learner involved in identifying important (to him or her we assume) experiences.

...that starting point involves three critical concepts. The first is that the middle school ought to be a general education school in which the curriculum focuses on widely shared concerns of early adolescents and the larger world rather than increasing specialization and differentiation among separate subjects. (Beane, 1991, p. 10)

or,

Another feature of this vision of the curriculum is that it proceeds from a constructivist view. (p. 12).

In this latter instance, problems, issues and instructional focus determine evolving classroom and learner circumstances.

The second integrationist approach attempts to "draw in" content from various subject areas as benefits the central focus. For example, theme-centered curriculum is derived from such a model. Or, elementary teachers who use children's literature as the curriculum base drive their curriculum on this model, e.g., use historical biographies to teach history concepts or use *Goldilocks and the Three Bears* to teach math processes and/or skills, i.e., sequencing, size relationships.

Aside from the question of whether these are doable curriculum models, how can one argue that either logically or conceptually they facilitate a learner's understanding of some holistic character.

In the case of the first model, the "student driven" one, we run the risk of having "ordinary life-situations" dictate the content of instruction. Unless perceptions of relevancy are broad and liberally interpreted, academic content is selected and extracted from its inherent structure to suit the immediate reinforcement needs of students. With this model, everyday social situations and/or the ongoing challenges of developing adolescence dictate a subtle but distinct shift in the major role of the teacher. The classroom teacher moves from content instructor to general learning facilitator, to personal counselor. The content of curriculum moves toward everyday problems and personal need circumstances of students.

The second model employs selected traditional academic subject matter, divested of its internal structural cohesion to meet some theme-based need. The risk of arbitrarily searching for something in math or science or social studies to tie to the literature suggests an idiosyncratic character to the model that does anything but encourage learners to conceptualize some holistic construct or pattern.

In either model instance, we see the demise of academic content and learning with possible long term implications of major proportions regarding the role of schools and education in our society.

On the other hand, subject area disciplines organize structures of knowledge binding their own internal cohesive elements and relationships. For example, one learns not only a body of historical facts and events, but, hopefully, a working knowledge of how history is generated; how historians perceive the world; how the structures of historical knowledge adapt new developments which become a part of "history's story". One learns the importance of relating historical knowledge and processes.

When students go through our schools perceiving history, science, mathematics, English, art, etc. as accumulations of facts, bits of knowledge, isolated skills, sometimes useful, occasionally interesting, but more often than not, "stuff that is not relevant in my life"---they are cheated. They are robbed of the opportunity to experience and to continue experiencing life at a multitude of levels and deprived of the knowledge that makes human beings interesting and cultured. In short, a lot less human than they have a right to be in our society.

And, interestingly enough, the fault lies not in the nature of the physical, natural or social science, nor of the fine arts or humanities, or lies in the curricula which have attempted to formulate the content and structures of these fields. The fault may well be in the instruction: (a) Either teachers themselves do not know enough about the fields of study to teach them effectively, interestingly, holistically, and relevantly, or (b) the teachers lack necessary pedagogical skills and abilities which would enable them to teach important content in an interesting and relevant fashion, or (c) the instructional support system is not up to the job of providing a teaching and learning environment.

This author's experiences in classrooms, both elementary and secondary, suggest that more often than not, problems exist in two of the three areas identified. One, the lack of background in academic subject matter remains a problem with many classroom teachers, especially in the elementary grades. Even though many new teachers in the elementary grades have academic majors in subject areas in addition to professional education courses in foundations and methods of teaching, we must realize that they are required to teach ALL subject areas in the course of the school day. Second, many of our teachers, both elementary and secondary, teach in less than desirable circumstances. Classes are too large. Materials are lacking or are seriously outdated. Support materials and resources, both human and material, are limited or nonexistent. Altering a curriculum model can impact very little on such conditions.

Most of our teachers are competent and hard-working. They teach energetically in environments not conducive to effective teaching. Curriculum and instruction are closely bound concepts. To assume that the problems of learning and the difficulties of society which have spilled over into the classrooms can be alleviated by integrating curriculum fails to recognize the close bonding between instruction and curriculum and the impact of our social condition on our schools.

Inservice experiences, workshops and summer institutes of various sorts focus increasingly on social issues, i.e., child abuse, drug education, AIDS education, rather than on new ideas in math or science or

other academic areas and how most effectively to teach them. And, topics not drawn primarily from such social problems or issues remain tangential to subject matter. For example, cooperative learning, assessment portfolios, higher level thinking skills, mainstreaming, classroom management and a variety of other nonacademic topics take up our professional attention and professional renewal time.

This is not to suggest that these are unimportant matters, nor is it to suggest that all teachers must be masters of all academic areas (or if they were that our curriculum and instruction problems would disappear). Nor, finally, is it to suggest that schools and schooling cannot or should not be sensitive to the major social problems which beset our young people.

Instead, I suggest that decisions (significant curriculum shifts or curriculum focus shifts) should be made only after careful consideration of what the problems are, how they came about and how the changes will alter things. And, perhaps these questions should be preceded by those which are even more fundamental than those associated with specific curriculum concerns. Questions regarding curriculum after all are premised upon certain assumptions we have about the roles and responsibilities of our schools. Joseph Schwab (1970) asserted that the field of curriculum is moribund. The death of the field of curriculum, he argued, was largely attributable to the fact that educators spend too much time focusing upon finding answers to relatively mundane questions. Instead, he proposed, the hope of curriculum was vested in the need for a concerted effort to generate new, more elegant and powerful questions. Perhaps the need for those kinds of questions still lives within us.

Meanwhile, the academic disciplines represent living bodies of knowledge that we have relied upon to give us a sense of what the world is and who we are as human beings.

References

- Ausubel, D. P. (1963). *The Psychology of Meaningful Verbal Learning*. New York: Grune & Stratton.
- Beane, J. (1991). The middle school: The natural home of integrated curriculum. *Educational Leadership*, 49, 9-13.
- Brown, R. (1973). *A First Language: The Early Stages*. Cambridge, MA.: Harvard University Press.
- Bruner, J. (1960). *The Process of Education*. Cambridge: MA.: Harvard University Press.

- Collins, A. M. & Quillian, M. R. (1969). Retrieval time for semantic memory. *Journal of Verbal Learning and Verbal Behavior*, 8, 241.
- Drake, S. (1991). How our team dissolved the boundaries. *Educational Leadership*, 49, 20-22.
- Ford, G. W. & Pugno, L. (Eds.). (1964). *The Structure of Knowledge and the Curriculum*. Chicago: Rand McNally.
- Gagne, R. M. (1977). *The Conditions of Learning and Theory of Instruction* (4th ed.). New York: Holt, Rinehart & Winston.
- Phenix, P. (1964). *Realms of Meaning*. New York: McGraw-Hill Book Co.
- Ryle, G. (1949). *The Concept of Mind*. London: Hutchinson's University Library.
- Schwab, J. (1970). *The Practical: A Language for Curriculum*. Washington, DC: National Education Association Publishers.
- Sulsby, E. & Teale, W. (1986). *Emergent Literacy: Writing and Reading*. Norwood, NJ: Ablex.
- Tough, J. (1977). *The Development of Meaning*. New York: John Wiley.
- Tyler, R.W. (1950). *Basic Principles of Curriculum and Instruction*. Chicago: University of Chicago Press.
- Vars, G. (1991). Integrated curriculum in historical perspective. *Educational Leadership*, 49, 14-15.