Three Approaches to Curriculum Design:
A Time For Every Purpose Under Heaven

by
Rod Janzen
September, 1999
Fresno Pacific Graduate School
Occasional Papers

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Series Editor: John Yoder

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Abstract

"Three Approaches to Curriculum Design" suggests that three commonly utilized approaches—integration, correlation and specialization—are all beneficial depending on specific curricular and pedagogical contexts as well as the manner in which they are implemented. The author proposes an eclectic yet innovative approach to curricular design that is not impeded by ideological or practical constraints.

The recent interest in interdisciplinary curricular design, which has swept the nation's educational institutions, has often neglected serious consideration of the various academic controversies and structural limitations associated with thematic teaching and learning. This is particularly true with regard to educational planning at the secondary level. It bears relevance as well for elementary schools. This is a particularly important issue in the state of California, where new curriculum frameworks seek to combine traditional and thematic approaches.

There are differences of opinion even among those who are committed to interdisciplinary curricular formats. Some supporters, for example, advocate full curriculum integration. Others simply want a more extensive correlation of subject matter areas. Those who support curricular specialization, on the other hand, believe that placing major emphasis on either integration or correlation compromises the integrity of individual academic disciplines, qualitatively diluting subject matter content. Traditionalists stress fervently that individual academic disciplines represent important and unique ways of organizing knowledge.

This paper suggests that the rationale behind all three curricular approaches—integration, correlation and specialization—be clearly understood, fairly represented and carefully analyzed. In the Old Testament Book of Ecclesiastes, the writer suggests that there is "a time for every purpose under heaven." The same might be said with regard to curriculum design. To emphasize any of the three aforementioned approaches while denigrating the others flies in the face of open, reflective, practical analysis. It is counterproductive as well in terms of interpersonal and political realities.

Integration

Full integration involves the most extensive transformation in present modes of educational operation. Integrationism asks educators to focus foundational attention on themes and issues which are not necessarily or fundamentally tied to a particular subject matter area, but which deal with questions of universal significance to students, teachers and to the community-at-large (Goodman, 1986; Kucer, Silva, Delgado-Larocco, 1995; Queen, 1999). The various
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academic disciplines are then consulted—as needed—for assistance in answering the general questions which motivate the inquiry.

A primary goal of curriculum integration is to find the best way to answer important questions posed by individuals in the school setting. The particular context within which teachers and students find themselves provides guidance with regard to the development of a clear rationale for issues, topics or questions studied.

It is often suggested that curriculum integration is particularly helpful for language minority students (Willinsky, 1991; Freeman & Freeman, 1992; Diaz-Rico & Weed, 1995) and for women (Grumet, 1988; Pagano, 1990). It has also been described as best suited to prepare students for life in a postmodern world. According to this way of thinking, integrationism’s eclectic, experimental mode of operation effectively encourages the development of creative solutions to local, national, and international social and economic problems (Slattery, 1995). In any case, the main focus of all integrative activities is inquiry—asking questions—then finding ways to begin answering those questions. Table 1, for example, poses the question, "How is it possible to predict with some accuracy consequences which might result from particular actions?"

<table>
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The question is a universal one dealing with cause and effect issues. It does not automatically require firm grounding in a particular subject matter discipline. In order to answer such a question, however, students are encouraged to engage in dialogue with the various academic traditions, which may provide assistance in the process of exploration (Harste, 1993). Procedures--as noted in Table 1--might include the reading of various documents, direct and indirect observations of practice, interviews with experts, and a general sharing of information and insights with other students and teachers.
The activity shown in Table 1 involves consultation with various disciplinary traditions in an attempt to answer the general question posed. The subject field of Business, for example, suggests the importance of doing market research to predict individual needs and social interests. Home Economics focuses on the nutritional implications of culinary traditions. Each one of the disciplines utilizes a different language and introduces highly nuanced explorative possibilities. Each traditional area of study offers uniquely creative ways to help answer a question which in itself transcends disciplinary categories.

Integration is extremely helpful in freeing research endeavors—and conversations generally—from subject-matter specific idiosyncrasies. As Ira Shor (1987) has written: Learning should "resist limits set by a single discipline's methods." (p. 114) Integration encourages the broadening of intellectual horizons in many ways. It is a particularly helpful model for introductory activities dealing with big ideas and major themes. It is an approach which was advocated by John Dewey as early as 1931, in his pamphlet, "The Way Out of Educational Confusion" (Dewey, 1931). Curriculum integration was also a major focus of the Reconceptualist movement of the 1970s and 1980s (McDonald, Wolfson, Zaret, 1973).

Advocates of curriculum integration emphasize that the main purpose of interdisciplinary study is to nurture a spirit of inquiry (Harste, 1995). They believe the inquiry process is animated most naturally, most wholistically, by investigations which move beyond traditional academic boundaries. In Table 1, for example, although the choice of methodology includes consultation with various disciplines, the latter are not recognized as foundationally exclusive delineations.

The primary focus of full integration is not simply to make students aware of how the various academic disciplines can answer their questions. It is, instead, to provide support to students (and teachers) as they become more and more conversant with their own exploratory inclinations (Apple, 1990; Smith, 1990). The pathway to effective problem-solving lies in the transcending of traditional disciplinary boundaries.

Full curriculum integration as an organizational approach does have detractors. Many educators believe that only major structural change—including the expiation of academic boundaries—will allow inquiry to move with real freedom in whatever direction it chooses to take (Gatto, 1992). Skeptics do not feel curriculum integrationism per se is a practical or effective modus operandi.

Advocates of other curricular approaches have also taken issue with the idea that a spirit of inquiry can only be nurtured in fully integrated formats. Inquiry is also emphasized, for example, in correlational and specialized curricular models. It is perhaps only when one defines "inquiry" to mean a total, open-ended, search for truth and meaning, that the integrationist interpretation of that term is accurate.

Proponents of critical theory have in addition questioned the purpose of inquiry-oriented integrated curriculum. Committed to the promotion of revolutionary alterations in the way in which the world works and is perceived, critical theorists have the sense that inquiry activities often do not have enough structure, organization, or clearly-thought-out conceptual purpose, to move people in the direction of dynamically productive modes of thought and action (Freire, 1985; Giroux, 1988). C.A. Bowers (1987) has described this nihilistic tendency as a "loose canon," which precipitates societal changes which are often chaotic, unpredictable and ecologically destructive.

Curriculum integration does encourage mind-expanding, inventive and creative ways of thinking at a time in history when people find themselves submerged in a sea of factual information. It encourages students to think beyond the confines of the sometimes artificial boundaries which have divided particular academic disciplines. The very fact that the postmodern world is overloaded with information, however, means that there is also a need for specialists; for those persons who think very specifically within the frameworks of certain academic disciplines. Even experts on curriculum integration and inquiry-oriented pedagogy specialize. They pride themselves on having an in-depth understanding of theoretically de-specialized endeavors.

We are thus confronted with a supreme dilemma and paradox. Not wanting to inhibit full understanding we integrate, yet too much integration--too many questions-- can lead to perceptual chaos, curricular spiderwebs enlarged to the point where web fringes are in reality disconnected from the web's conceptually-integrated center. The next curricular approach discussed --correlation -- attempts to deal with this dilemma by constructing a curricular model which is situated somewhere in between integration and specialization.

Correlation

Unlike full integrationists, advocates of correlated curricula believe that teachers and students should operate out of the central perspective of a particular academic discipline (Dykeson & Gross, 1995). They assume, however, that to fully understand the factual information, themes and issues
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Curriculum correlation is at times confused with curriculum integration, the two designs viewed as variants of a single thematic inquiry approach (Jacobs, 1989). One finds this definitional confusion, for example, in state framework documents (California State Department of Education, 1987, 1988). At the secondary level, particularly, but also in elementary schools, correlation is often—much to the chagrin of integrationists—what curricular specialists mean when they use the word "integration."

Curriculum correlation is much more focused, however, on particular subject matter disciplines. Correlationists recognize that each academic discipline has its own unique way of thinking and acting (Jacobs, 1989). As Neil Postman (1988) has noted: "The principles and rules of asking questions...differ as one moves from one system of knowledge to another...." (p. 27) Correlationists therefore believe that students need to reflect on ideas, topics and themes from the central vantage point of individual subject matter areas. Curriculum correlation recognizes Jerome Bruner's notion of the uniqueness of separate "disciplinary structures" (Bruner, 1960).

The correlative approach is suggested in Table 2, where in the context of a social science course, the fast foods industry—an institution well-known by high school students—is studied in order to give insight into those principles which most concern Americans. The general question posed, therefore, is, "What can a food franchise tell us about life in the United States?" The procedural question, which helps frame possible answers to the general question, asks how academic disciplines other than the social sciences can provide assistance in answering the conceptual question posed.

### Table 2: Correlating Curriculum

<table>
<thead>
<tr>
<th>Setting:</th>
<th>A Social Science course</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Question:</td>
<td>What can a fast food franchise tell us about life in the United States?</td>
</tr>
<tr>
<td>Procedural Question:</td>
<td>How can different academic disciplines help us answer the question posed?</td>
</tr>
<tr>
<td>Activity:</td>
<td>Reading, observation, interviews, discussion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disciplines/ Area of Study</th>
<th>Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>Aesthetics (food, eating areas)</td>
</tr>
<tr>
<td>Business</td>
<td>Management (profit margins, supply issues, leadership)</td>
</tr>
<tr>
<td>Drama</td>
<td>Capitalism (micro/macroeconomic theory)</td>
</tr>
<tr>
<td>Ethics</td>
<td>Values (in the workplace)</td>
</tr>
<tr>
<td>Home Economics</td>
<td>Nutrition (food preparation)</td>
</tr>
<tr>
<td>Language Arts</td>
<td>Communication (speaking, listening, writing, reading)</td>
</tr>
<tr>
<td>Law</td>
<td>Legal rights (employees, employers, customers)</td>
</tr>
<tr>
<td>Linguistics</td>
<td>Language development (employees, employers, customers)</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Computation (sales, wages, purchase patterns, customer profiles)</td>
</tr>
<tr>
<td>Music</td>
<td>Genre played (if any and for what reason)</td>
</tr>
<tr>
<td>Philosophy</td>
<td>Purpose (related to work)</td>
</tr>
<tr>
<td>Physical Education</td>
<td>Physical activity on the job</td>
</tr>
<tr>
<td>Psychology</td>
<td>Human development (social competence, interpersonal relationships)</td>
</tr>
<tr>
<td>Science</td>
<td>Ecology (chemical use in cleaning and food preparation)</td>
</tr>
<tr>
<td>Sociology</td>
<td>Labor relations in fast food franchises (roles, wages, internal dynamics, cultural/ethnic/class issues)</td>
</tr>
<tr>
<td>United States History</td>
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Curriculum correlationists, like integrationists, are interested in creating learning environments which are relevant to students and which promote student inquiry (Martorella, 1991). The inquiry in Table 2 proceeds via a variety of reading assignments, observations, interviews and discussion. The main focus, however, is how the various disciplines can help answer a question which has particular relevance to the field of study we call the "social sciences."
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In order to answer the question posed in Table 2, the discipline of mathematics, for example, suggests the importance of doing a statistical analysis of purchase patterns, customer profiles and profit margins. The subject field of art helps interpret the social and aesthetic meaning of eating area structures. All aspects of the correlational inquiry, however, are connected to a central social science-related question: "What does this tell us about life in the United States?" The question posed is not a general one; it is specific to the social sciences.

Unlike the more open-ended "cause-and-effect" lesson outlined in Table 1, the fast food inquiry is more centrally connected to a particular area of study (Maxim, 1999). The topic selected is not, for example, foundationally relevant to science and mathematics.

That which is substantively unique to another subject field is not of primary importance to the curriculum correlationalist. Art work hung on fast food restaurant walls, for example, is analyzed only with regard to how it might help answer the particular question at hand. The primary focus is not to interpret textures and patterns in the art work. Aesthetic perspective in general is not considered relevant. Other subject areas are consulted--just as in the integration example--but the underlying thematic focus of the correlational study originates with the social sciences.

Curriculum correlation thus provides a middle way between full integration and specialization. Some curriculum specialists consider correlation too disjointed in its multifarious cross-disciplinary investigations, at least for a pre-college-level audience. Integrationists feel it limits the general process of inquiry and often hint that correlationists have "sold out" in their refusal to fully adhere to the integrationist doctrine.

Taking into consideration present educational institutional structures as well as general political considerations, however, correlation often represents the most realistic approach to curricular change, particularly since it is an approach which validates--in many ways--both integration and specialization. Patricia Roberts and Richard Kellough (1996) have even suggested varied "levels" of adherence to interdisciplinary curricular designs. Correlation might thus be placed in the center of a continuum which begins with specialization and ends with integration (see Figure 1).

![Curricular Approach Continuum](image)

Experiments in "bloc" scheduling at the middle and high school levels have greatly assisted correlateive activities, providing many opportunities for teacher collaboration and the cross-disciplinary sharing of ideas that are essential to the success of any non-specialized curricular endeavor (Willis, 1992). A high school history teacher, for example, cannot be expected to know a great deal about the subject fields of mathematics and science nor can he/she be expected to be conversant with the nuances of recent American literature.

Some middle schools have established curriculum correlation in two theoretically like-minded subject fields, such as the social sciences and language arts, as well as mathematics and science. Member institutions of Ted Sizer's Coalition of Essential Schools, and others, have experimented with even more generalized subject area correlation, in the direction of full integration (Aschbacher, 1991; Sizer, 1992). "Humanities blocs," for example, have encouraged student inquiry to move beyond the social sciences and language arts, to the domains of the fine arts, ethics and philosophy. In most of the schools experimenting with interdisciplinary curricula, however, joined-together subjects are usually studied in more of a correlational than an integrative manner.

**Specialization**

A third curricular approach also deserves serious consideration. Those who advocate disciplinary specialization denote major weaknesses--and even inconsistency and a modicum of hypocrisy--in curricular approaches which do too much integrating and correlating. (Integrationists and correlationists, concurrently, denote inconsistency and hypocrisy on the part of curriculum specialists.) Specialists fear that integrated and/or correlated academic approaches--while they have their place--often lead to overly individualistic and context-driven activities with chaotic and irrelevant procedures and results.

While integrationists and correlationists engage in significant criticism of academic specialists, making them responsible for everything from narrow-minded student thinking to low self-esteem, supporters of academic
In order to answer the question posed in Table 2, the discipline of mathematics, for example, suggests the importance of doing a statistical analysis of purchase patterns, customer profiles and profit margins. The subject field of art helps interpret the social and aesthetic meaning of eating area structures. All aspects of the correlational inquiry, however, are connected to a central social science-related question: "What does this tell us about life in the United States?" The question posed is not a general one; it is specific to the social sciences.

Unlike the more open-ended "cause-and-effect" lesson outlined in Table 1, the fast food inquiry is more centrally connected to a particular area of study (Maxim, 1999). The topic selected is not, for example, foundationally relevant to science and mathematics.

That which is substantively unique to another subject field is not of primary importance to the curriculum correlationalist. Art work hung on fast food restaurant walls, for example, is analyzed only with regard to how it might help answer the particular question at hand. The primary focus is not to interpret textures and patterns in the art work. Aesthetic perspective in general is not considered relevant. Other subject areas are consulted--just as in the integration example--but the underlying thematic focus of the correlational study originates with the social sciences.

Curriculum correlation thus provides a middle way between full integration and specialization. Some curriculum specialists consider correlation too disjointed in its multifarious cross-disciplinary investigations, at least for a pre-college-level audience. Integrationists feel it limits the general process of inquiry and often hint that correlationalists have "sold out" in their refusal to fully adhere to the integrationist doctrine.

Taking into consideration present educational institutional structures as well as general political considerations, however, correlation often represents the most realistic approach to curricular change, particularly since it is an approach which validates--in some ways--both integration and specialization. Patricia Roberts and Richard Kellough (1996) have even suggested varied "levels" of adherence to interdisciplinary curricular designs. Correlation might thus be placed in the center of a continuum which begins with specialization and ends with integration (see Figure 1).

Figure 1: Curricular Approach Continuum

<table>
<thead>
<tr>
<th>Disciplinary</th>
<th>Interdisciplinary</th>
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</thead>
<tbody>
<tr>
<td>Specialization</td>
<td>Correlation</td>
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</table>

Experiments in "bloc" scheduling at the middle and high school levels have greatly assisted correlative activities, providing many opportunities for teacher collaboration and the cross-disciplinary sharing of ideas that are essential to the success of any non-specialized curricular endeavor (Willis, 1992). A high school history teacher, for example, cannot be expected to know a great deal about the subject fields of mathematics and science nor can he/she be expected to be conversant with the nuances of recent American literature.

Some middle schools have established curriculum correlation in two theoretically like-minded subject fields, such as the social sciences and language arts, as well as mathematics and science. Member institutions of Ted Sizer's Coalition of Essential Schools, and others, have experimented with even more generalized subject area correlation, in the direction of full integration (Aschbacher, 1991; Sizer, 1992). "Humanities blocs," for example, have encouraged student inquiry to move beyond the social sciences and language arts, to the domains of the fine arts, ethics and philosophy. In most of the schools experimenting with interdisciplinary curricula, however, joined-together subjects are usually studied in more of a correlational than an integrative manner.

Specialization

A third curricular approach also deserves serious consideration. Those who advocate disciplinary specialization denote major weaknesses--and even inconsistency and a modicum of hypocrisy--in curricular approaches which do too much integrating and correlating. (Integrationists and correlationalists, concurrently, denote inconsistency and hypocrisy on the part of curriculum specialists.) Specialists fear that integrated and/or correlated academic approaches--while they have their place--often lead to overly individualistic and context-driven activities with chaotic and irrelevant procedures and results.

While integrationists and correlationalists engage in significant criticism of academic specialists, making them responsible for everything from narrow-minded student thinking to low self-esteem, supporters of academic
specialization blame the latter manifestations on more foundational social problems or on poor teachers who rely on worksheets and true-false examinations. Sociologist/theologian, Jacques Ellul, has gone further, questioning the postmodern "humiliation of the word" and an obsession with "images." (Ellul, 1985). The most common complaint made by integrationists and correlationists, however, is that curricular specialization has caused many—if not most—teachers to focus attention almost exclusively on their own departments and areas of study.

Academic specialization has been a central component of most elementary and secondary schools throughout the world since at least the nineteenth century. It has become institutionally embedded in the way in which most people view education. It is for this reason that curriculum specialization is attacked so vociferously by its opponents. They view it as an antiquated remnant of modernity, an appendage of the industrial age which still wields considerable power and influence. Integrationists and correlationists feel that only through hard-hitting attacks, employing the strongest arguments, can the academic specialists be defeated.

Opponents of specialization suggest that in a postmodern world people can only find realistic solutions to local, national and global problems by crossing the boundaries of specialized fields of study (Doll, 1993; Slattery, 1995; Pinar, Reynolds, Slattery, Taubman, 1996). Traditionalists focus attention on the same information explosion of the past fifty years but believe such changes demand an even greater level of subject matter expertise. Specialists do not accept the idea that a post-industrial world needs to eliminate disciplinary boundaries altogether.

Advocates of curriculum integration and correlation believe strongly that discipline-based specialization is irrelevant outside of the school setting. They contend that in most jobs people are asked to synthesize information from various areas of knowledge. They also suggest that jumping from one knowledge area to another every fifty minutes—as one finds in many American secondary schools—is both unnatural with regard to later professional environments, and thought-numbing with reference to the learning which actually takes place. Integrationists and correlationists associate specialization with the "factory model" of schooling introduced in the early nineteenth century, which had "value" only as it produced workers for industrial operations which are now outdated (Goodman, Shannon, Freeman, Murphy, 1988; Spring, 1989).

While proponents of curriculum specialization agree, in part, with their critics, they are not willing to accept the conceptual or practical superiority of integration and correlation. While recognizing the value of both in certain circumstances, specialists believe that one cannot both fully comprehend a particular area of knowledge, and be creative in it, without focusing substantial attention on the unique conceptual and interpretive traditions—as well as salient factual information—as basic to that subject field (Barr, Barth, Shermis, 1977). According to this viewpoint it is essential that one learn the various idiosyncratic ways in which specific subject fields operate and understand themselves before branching out to find relationships with other academic disciplines. As "structure-of-the-disciplines" proponent Edwin Fenton put it (in 1967): "Students should learn the most important elements—the basic concepts—of each discipline" (p. 21). This is a time-consuming process requiring focused attention on a single subject area.

Table 3, for example, shows what a specialist curriculum design might look like from the perspective of an historian. The question under general investigation, "Did the majority of people living in the thirteen colonies in the 1770s support the Revolution?" is discussed from a particular vantage point, utilizing an investigative framework and basic principles of research commonly adhered to by experts in the field of history.
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Table 3: Curriculum Specialization.

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It is expected, for example, that information will be gathered from a variety of sources which are both reliable and diverse in nature. It is anticipated that both primary and secondary sources will be consulted. Conclusions based on careful analysis of gathered information help answer the general question under consideration.

Similar examples of specialized study are found in all of the subject areas. Art and music teachers, in particular, have criticized integrative and correlational curricular approaches for tending to relegate their own fields of study to tangential interpretive realms (Drake, 1991; Hewitt & Stallings, 1995; Leppke, 1998). One does not study things like rhythm, tempo and expression (in music) or texture, color and pattern (in art), for example, when one focuses primary attention on finding ways in which music and art might help bring clarity to a question grounded in the sciences or social sciences.

Advocates of specialization wonder where the great architects, musicians, engineers, historians and other professionals will come from if students are not taught the importance of specialization early in their educational experience. Specialists believe that adherence to the integrative/correlative alternative will ultimately produce a generation of students who know very little about very many things.

A Time For Every Purpose Under Heaven

I believe that it is important to recognize the value of all three curricular approaches: integration, correlation and specialization. Each model has positive features which—when faithfully given adherence—bring forth a unique understanding of the world. In all three approaches central attention may be focused on inquiry as a motivational characteristic. This contrasts with the simple memorization of factual material (which in itself has certain value). All three curricular approaches may utilize modern pedagogical methods which emphasize cooperative learning, recognition of diverse learning styles, and cultural sensitivity (Caine & Caine, 1997).

A high school English class studying a Shakespeare play might, for example, engage in a specialized textual analysis of the bard’s writing style and purpose, a correlative analysis of social/historical variables, and an integrative search for content which has universal meaning. Each one of the three pathways might take a number of days to fully explore. Each investigation has a different purpose and a different objective. Each demands a different curricular approach and, ultimately, all three are mixed, matched and interwoven.

To suggest that one curricular approach is superior to another—at any grade level—is counterproductive. Just as there are many different ethnic and religious groups living on this earth, students, teachers and communities have different needs and interests. Educators will hopefully introduce students to a variety of curricular approaches, inviting them to search for answers to some of
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