"INTEGRATION" AND "THE INTEGRATION OF FAITH AND LEARNING"

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Abstract

This study attempts to determine what use the term "integration" has in educational discourse, specifically as it appears in the popular phrase in Christian higher education, "the integration of faith and learning." Chapter I records that many educators see widespread disintegration in contemporary education. This perceived disintegration has led to many calls and proposals for educational integration. While educators perceive this increased need for integration, what "integration" means is less and less clear.

By surveying actual usage in educational writing, this thesis distinguishes four general senses of "integration": fusion, incorporation, correlation, and dialogical (in Appendix A and Chapter III). It then explores further typical elements of meaning in educational uses of "integration" (Chapter IV). Chapters III and IV reveal and discuss a number of points of contention between educators as to the "meaning of integration."

Chapter V identifies five main sources of the confusion that often accompanies uses of "integration." It is a positive term and frequently is employed primarily for its value as a slogan. Different educators give "integration" at least three different psychological meanings. The same word is used to denote both processes and end states. It is a polymorphous term whose meaning is not clear until what is
being integrated is specified. It is a term that invites conception-building, though conceptions are rarely announced as such; usually educators' visions of what ought to be come cloaked as definitions of terms.

"The integration of faith and learning" suffers from every weakness that "integration" itself encounters. Its popularity in certain sectors of church education is understandable when considered in its historical context: some branches of the church that once largely abandoned higher education are now trying to express a new interest in it. "Integration" is a choice word to serve as a slogan that expresses a certain conception of Christian education. Beyond its function as a slogan, and despite the other problems that frequently accompany its use, "integration" does have use in education, partly because integration is an important concept in education.
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CHAPTER I
INTEGRATION AND "THE INTEGRATION OF FAITH AND LEARNING"

Does not the worst evil for a state arise from anything that tends to rend it asunder and destroy its unity, while nothing does it more good than whatever tends to bind it together and make it one.

- Plato, The Republic, 5.

As the quotation from Plato indicates, integration is neither a new idea nor an idea of concern exclusively to educators. For that matter, the desire for wholeness, unity, harmony, and integrity did not begin with Plato; all people at all times in history have shared these concerns. This "passion for unity," according to at least one account, is "inveterate, universal, and endemic."[1] One current expression of the "passion for unity" is the term "integration." The notion of "integration," or, rather, a sub-class of it--"educational integration"--is the subject of this study. More specifically, the phrase that has become so popular in Christian education--"the integration of faith and learning"--is of special interest here.

One wishing to study such a term, however, must have more convincing reasons than that ideas of unity, harmony and integrity are apparently universal and ageless. Three such
reasons come to mind and it is a consideration of them that constitutes the focus of the remainder of this chapter. Briefly, these reasons are as follows:

A) "integration" is a popular term in educational discourse. The phrase "the integration of faith and learning" has increased in popularity simultaneously with the key term. From such frequency of usage or popularity, one adduces that "integration" is an important educational concept;

B) "integration" frequently is ambiguous and a source of confusion in educational discourse;

C) "integration," in educational applications, has been examined very little. A prior question to "Is integration desirable?" is "What is integration?" As Stephenson observes, words figuring centrally in disagreements frequently require clarification before the questions at issue can be answered.[2] "Integration" certainly figures centrally in many arguments, yet much clarification of the concept is still required. Musgrave, in fact, notes this feature of "integration" specifically. He writes that "when one knows what is implied by integration the question may also be answered, is it worthwhile?"[3]

In these circumstances, more study of "integration" is in order. While "the integration of faith and learning" is of special interest herein, the most fruitful way to examine it appears to be to approach the general term
"integration" first, then to focus on the problematic phrase. Both examinations are conducted with one primary object in view: to test the hypothesis that "integration" functions usefully in educational discourse and ought to be retained in discussions of curriculum.

A. THE IMPORTANCE OF INTEGRATION

Given that integration is such an important concept in general, it should come as a surprise to none that educators in this century have concerned themselves with it to the degree that they have. Many, in fact, argue that such a concern is quite proper, since educational integration is a concept interrelated with curriculum sequencing, choice of subject-matter, teaching methodologies, and, some claim, mental health. There are four obvious arguments favoring the claim that educational integration is an important concept. One argument, and as noted, possibly the weakest, is that integration in general is important. But three stronger arguments come to mind. First, there is and has been for some time great concern over educational disintegration. Second, this perceived unhappy state of affairs has elicited a number of calls for integration. Educators persist in demanding that curricula be integrated or contribute to integration. Third, and again a consequence of the unhappy
situation that many perceive in contemporary education, educators have made a great number of curricular attempts at some sort of integration, so many attempts in fact that a few writers have begun to take note of the popularity of "integration" in educational discourse. To establish the importance of "integration" as an educational concept, then, three arguments are presented, the first being an overview of concern about educational disintegration. The second and third arguments follow the first very briefly in this chapter and are more fully developed in Chapter III, the schemata of uses (and Appendix A, the extensive list of uses).

1. Cosmos or Chaos: Concern over Disintegration

a. A brief history of educational developments

A brief sketch of developments in higher education in the last five centuries provides a valuable background to present-day concern about "educational disintegration," attacks on certain curriculum structures, and the consequent calls for various kinds of educational integration. In his study of the analysis of concepts, Wilson, in fact, points out that since concepts do not operate in a social vacuum, it is important to consider the social circumstances in which they are used. In light of this, he notes the benefit to a conceptual analysis of identifying any underlying anxieties that might be related--perhaps causally--to people's use of
certain concepts.[4] Tracing educational developments through recent centuries will reveal the sources of some of the anxieties underlying contemporary education with its concern for integration.

If one begins a survey of education during the Renaissance, one must consider scholasticism as a background.[5] Any proper understanding of scholasticism seems contingent upon grasping Christian attitudes at the time of declining Roman power. One line of argument frequently heard in the early Medieval church was that Christianity ought to have nothing to do with its surrounding culture. Tertullian clearly expresses this view:

What is there in common between Athens and Jerusalem? between the Academy and the Church? . . . away with all projects for a 'Stoic', a 'Platonic' or a 'Dialectic Christianity'. . . . The Son of God was born, I am not ashamed of it because it is shameful; The Son of God died, it is credible for the very reason that it is silly; and, having been buried, He rose again, it is certain because it is impossible.[6]

Jerome, another church leader, expresses a view much like Tertullian's when he asks, "How can Horace go with the psalter, Virgil with the gospels, Cicero with the apostle?"[7] One wants to warn that such Christian interpretations did not end with Tertullian and Jerome. They articulated so forcefully their strong antipathy toward any sort of dialogue between Christian and non-Christion belief that they attracted a following that has persisted throughout
Christian history, a fact that will later come to bear on the popularity of "the integration of faith and learning."[7]

The views of Tertullian and Jerome were not held unanimously in the early Christian church however, and as early as the fourth and fifth centuries such men as Clement of Alexandria and Origen were attempting to reconcile Christianity with classical Greek and Roman philosophy. Basing a curriculum on the Quadrivium and Trivium, they demonstrated an early form of scholasticism and laid the foundations for the sort of Christian philosophizing which reached its zenith in Thomas Aquinas' attempt to recover Aristotle and make Greek philosophy more palatable to Western European Christians in the high middle ages. The goal of Thomas, and Thomism after him, was nothing less ambitious than the synthesis of theology with all knowledge.[9] As will be noted later in this study, Thomas' influence was felt widely until the Renaissance and, in some circles, is still felt to the present day.

It is into this milieu that the scientific spirit of Renaissance learning and exploration came and, inevitably, did not fit. Some Catholics blame the Protestant Reformation for the church's diminishing control over education.[10] For whichever reason, church dogma could no longer make a significant contribution to the organization of knowledge, for its job of synthesis based on theology was already done.
Medieval speculations were no longer adequate to the new task of discovering the world. And so, for some five or six centuries men saw it as their task to expand the stock of knowledge through science and travel. Simultaneously, the influence of the church upon the everyday experience of ordinary people declined and, to a greater degree than had been the case for centuries, present life on earth became more important than the anticipated future life in heaven. Reason, rather than authority, became the measure of epistemological matters.

By the eighteenth and nineteenth centuries, there was a new mood in the universities which worked itself out as an interest in natural science and in the professions. These new interests were accompanied, especially in America, by a corresponding loss of interest in training ministers for the church. Such schools as Harvard and Princeton, for example, which had been founded by Puritans, shifted in the nineteenth century to become universities which viewed the whole realm of knowledge as their proper domain. The elective system was introduced to replace the fixed curriculum, and such institutions as Yale, Michigan, and Virginia led the way toward offering a new type of higher education. Interestingly enough, it was during this time that the word "integration" first began to appear in educational writing. In a master's thesis written at the
Teacher's College of Columbia University in 1899 and titled "The Doctrine of Correlation of Studies in the United States," Guy Maxwell called for

... the recognition of the natural relations existing among the various departments of human activity and such an arrangement of those departments for the presentation to the child that all his knowledge shall stand clearly in mind in its true relation to the whole and each in its parts.[13]

Just a year before Maxwell wrote his thesis at Columbia, Alexis Bertrand published *L'Enseignement Integral* employing the term "integration."[14] Even this reference was preceded by Herbert Spencer's use of it in a reference to psychological health in his *Principles of Psychology* in 1855.[15] Without going into great historical and etymological detail at this point, it is possible to see that simultaneous with the completion of the decline of older views of knowledge, whether Thomistic or otherwise, there came a rise in interest in educational integration. This is not to argue that educators of the nineteenth century saw about them disintegration, but nonetheless an interest was beginning to take form.[16] In the present century, this interest would blossom twice, the second blossoming including interest in "the integration of faith and learning."

b. Current criticism of curriculum

The preceding brief history of developments in education does not in itself account for the great interest
in educational integration evident in this century. That interest is better understood if one examines the sorts of criticism that have been directed at schools and especially at subject- and discipline-based curricula in the last fifty years. Richard Pring, in fact, argues that there is a good justification for exploring this negative angle. He writes:

A useful way to begin (before one seeks to find some coherence in or classification of the many different claims for an integrated curriculum) is to list almost at random the sorts of criticism levelled against a curriculum that is fragmented into isolated teaching units of distinct subject-matters, and thus the sorts of problem that a more integrated curriculum is intended to meet. It often is the case that one understands what a person means by understanding the kind of problem that is worrying him. What is meant by an integrated curriculum depends partly upon the nature of the problems that it is aimed to meet.[17]

Pring himself lists a number of such criticisms, some of which are included in what follows. Three approaches are taken here to a review of these criticisms: first, a sampling is presented of the negative language used by critics of modern education; second, some contemporary criticism is examined more closely; third, five specific criticisms of curricula are treated.

i. The language of the attack on subjects

Attending to Pring's suggestion, the following is "almost [a] random" list of criticisms directed against specialized, twentieth-century subject- and discipline-based
curricula:

"fragmentation"

"disintegration"[18]

"barriers"

"pigeon-holing"

"artificial limits"

"frequent irrelevance to real problems"[19]

"hotch-potch"

"products of haphazard addition"[20]

"arbitrary"

"compartmentalization"

"aimless wanderings in the mere bypaths of knowledge"[21]

"atomization/atomistic"

"educational constipation"

"a glut of unassimilated and unrelated ideas"

"elementistic"[22]

"undigested lumps of information"

"splintering"

"fissionary tendencies"

"cultural and educational dispersal"

"curse of departmentalization"

"shreds and patches"

"a severe, illiberal limiting of education"

"growing aggregation of courses"

"academic islands"[23]
"mystifying"
"detached"
"bits and pieces of information"
"ossified"
"mere aggregations of departments"
"triviality and isolation."[24]

Such a list makes for interesting reading and might easily be extended, but a second, more systematic approach is perhaps more in order as a means of catching the spirit of the criticism that has been directed at subject- and discipline-based curricula.

ii. Further examination of criticism

Specialization in education and the subject- or discipline-based curriculum have been matters for attack throughout this century. In a passage now frequently quoted, Whitehead laments the "fatal disconnection of subjects that kills the vitality of our modern curriculum."[25] Both Jaspers and Ortega y Gasset note the disintegration of modern education and science.[26] The Harvard Report decries the diversification and parceling of learning "into a myriad of specialties."[27] Rachel Sharpe comments on students' perceptions of knowledge in the type of curriculum that usually accompanies such specialization:

School knowledge is experienced as reified, fragmented and disparate collections of unproblematic 'facts.' The grounds of such
knowledge usually remain hidden, the procedures for arbitrating between different knowledge claims rarely being exposed to critical examination."[28]

In a similar vein, James questions the purposes of arbitrarily dividing educational time into "spasms of thirty, forty, or forty-five minutes, punctuated by the clanging of bells." She follows this query with the question, "How do we reconcile this planned incoherence with our knowledge of the different rhythms of learning different individuals have . . .?"[29] A well-known conservative American critic deplored the same situation earlier in this century, albeit for different reasons. R.M. Hutchins asked why it was "that the chief characteristic of the higher learning [was] disorder."[30] At another point, he offers an illuminating metaphor:

The modern university may be compared with an encyclopedia. The encyclopedia contains many truths. It may consist of nothing else. But its unity can be found only in its alphabetical arrangement. The university is in much the same case. It has departments running from art to zoology but neither the students nor the professors know about the relation of one departmental truth to another, and what the relation of departmental truths to those in the domain of another department may be.[31]

Such complaints can still be heard. After noting that "diversity--not coherence--has become the 'guiding principle' in . . . academic planning," Boyer notes that ". . . we have a few requirements which stand like 'pillars' among 'the crumbled ruins' of the past, surrounded by a sprawling 'shanty town' we call 'electives' where students randomly can
wander in and out."[32] In similar language, another American, writing in 1956, noted this indictment: "the curriculum of the public schools is a patchwork of unrelated subjects devoid of any consistent principle of order or clarity, either intellectual or moral."[33] These citations begin to make clear the unhappy situation perceived by many in education.

The first impression one might get on reading such criticisms is that nothing good at all can be said for present-day subject-based curricula. Manifestly, critics see disintegration and fragmentation on many sides when they view the current educational scene. In general, and rather simply, such pervasive disintegration might be seen as the reason there are so many calls for "integration." Less simply, a good way to summarize the view many take of this present state of affairs is by a brief examination of the phrase "knowledge explosion," a phrase many writers use but few seem to consider for its full descriptive value. This phrase is most often used to describe the great increase in the stock of knowledge in the period since the Renaissance or since the industrial revolution. Inasmuch as the stock of knowledge has increased exponentially during this period, such a description seems appropriate. Yet, another sense of "explosion" is usually ignored by critics who might buttress their arguments further were they to consider it: the sense
that things have come apart and are now scattered and in a state of great disorder. Certainly the thrust of the quoted criticisms is in accord with this sense of "explosion."

iii. Specific criticisms of curricula

Even a few citations, or a brief comment on "knowledge explosion," however, do not do justice to the intensity of the criticism directed toward subject-based curricula. The sort of orchestrated attack that has come in recent years warrants more systematic attention. A number of discrete claims have been made by critics regarding the negative effects of subject-based curricula: 1) such curricula lead to "realist" views of knowledge and ignore the social or "invented" nature of knowledge; 2) such curricula are used in the perpetuation of a certain social order, specifically, the maintenance of a privileged place for the educated; 3) such curricula and departmental school organization hinder the growth of knowledge by fostering competition and isolation; 4) students become confused about what they are supposed to be learning—especially because of situations #1 and #3 above; 5) ultimately, students suffer psychological disintegration. This list could be extended, but the above are five main criticisms directed against subject-based curricula.

Before launching an examination of such criticisms, it is important to note a number of limits or features of
these criticisms. First, the five areas of criticism listed patently are not mutually exclusive categories but have been presented in this fashion simply for ease of treatment. Second, all criticisms of this sort do not originate from the same source. The first two, for example, are usually offered together, but those educators most concerned about the first two frequently give little attention to the last two, and vice versa. The above comment regarding sources notwithstanding, much of the criticism in question originated with and initially centered around one book, *Knowledge and Control*, edited by Michael F.D. Young in 1971.[34] The final remark that necessarily must precede considerations of these criticisms of subject- and discipline-based curriculum, and perhaps the most important to the reader, is this: these criticisms and their supporting arguments simply will be reported here, largely without evaluation.

The curriculum and knowledge. The most important criticism directed at the subject-based curriculum, and one somewhat anticipated by the foregoing list of phrases and words, is that a subject-based curriculum cannot or does not adequately account for the nature of knowledge. "Cannot" intimates an argument that focuses on epistemology while "does not" anticipates more of a sociological argument. The two are not so neatly separable in practice and consequently will be dealt with largely as a piece here. A notable feature of
this debate has been that the attack on subject- or discipline-based curricula is frequently inseparable from attacks on Paul Hirst's forms of knowledge thesis or Philip Phenix's realms of meaning thesis. One is led to wonder if some have equated Hirst's or Phenix's schemas with traditional methods of curricular organization. Warnock has noted the frequent suggestion that

... Hirst's arguments for the forms of knowledge are, though greatly dressed up, really conservative arguments for old-fashioned subjects as they already exist in schools and universities, in the preservation of which teachers have a vested interest.[35]

In Knowledge and Control, Young, too, offers criticism of Hirst:

Starting from certain a priori assumptions about the organization (or forms) of knowledge (Hirst, 1969), their [the educational philosophers'] criticisms focus either on new topic-based syllabi which neglect these 'forms of understanding' or on new curricula for the so-called "Newsom child" which they argue are consciously restricting them from access to those forms of understanding which in the philosopher's sense are 'education.' The problem with this kind of critique is that it appears to be based on an absolutist conception of a set of distinct forms of knowledge which correspond closely to the traditional areas of the academic curriculum and thus justify, rather than examine, what are no more than the socio-historical constructs of a particular time. It is important to stress that it is not 'subjects,' which Hirst recognizes as the socially constructed ways that teachers organize knowledge, but forms of understanding, that it is claimed are 'necessarily' distinct. The point I wish to make here is that unless such necessary distinctions or intrinsic logics are treated as problematic, philosophical criticism cannot examine the assumptions of academic curricula.[36]
Others have criticized Hirst along similar lines but it is this passage which largely sets the stage for later criticism.

Young argues at other points as well that knowledge is a social-historical product, not a naturally occurring phenomenon. In his debate with John White, for example, he asserts that "knowledge [is] constituted by the actions of men in educational and other settings, and [he sees] these settings as located in our history."[37] This view of knowledge as a product of human activity is ostensibly at variance with Hirst's "absolutist" view of knowledge.

The question of the nature of forms of knowledge—historically developed or logically necessary—has been pursued by many outside of Knowledge and Control as well. Brent, for example, asks if the forms developed fortuitously and accidentally or if they are the "logically necessary presuppositions of the constitution of any human world."[38]

After styling the development of the idea of forms of knowledge a "conservative response of academic vested interests," Holly calls into question the "inevitability or essentiality" of said forms.[39] It is apparent that all are not pleased with "received" views of knowledge. The rhetorical question remains as to whether Hirst himself views the forms of knowledge in the realist terms others impute to him. It does warrant mention here, however, that Hirst and
Peters advocate a kind of integration in at least one piece of their work.[40]

**Curricula and social structure.** The second criticism—that subject- and discipline-based curricula and the views of knowledge implicit in them help maintain the privileged position of those with education—is expressed by Keddie in this manner:

... it seems that one use to which the school puts knowledge is to establish that subjects represent the way about which the world is normally known in an 'expert' as opposed to a 'commonsense' mode of knowing. This establishes and maintains normative order in and within subjects, and accredits as successful to the world outside school those who can master subjects. The school may be seen as maintaining the social order through the taken for granted categories of its superordinates who process pupils and knowledge in mutually confirming ways.[41]

This hierarchy between "expert" and "commonsense" knowledge is examined further by Young himself:

Academic curricula ... involve assumptions that some kinds and areas of knowledge are much more 'worthwhile' than others: that as soon as possible all knowledge should become specialized and with minimum explicit emphasis on the relations between the subjects specialized in and between the specialist teachers involved.[42]

It is because of this widespread predisposition for specialization that Young, in his introduction, calls for the examination of the "scientific" and the "rational" as legitimizing categories.[43] Years after this call, Young wrote with Whitty, as follows:
school subjects tend to represent education as relatively discrete bodies of knowledge, largely independent of the social relations between teachers and taught, and experienced as a set of hurdles through which students have to pass, directed and assessed at each stage by the repository of knowledge. . . . [44]

In the already-cited debate with John White, Young echoes the "expert versus commonsense" polarity noted by Keddie, this time arguing that a forms of knowledge thesis helps sustain a hierarchy between theory and practice.[45]

Basil Bernstein pursues the question, "How are forms of experience, identity and relation evoked, maintained and changed by the formal transmission of educational knowledge and sensitivities?"[46] By using the concept of a code—the underlying principles which shape curriculum, pedagogy and evaluation—Bernstein is able to distinguish two possible and opposed tendencies, one toward "collection" and the other toward "integration." Where strong boundary maintenance exists, Bernstein labels the code a "collection" code; curriculum contents are not in close relation to each other. Where subject boundaries are weak—contents open—Bernstein calls the code "integrative." Having established this distinction, however inadequate it might be to describe all the complexities of classroom reality, Bernstein then argues that collection codes (regarding curricula) prevent students from grasping the interrelationships between various curriculum contents. Lack of understanding leads to a lack of power. Thus school subjects play a role in social
control. Additionally, strong insulation between subjects relegates community-based or commonsense knowledge to an inferior position and thus renders it irrelevant. Implicit in the irrelevance of outside-of-school knowledge is the hierarchy that Keddie and Young both identify. Where strong classification (collection codes) exists, authority structures are stronger; where there is integration, authority structures are weaker.[47]

**Competition and isolation.** The criticism that the departmentalization that usually accompanies a subject- or discipline-based curriculum leads to competition and isolationism has come from a wide range of critics. In its most basic form, the argument runs approximately like this:

Premise 1: Subject divisions in a curriculum lead to departmentalization.

Premise 2: Departmentalization leads to competition and compartmentalization rather than to co-operation among departments.[48]

Premise 3: Co-operation and communication are both necessary for expansion and impartation of knowledge.

Conclusion: Both research and education are impaired by disciplinary organization of curricula.[49]

Numerous reasons are given for the development of this phenomenon. First, as the foregoing historical survey made clear, there is substantial commercial and occupational pressure placed on universities (pressure which filters down into secondary and even junior-secondary schools) to train
specialists and thus to specialize. Hutchins calls this a "vocationalism" which leads to "triviality and isolation" and Hong identifies it as a "severe limiting of education to training in exclusive areas . . ."[50] Loomer describes one aspect of this problem in particularly harsh terms:

... intellectual integrity involves the idea of wholeness, of unity, wherein the several disciplines that make up a university are synthesized. The ideal of integrity involves synthesis of the various aspects of man's experience with his world because they are aspects of any one individual. If we required a prospective faculty appointment to be concerned about intellectual integrity, we would be asking him to relate two or more fields of specialized inquiry. But all we ask for at present is that the prospective professor be competent. We imply thereby that the professor as a divided or compartmentalized self can be both an adequate member of a faculty and a true representative of the intellectual life.[51]

While Loomer admits that competent scientists contribute to the fund of human knowledge, he argues that they frequently do not understand how or why they have contributed.

Others have noted the tendency toward, and results of specialization as well, perhaps the most notable among them, C.P. Snow in The Two Cultures. Snow distinguishes between literary and scientific people who have "so little in common" intellectually, psychologically or morally. One wants to caution that even in Plato's Republic the poets and philosophers were set at odds. What Snow has identified is not a new problem. Yet his observation is that "the intellectual life of the whole of Western society is

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increasingly being split into two polar groups."[52] Snow is arguing more than mere division, as the title makes clear. His point is that there are, in the anthropological sense [his term, p. 9] actually two different cultures developing--two cultures that have as little understanding of each other as, say, tribal Polynesians and southern Californians have of each other. One wants to credit Snow with making a more accurate appraisal of the situation than one of his critics who views his debate with Leavis as nothing more than a "gentleman's quarrel."[53]

According to Snow, the "two cultures problem" is related to two things: 1) a "fanatical belief" in specialization; 2) the tendency to let "social forms crystallize." That is: "once a thing like a cultural divide gets established, all the social forces operate to make it not less rigid, but more so."[54] The similarity between Snow's observations and the arguments of the sociologists of education discussed earlier is interesting if for no other reason than that The Two Cultures preceded Knowledge and Control by some years, and the two respective central figures represent such different political viewpoints.[55]

While this discussion of "the two cultures" is interesting--and one wants to agree with Snow and the sociologists of education that the matter is serious--the discussion so far has focused only on the first two premises
of the argument as outlined (on page 20). Without minimizing the significance of the divorce itself, it is perhaps more important to any consideration of educational integration what the divorce is alleged to lead to among educators and researchers, and, ultimately, students. Specialists tend to "sharpen their specialties rather than broadening their interests."[56] The resulting ignorance of fields other than one's own leads to a fear and resistance to integrative efforts of any sort.[57] The advance of knowledge through research is hindered because individual researchers lack what Newman called "enlargement of the mind" and what Peters calls "cognitive perspective"--the broad educational base that facilitates taking the wider view--and the spread of knowledge through education is hindered because schools take on an air of epistemological xenophobia which renders students incapable of viewing the contents of the curriculum as the parts of an organic whole.[58]

**Disintegration and the inhibition of learning.** The final two criticisms of subject-based curricula mentioned earlier--that the possibility of students' learning is inhibited and that, ultimately, students' mental well-being can be threatened--are treated together here because they are so closely related. One of the more articulate expressions of the criticism is that given by Lindeman. He writes,

... it is [in junior high-school] that the pupil
first comes into contact with specialized teachers who know some single field or subject-matter but know practically nothing about other subjects nor about the relationship between subjects. The flood of subject-matter which now descends upon pupils in rivulets streaming from academic departments, each with its own label, and each in turn demanding a separate loyalty begins the first of those vicious separations in our educational system which keeps learning from being an integrative experience.[59]

It is from another evaluation of the way a student might experience university that the title of the present section, "Cosmos or Chaos," comes. After discussing how theology was the "conceptual cement" that held the curriculum together in the medieval university and how there is now no such cement in the modern "multiversity," Taylor notes that the clashing of values, languages, and methodologies of disparate disciplines results in an overall view of chaos in place of the medieval cosmos. Continuing, he asserts that it should be no surprise that post-secondary students "feel not only bewildered but exposed to schizoid tendencies in [their] intellectual environment."[60] Wise suggests that the source of such problems may be liberal education itself:

... we may create only a mind torn against itself and unable to use what it knows because it sees only chaotic diversity, fragments of knowledge which paralyze rather than catalyze human resources.[61]

While Taylor only intimates a connection between destructive curricular diversity—what might well be labeled "epistemological disintegration"—and the psychological health of the student, others argue this connection more
explicitly. Phenix, for example, argues that one of the purposes of the curriculum is to run counter to forces of depersonalization and fragmentation, and, more notably, the "sources of meaninglessness in contemporary life."[62] Another writer sees "compartmentalization" not only as pedagogically disintegrative but actively "so opposed to the natural tendency of integrative experiences that the learner's entire process of socialization might be inhibited or impaired."[63] Aubrey echoes this line of argument. He speaks of the futility of discussing "education as a process [for] developing integrated personality" when the student is being "victimized by a process that leads to more confusion than wisdom, to a separated array of knowledges never brought into fruitful relation to each other."[64] Dix argues that the process actually goes one step further: integrated individuals are necessary for society to be integrated.[65]

Thus, the conclusion of the argument presented previously becomes the first premise for a further argument that runs along these lines:

Premise 1: Subject-based curricula frustrate students' attempts to learn.

Premise 2: Epistemological frustration leads to disintegration.

Premise 3: Individual disintegration leads to social disintegration.

Conclusion: Subject-based curricula lead to social disintegration.
Though the connection to social disintegration is not the focus of this study, it is noteworthy that some see the influence of curriculum structure and its relation to integration spreading this widely.

2. Calls for Integration

One of the responses to the state of disarray perceived by so many educators has been to call for integration of one sort or another. These calls have come from educators in different countries, working at different grade levels from primary to post-graduate, and over a long period of time. "To avoid scattering, studies should be interrelated, so that the body of one's knowledge can be one . . ." predates any of the critical comments already cited; it was written by a classical Roman, Marcus Vituvius Pollio.[66] It is clear that as unity and wholeness in general are not new concepts, neither are educational unity and wholeness. This interest persists into the present century where there have been two identifiable peaks of interest in integration, one from about 1930-50 and the other from about 1965 to the time of writing. Such interest warrants attention.

Numerous expressions of this interest can be found in educational books and journals. Dewey, for example, wrote as early as 1902 that the
body of knowledge is indeed one, it is a spiritual organism. To attempt to chop off a member here and amputate an organ there is the veriest impossibility. The problem is not one of elimination, but of organization; of simplification not through denial and rejection but through harmony.[67]

Karl Jaspers called for a joining of hands between science and philosophy so that mankind could be guided along "the path to authentic truth."[68] As another example, Kerr writes that

we need to consider the types of relationships that should obtain both within and between the main areas of knowledge... the theory of knowledge raises many questions about the relationships of the various disciplines to the development of the mind and the nature of knowledge.[69]

In the introduction to Integrated Science, Gratz writes that the reason an interdisciplinary approach is necessary is that "in the real world of life, nature and things, there is no artificial separation of physics, chemistry, microbiology, or physiology."[70] Yet another writer calls for the conviction "that we are indeed studying a unified cosmos" and not simply an assortment of discrete entities.[71] Numerous other citations might be provided in an attempt to strengthen the case that educators desire integration and that "integration" is an important educational concept. To do so here would be superfluous however, as both Chapter III and Appendix A deal more explicitly and comprehensively with the sorts of proposals advocated under the general name "integration."

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3. The Popularity of "Integration"

As illustrated in Appendix A, integration in education has been sought in so many ways that it is now quite appropriate to call it a "popular" concept. A scattered few writers have noted this rise in popularity.[72] Ciccorico makes clear in his survey of the concept's history in educational use that this popularity is relatively recent (though the concept itself is not). Spencer used the term in his 1855 volume, Principles of Psychology and James did the same in 1896 in his Principles of Psychology. In a master's thesis done at Columbia in 1899 (cited above), Maxwell discussed correlation as integration. Where the previous century saw only infrequent, if increasing use of the term, one has only to follow Ciccorico's survey of the forty or so years to the 1930's and 1940's to see the first peak of interest in integration and general education that occurred at that time.[73] Some argue that interest has not waned since that time and others say another zenith is being reached in this decade. That debate is of less importance, however, than the fact that integration has achieved great popularity and importance in educational discourse. Hong notes Lindeman's appraisal that integration has become a "big word" in education.[74] Dix implies as much when he sets his own use off from all other uses where "integration" is "just another educational slogan."[75] Gangel notes his hesitation
about using the term because it has been used "so frequently . . . that one wonders about the extent of its present impact."[76] As early as 1937, Knudsen had observed an increase in usage and then added somewhat sarcastically "that only a particularly obtuse educator or one quite insensible to happenings in the field would fail to accept integration as a key word in present day education."[77] In his part of one of the handful of book-length studies focusing exclusively on "integration," Lindeman demonstrated by means of a list that "integration" had been put to some diverse uses in educational writing.[78] Both Hopkins and Knudsen wrote before 1940; the situation described by them, if it has changed, has changed so that "integration" is now even more popular. The historical method, while it is an appropriate way to trace the rise of popularity of "integration" as a concept, does not demonstrate adequately the width of that popularity. For this reason, the final evidence that "educational integration" is an important concept receives its full development in Chapter III with its schemata of logical forms of integration (and in its complement, Appendix A with its substantial list of actual uses of "integration").

B. "INTEGRATION": A CONFUSING AND AMBIGUOUS CONCEPT

The observation that "integration" is used widely is
accompanied, in the writings of a few educators, by a second important observation: specificity is lost as usage increases. To begin his dissertation, Connole quotes a particularly negative appraisal of the state of usage of "integration":

Like 'democracy,' 'liberty,' 'fraternity,' and other emotive terms so frequently used as slogans, banners and rallying cries, but which in concrete application reveal little but their ambiguities; 'integration' as generally used is almost meaningless.[79]

Both Knudsen and Hong join Lindeman (in the Hopkins' study) in noting that increased use leads to loss of precision.[80] Dressel argues along these lines as well. He writes:

The real difficulty with the word "integration" rests in the multiplicity of interrelated meanings which permit its use in reference to many and differing situations but which may result in ambiguity which interferes with a reasoned discussion.[81]

Pring too, notes this fact where he states that "integrated curriculum is an imprecise term that covers a range of curriculum responses to shortcomings of subject-based curriculum organization."[82] For all its ambiguity, however, it is implicit in continued wide usage that educators still consider the term a central one. In 1952, Blackmer called it "a much abused but still indispensible term."[83] Dressel voices the same conclusion:

... it is a slogan with such a wide range of connotation as to hinder or block communication. Yet, integration, like orientation, articulation, adjustment, and maturation, evokes such a
fundamental set of related ideas that its use continues despite the confusion.[84]

While these two writers represent the middle of the century more than they represent the present decade, continued popularity of the term indicates that the conditions described by them obtain to this day.

It is the conclusion of a number of educational writers that with such confusion surrounding "integration" it is a term that should be used with care. Hong, for example, writes that

...one may properly raise the question: What is meant by integration in liberal education? The same disintegration which prompts the present widespread insistence upon integrative remedy results also in a pluralistic, confused understanding of educational integration itself.[85]

Ultimately, the degree to which "integration" is a confusing and ambiguous concept in educational discourse, can be gauged only by one willing to examine actual usage of the concept in educational writings.[86]

C. THE PAUCITY OF REFLECTION ON "INTEGRATION"

Despite the wide usage of "integration" and the great deal of confusion frequently attending said usage, there has been relatively little reflection on the actual use of "integration" as a concept in educational discourse. If one distinguishes those who call for integration or otherwise
claim it as a feature or goal of a curriculum they have developed, those who offer a definition of "integration," and those who examine "integration" as a concept, one finds that those who focus on explicating the concept itself constitute the smallest group, and the first group named--those who use it apparently without reflection--the largest.[87] Hong goes so far as to call such explicit studies of the problem of "integration" rare.[88] While one might think importance alone--or certainly importance plus the confusion generated in use--would warrant and precipitate a good deal of reflective discussion, such discussion has not been forthcoming. This lack of discussion perhaps leads to or allows many things but the most important for the present purpose is that it facilitates the continuation of the confusion and ambiguity that pointed to the need for discussion in the first place. Some might argue that a lack of discussion does more than merely "facilitate" continuation. Inasmuch as silence regarding usage may constitute approval, this argument runs, a lack of discussion about "integration" is equal to some kind of agreement that the range of meaning of the concept has been agreed upon by all concerned, and use of the concept in educational discourse may therefore proceed.

The comparatively rare studies of integration done thus far warrant some discussion for at least two reasons.
First, such discussion helps situate the present study. More important, viz-à-viz the purposes of this chapter, such a discussion or review underlines the need for further study to be carried out.

A number of major studies of integration, not all with the same purpose, have been attempted successfully in the last fifty years. The Society for Curriculum Study should probably be credited with the first, Integration: Its Meaning and Application, edited by Levi Thomas Hopkins in 1937. The same year this study appeared, Roger Joseph Conole completed his doctoral dissertation (cited above) at the Catholic University of America, A Study of the Concept of Integration in Present-Day Curriculum Making. 1942 saw a second dissertation, that of D.A. Brooks cited at the commencement of this chapter. Next, Roy J. Defarrari's major study, Integration in Catholic Colleges and Universities, appeared in 1950.[89] Probably more important than this book, with its narrower focus, was the National Society for the Study of Education's The Integration of Educational Experiences in 1958, under the editorship of Nelson B. Henry, who also edited the 51st Yearbook of the same society some years earlier.[90] Two major studies of interdisciplinarity appeared in the 1970's. The first, called simply Interdisciplinarity, was sponsored by the Organization for Economic Co-operation and Development (OECD) and edited by a
team of scholars drawn from various OECD nations. This 1970 volume, already cited herein, paid special attention to problems of teaching and research in universities. The second, edited by Kockelmans and also already cited herein, appeared in 1979 as Interdisciplinarity and Higher Education. It examined the history of interdisciplinarity, and provided some justifications for it. One British volume warrants mention though it lacks the prominence of, for example, the Hopkins or Henry volumes. This is a brief collection of essays, Integrated Studies in the Secondary School, edited by David Warwick and published in 1973.[91] One further slim volume appeared in 1981 as Creating an Integrated Curriculum—the Higher in "Higher" Education.[92] Finally, one recent volume written from an explicitly theological viewpoint needs listing: Toward a Harmony of Faith and Learning, edited by Kenneth O. Gangel in 1983.[93]

Numerous other articles and chapters within books might be mentioned but most, like the books named, consistently fall short in one area of concern: relatively little attention is given to the way "integration" works as a concept. The books named largely concentrate on histories of integration, attempts at integration, problems with and reasons for integration, but reflective comments on "integration" are few. And, as Hong points out, thorough studies of "integration" are rare.[94] The distinction
between integration and "integration" which is implied in the
title of this chapter is an important one for, while there
are many discussions of integration, there are few of
"integration." Throughout this study, reference is made to
the few extant discussions.

To summarize and review the arguments of this
chapter, three aspects of the present state of affairs in
educational discourse point to the need for further study of
the concept "integration." First, it is an important
concept, both in general usage and in educational usage.
This importance is demonstrated by concern about
disintegration, by numerous calls for integration, and by
frequent attempts to design or implement integrative
curricula. Second, "integration" is a confusing and
ambiguous concept. Though this argument remains incomplete
until later in the thesis, it is nonetheless already clear
that the term engenders a good deal of trouble in educational
discourse. Third, "integration" has been the subject of
little reflection. Many discuss integration but few attend
to how "integration" functions as a concept in educational
discourse.

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1 Horace M. Kallen, "The Meanings of Unity Among the
Sciences," Philosophy and Phenomenological Research 6 (June
1946):493-95; see also Daniel Ammen Brooks, The Concept of


5 The choice to recount developments beginning more recently than classical Greek and Roman culture is made on the grounds that classical education is treated more fully than is possible here in William Barclay, Educational Ideals in the Ancient World (London: Collins, 1959); Frederick A.G. Beck, Greek Education (London: Methuen, 1964); and Howard Hong, ed., Integration in the Christian Liberal Arts College (Northfield, Minnesota: St. Olaf College Press, 1956).


12 D.G. Tewksbury offers much more on the religious origins of American colleges. See *The Founding of American Colleges and Universities Before the Civil War* (New York: Columbia, 1932), chapter 2. Also see Charles Habib Malik, *A Christian Critique of the University* (Downers Grove: Inter-Varsity Press, 1982), on the decline of Christian influence in the university (pp. 15-32, 70-84).


15 Ibid., p. 16.

16 More detailed appraisal of twentieth-century education appears throughout the thesis: in the remainder of the present chapter; in the detailed discussion of "the integration of faith and learning" in Chapter VI; and in the brief introductory discussions of the various "curricular attempts" listed in Appendix A. For this reason, the foregoing survey leaves off with the nineteenth century.


23 Hong, pp. 2, 3, 4, 13, 116–117, 125.


25 Alfred North Whitehead, *The Aims of Education*


27 P. 56.


30 Hutchins, p. 94.

31 Ibid., p. 95.


34 Cited above. Mary Warnock correctly observes that the "most radical form of the attack [on subjects] is the sociological argument" and that the best known proponents of that argument were included in *Knowledge and Control*; see *Schools of Thought* (London: Faber and Faber, 1977), p. 106.

35 Ibid.

36 Michael F.D. Young, "Curricula, Teaching, and Learning as the Organization of Knowledge" in *Knowledge and Control*, p. 23.


41 Nell Keddie, "Classroom Knowledge," in M.F.D. Young, p. 156.

42 "Curricula, Teaching, and Learning as the Organization of Knowledge," p. 34.

43 P. 3.


45 White and Young, p. 7.

46 Basil Bernstein, "On the Classification and Framing of Educational Experience," in M.F.D. Young, p. 47.


50 Hutchins, p. 43; Hong, p. 125; see pp. 33-58 in Hong for the full development of the St. Olaf's faculty argument.


54 Snow, pp. 1,17.

55 For further discussion of the views of Snow, see Frank Raymond Leavis, *Two Cultures? The Significance of C.P. Snow* (London: Chatto and Windus, 1962); and Charles Fetche, "Curriculum Theory: A Proposal for Unity," *Educational Theory* 27 (Spring 1977):100-102.

56 Charles A. Beard, *The Nature of the Social Sciences* (New York: Scribners, 1934), pp. 137-38. See also Ortega y Gasset, *Revolt of the Masses*, p. 110, where he notes that those with a "curiosity for the general scheme of knowledge" are frequently criticized as dilettantes.

57 Whitfield, pp. 226-28; Hugh G. Petrie, "Do You See What I See: The Epistemology of Interdisciplinary Inquiry," *Journal of Aesthetic Education* 10 (January 1976):33; French, pp. vii-xi; Walter R. Lynn, "Integrating Liberal Education in Engineering," *Liberal Education* 63,2 (1977):253-58. See also Clive Beck who cynically notes that it "pays an academic to develop and defend a narrow theoretical position dressed up in an exclusive technical language. In this way he is able to have his articles published ... and acquire a band of disciples" (p. 8), *Educational Philosophy and Theory* (Boston: Little, Brown, 1974). Also see his "Educational Studies and the Cult of Specialization," *Educational Studies* 5 (Winter 1974):189-96.


60 Loomer coins the word "pluriversity" to express his

61 Wise, p. 392.
62 Phenix, p. 5.
64 Aubrey, p. 31.
68 Jaspers, pp. 179-80.
72 See for example, D. Connelly, p. 23; John D. Carter and Bruce Narramore, Integration of Psychology and Theology (Grand Rapids: Zondervan, 1979), p. 13. This short list of writers who note the popularity of "integration" is extended in Chapter V, Section A.
73 Ciccorico, p. 60; Knudsen, pp. 15-16.
Hong, p. 4.

Dix, p. 363.


Knudsen, pp. 15-16.

Pp. 21-22.


Hong, p. 4; Knudsen, pp. 15-16; Lindeman, p. 21.


Pring, 1976, p. 103.

P. 31.

Dressel, p. 7.

Hong, p. 117.

That examination of usage appears as Appendix A, and thus the conclusion of this second "confusion and ambiguity" argument must await its completion. Chapter V and VI also contain much discussion relevant to the concern with ambiguity and confusion.


Hong, p. 5.


General Education (51st Yearbook of the NSSE, pt. 1)
Earlier studies may, in principle, be excused for this omission, as the problem of confusion and ambiguity was not as great when many of these early studies appeared as it is at the present time.
CHAPTER II
PROCEDURE AND LIMITS

It might be thought that the obvious way of beginning a study in the philosophy of education would be to formulate a definition . . . and to see whether this would fit all examples . . . To proceed in this way . . . would reveal a certain insensitivity to one of the main contentions of the recent 'revolution in philosophy' . . .
- R.S. Peters, Ethics and Education, p. 23.

The overall purpose of this thesis was stated on page 3: to discover whether the term "integration" is a useful educational term. Conceptual clarity regarding "integration" is prerequisite to, and a large part of, any evaluation of utility. Such clarity is worth gaining in its own right, but, as well, it will facilitate further understanding of the popular but problematic phrase, "the integration of faith and learning." Having two objects in view for the thesis—-one necessarily prior to the other—-need not induce a methodological nightmare. Late in the thesis, when the examination of the key term "integration" is complete, the phrase by which "integration" has made its way into the language of Christian education will be explored further. The final portion of that exploration consists of a direct answer to the question raised by the hypothesis, the
question of utility.

Meanwhile the study will proceed by examining a broad range of actual occurrences of "integration" in educational language. These uses, which appear in Appendix A as phrases and sentences, in most cases are cited or paraphrased from their original sources. The initial classification of these occurrences in Chapter III will be according to their logical form or sense—how are the proposed constituents said to be joined? Chapter III thus contains representative sentence types or schemata.

Two important directions of exploration naturally flow from the schematization of uses in Chapter III. The first to be treated here will consist of a thorough answer, in Chapter IV, to the question "With what does integration have to do?" That is: the question of meaning. That chapter will examine the function of organizing principles and purposes as integrators, the notions of adequacy and breadth, and the relations between parts and wholes. Chapter IV will conclude with a review of some definitions of integration offered in educational literature. For two reasons, that review of definitions will attend especially to the "locus" of integration. First, one of the key debate questions in educational discourse is whether integration takes place in curricula or in people. Second, ambiguity regarding the locus of integration is apparently one of the chief sources
of the confusion surrounding "the integration of faith and learning."

The second important consideration flowing from the Chapter III schemata of uses is that of sources of confusion. Chapter V will consist of discussions of five aspects of "integration" in use: "integration" as a positive term, psychological connotations of integration, integration as a process or a product, "integration" as a polymorphous term, and the concept/conception distinction applied to "integration."

Chapter VI examines "the integration of faith and learning" as a specific but typical case of "integration" generating problems in use. The origin, history, and present range of usage of the phrase are examined, along with its utility in educational discourse.

A. A NOTE ON LINGUISTIC METHOD

The purpose of this study has been stated: to examine a specific concept that is widely used in educational writing; What do people mean by "integration"? How does it function? Why does it generate confusion? As already indicated, the approach taken herein is that of a concept analysis along the lines advocated in broad outline by Wittgenstein and refined and used successfully in various
fields of study since. Three questions arise with regard to carrying out such an analysis in an attempt to understand "integration." First, why should this approach be used? Second, to what degree has this approach been used successfully in the past? Third, what does this approach entail?

1. Why a Linguistic Analysis?

The problem is to understand the meaning of a term. Why is a concept analysis the best approach to this problem? "Integration" is one of that class of words that has always vexed philosophers. One of the reasons some words have been persistently vexing is mentioned by Wittgenstein in The Blue and Brown Books:

The idea that in order to get clear about the meaning of a general term one had to find the common element in all its applications has shackled philosophical investigation; for it has not only led to no result, but also made the philosopher dismiss as irrelevant the concrete cases, which alone could have helped him to understand the usage of the general term.[1]

As R.S. Peters notes, what Wittgenstein points out in this passage

. . . is particularly true of the sorts of terms in which philosophers are interested; for they are usually very general terms, which have developed a life of their own in a variety of contexts. They have seldom been consciously erected to perform a limited function in a confined system.[2]

Peters continues by noting that "education" is "a concept of
this sort." One wants to add, so too is "integration."[3] Wittgenstein argued that such concepts are especially resistant to explication if they are pulled out of their natural linguistic contexts and analyzed in vacuo. It is the philosopher's task to "bring words back from their metaphysical to their everyday use" and thus to untangle questions of meaning.[4] While "integration" perhaps does not rank in importance with the words Wittgenstein had in mind—words like "knowledge," "being," "I" and "name"—the lesson remains for anyone wanting to examine its meaning: do not remove it from usage expecting thus to discover the essence of its meaning. To do so, according to Wittgenstein, is to engender further confusion because then the language is "like an engine idling" rather than one that is doing work (#132). It is language on holiday (#38). The philosopher's aim is "to shew the fly the way out of the fly-bottle" (#309) and to do so requires that words be considered in their original contexts.

Wittgenstein offers a number of concepts and distinctions to aid in solving the problem of the fly caught in the fly-bottle. The most important is his observation—intimated in The Blue and Brown Books citation above—that "the meaning of a word is its use in the language" (#43). This idea, which has now achieved slogan status, lies at the heart of Wittgenstein's later work and bears heavily on the
present concern about "integration." In the same paragraph in *The Philosophical Investigations* from which the above remark was cited, Wittgenstein makes another comment often missed by his readers: that sometimes the meaning of a word can be found by pointing to an object, for example, the meaning of the word "triangle." One wants to be mindful of that remark which so many of Wittgenstein's readers have missed. But the point of interest here is still that "integration" is the sort of word Wittgenstein had in mind when he wrote the first half of the paragraph—a word demanding consideration of its context. At no point does Wittgenstein claim that all words' meanings are their use in the language; he does claim that this is the case for many words.

Wittgenstein offers two further contributions to a study such as the present one. These are his notions of language-games and of forms of life. By "language-game," Wittgenstein means those contexts or environments in which language is used and by which language comes to have meaning. He names a number of examples of such games:

- reading a plan or diagram
- play-acting
- guessing
- praying
- greeting
cursing
asking
thanking
describing an object
giving orders
reporting an event
telling jokes. (#23)

He makes clear that the list may be extended, and one thinks of educational discourse, or more specifically, curriculum integration discourse, as a language-game. His own definition of a game runs thus: "language and the actions into which it is woven" (#7). To understand "integration," on Wittgenstein's account then, will require more than examining just a word. As he states later in the Investigations, "One cannot guess how a word functions. One has to look at its use and learn from that" (#340, emphasis his).

Wittgenstein does not stop at the notion of a language-game; he proposes that one must also look at the form of life that gives rise to any particular language-game if one wants to understand the linguistic constituents of that game (#19). Toulmin describes Wittgenstein's notion of a form of life as "a larger constellation of activities" than the language-game. He writes:

... a language game derives its effective point from being geared into other, nonlinguistic activities. In the last resort, then, we shall
understand the meaning of an expression aright—and so be in a position to give an adequate analysis of it—only if we see it in the context, first, of the language games by which the expression is put to use; and then, of the forms of life from which these language games derive their significance.[5]

A page later, Toulmin repeats his point that the "unit of significance" for understanding the meaning of terms is "the overall syndrome or constellation of standard behavior."[6] In the first chapter of this study, both Wilson and Pring were noted for their having pointed out that examining the social circumstances, discovering the underlying anxieties, and understanding the sorts of problems worrying people are necessary ingredients in grappling with the meanings of difficult terms. Though they do not do so in so many words, both Wilson and Pring are recognizing that language-games arise in certain forms of life and those forms of life must be encountered by anyone wanting to understand a problem term like "integration."[7]

2. The Uses of Analysis

What has come to be known as "linguistic analysis" has often, frequently rightly, been criticized for paying too little attention to the traditional pursuits and concerns of philosophy—epistemology, ethics, aesthetics, metaphysics and so on—in its search for clarity in language. Even the harshest critics of analytic philosophy, however, admit that philosophy and many other fields have reaped benefits because
of the efforts of linguistic philosophers. Leiser, not a critic of analytic philosophy, offers this argument in the introduction to his study of custom:

This approach has been enormously fruitful in a number of fields in recent philosophy. Time after time philosophers have found that ancient philosophical puzzles have been solved when the confusions caused by overprecise definitions of concepts whose edges are more properly blurred were exposed for what they were. No doubt many of those definitions served very useful purposes; but many of them, because of their artificiality and because of the violence they did to linguistic usages, have tended to confuse and obscure what might otherwise have been relatively clear.[8]

This quotation is not intended as a hidden argument that "integration" is a term that "might otherwise have been relatively clear," though it is definitely confused and obscured in meaning. The point is simply that a linguistic approach can usually be of service where concepts are confused and ambiguous. Soltis agrees with Leiser's claim regarding the usefulness of analysis:

. . . analysis and world-view making may work in tandem. The techniques of analysis may be used to clarify and make more precise and intelligible the broad and comprehensive concepts of synoptic philosophic systems.[9]

Shortly after making this remark, Soltis introduces a metaphor of a scientist who uses a microscope and another who uses a telescope. One's efforts are spent in "charting the universe" and the other's in discovering minute details of single organisms. Yet, Soltis argues, the work of these two is not necessarily in opposition and neither is the work of
the linguistic philosopher in opposition to that of the philosopher with other interests. He notes that

... the fruitful use of one does not preclude or deny the validity of the use of the other; nor does it cancel the possibility that they may be used in conjunction or in some other complementary way.[10]

This approach to "finding the meaning of a term"—that is, clearing up confusion surrounding the use of a term—has been used successfully in many contexts. Leiser's analysis of "custom" is not the only example from philosophy. Hare's work *The Language of Morals* and Weldon's *The Vocabulary of Politics* are both named by Leiser as examples of successful analyses of problematic concepts.[11]

To name another field, Thiselton has used the method fruitfully in Biblical hermeneutics.[12] A great number of examples come to mind in the field of education. In the past twenty years educators have sharpened such central notions as "education," "teaching," "learning," "mastery" and many other concepts too plentiful to enumerate here. In *Ethics and Education* (already cited herein), Peters provides one of the central works in the clarification of "education." In doing so, he employs a linguistic methodology. "Integration," like "education," is one of those concepts with blurred edges that, besides needing clarification, would be suitably approached by means of a linguistic methodology.
3. What is Entailed in Analysis?

The salient feature of a linguistic analysis of a term is an examination of actual usage of that term. The schemata that appear in Chapter III, based as they are on the survey of usage in Appendix A, are the beginning of such an examination. Having gathered actual uses of a term, one is in a position to find out what the people who use the term mean by it. In the case of "integration," one will also be in a position to find out why such confusion surrounds the use of the term, and, finally, how it works in "the integration of faith and learning."

This approach appears to be similar to that taken by Brooks in his earlier dissertation but in fact is quite different. He began by reporting on dictionary usage and then gave the largest part of his work over to demonstrating that "integration" was a significant concept throughout the history of Western thought in most fields of interest. Similarity between his study and the present one is thus minimal; Brooks wanted to synthesize his findings "into a consistent and harmonious concept" and then to "suggest possible lines of application in the field of education."[13] The present study is based on the finding that there have been so many applications made of "integration" since Brooks' time that little consistency or harmony remain to be had regarding the word's meaning. There may be a similarity of
purpose between the present thesis and that of Connole, though there is a clear methodological difference. His approach to usage is to sample "definitions of integration found in the writings of educators" at the time of writing.[14] Such sampling of definitions is but a small part of this thesis (Appendix A); more important here are the samples of actual usage.

B. LIMITS

Five main limits will be in effect throughout the following considerations. The most important is that educational integration or curriculum integration, and, ultimately, integration in Christian education are of much greater concern here than other kinds of integration. This is not a simple matter since, as will become clear presently, psychological integration and the integration of knowledge both are the concerns of educators and are often interconnected with curricular uses of the concept.[15] Despite any obvious connections to the present subject, of necessity, the integration of knowledge cannot be a focus of this study.

The second limit is that post-secondary education is of greater concern in this study than either secondary or elementary education. This is not a crucial matter, however,
since usage of the concept is not always tied to a specific level of education.

The third limit is that this study will not attend in much detail to uses of "integration" that are relatively clear. Confusing and ambiguous uses are more the concern. "Racial integration" in schools, for example, notwithstanding its status as a divisive political and social question, is not the source of semantic problems. On the other hand, "the integration of science and humanities" is thoroughly problematic as regards meaning. A few curricular uses are relatively clear, however. For example, the integration of botany and zoology courses to yield "biology" is problematic to few. The present study will focus on more difficult uses.

A fourth limit which is tied to the third involves that group of phrases where "faith," "theology," and "Christianity," are used. These uses are but a small portion of what one finds in the literature of educational integration. But "integration" appears in a large portion of the language of Christian education. Thus, what might appear to be disproportionate attention will be given to such uses in this thesis, especially toward the end.

Fifth, this study will avoid entanglement with notions of interdisciplinarity except in those cases where it has sufficient bearing on integration to warrant mention.
Frequently, curriculum proposals labeled "integrative," or reported to foster integration also entail interdisciplinarity (or "trans-," "non-," a-," "multi-," "cross-disciplinarity"). This family of words generates its own share of confusion in educational discourse. It is not within the scope of this study to examine this additional concept in depth. Instead, this study will simply report that cases listed are claimed to be examples of or attempts at integration, regardless of their alleged status with regard to interdisciplinarity. It might be argued that interdisciplinarity as a whole is an example of attempting to bring educational integration. Kavaloski does just this. He writes that

... interdisciplinary education aims at being an intrinsically integrative learning experience for the student; i.e., encourages the student to perceive the various components of human knowledge within some larger holistic framework.

He then quotes Kockelmans from "Why Interdisciplinarity?" to the effect that interdisciplinarity aims at "contributing to the restoration of the unity of the sciences, and in the long run, to the unity of our world view."[16] In writing thus, Kavaloski presents the usually-accepted placement of interdisciplinarity vis-à-vis integration. Other discussions, which need only be noted, follow the same lines as his.[17] A notable exception to this trend is Thompson, who identifies the two: integration with interdisciplinar-
ity. [18] Much fuller discussions of interdisciplinarity are provided in two books cited at the close of the initial chapter, those edited by Kockelmans, and by Apostle et al, both entitled *Interdisciplinarity*.

Finally, a number of further comments about the uses presented in Chapter III and the listing of Appendix A are warranted before presenting them. First, while the list is not exhaustive it is representative. Thousands of curricular examples might be cited in all if a complete list of usage were the object. To develop such a list is arguably not worthwhile. Second, the examples that are cited are presented in a somewhat classified fashion. Many different schemata are available to classify the uses of "integration." The system used here is based roughly on the logic of each use of "integration" or the type of joining implied or reported. Part A lists four common uses (social, psychological, educational, and numerous ordinary language uses) and three specifically educational uses (horizontal, vertical, practical). Parts B and C treat "fusion" and "incorporation" senses (where two or more things are joined). Part D lists various themes, topics, projects and problems as attempts to bring about integration within curricula. Part E deals with correlation (where subject and discipline distinctions remain but connections between fields are made). A number of kinds of interdisciplinary
"borrowing" are mentioned in Part F. Part G deals with that class of uses of special interest in this study, those uses where theology, faith, or religion are said to be "integrated" with some discipline or activity. The bulk of Appendix A is reduced in Chapter III by means of a presentation of a few sentence schemata. The simpler, and wider categories of Chapter III facilitate quick movement into the discussions which follow in Chapters IV, V, and VI.

Third, not all the examples of usage appearing in Appendix A or Chapter III contain the word "integration" or a cognate thereof. All examples do, however, occur in contexts where integration is discussed, implied, promised as an outcome, or otherwise said to be involved. In light of this, not all the statements that appear are actual quotations from sources; a few are summaries or capsule expressions of the type of integration being claimed or advocated in any given source. Brooks, in his 1942 dissertation, noted this limit as well, citing the difficulty of "finding numerous quotations from educational discussions which use the precise term 'integration'."[19] While it is much easier to find such uses forty years later, the "factor of interpretation" Brooks concluded was necessary will also be a factor herein at some points.

Fourth, the following examples, even though they are presented in roughly classified form, should not be taken to
represent mutually exclusive categories. There are many overlaps and points of intersection between the types listed.

Finally, even before commencing the schemata of uses, one note needs to be made about the term "integration." This term has been taken by some to refer to narrow curricular proposals which most other writers call by some other more specific name than "integration." Weeks, for example, while recognizing the undifferentiated, wide use of "integration," wishes to reserve the word for attempts to integrate the entire curriculum. Anything less than that, she calls "correlation."[20] Throughout the schemata in the following chapter and the list in Appendix A, (and indeed, throughout most of the thesis) "integration" is used in its general, undifferentiated, widest sense. To do so is not as careless as it at first may appear; one needs to use one word or another until some work of clarification is complete. Eventually, more precise usage will be possible. If not, at least those using "integration" can be more informed as to its limitations and weaknesses.


2 Ethics, p. 23.

3 Failure to notice this feature of "integration" may, in fact, have led some earlier studies of integration off the track.


6 P. 75.


9 Jonas F. Soltis, An Introduction to the Analysis of Educational Concepts (Reading, Mass.: Addison-Wesley, 1968), p. 82.

10 Soltis, p. 83.


12 Anthony C. Thiselton, The Two Horizons (Grand Rapids: ...

13 P. vii.

14 Connole, p. ix. One wants also to note that Connole's interest was in a movement, not a concept, and that fifty years have passed since he wrote his thesis.

15 Such studies of the integration of knowledge as the following warrant mention: Oliver L. Reiser, The Integration of Human Knowledge (Boston: Sargent, 1958); William Oliver Martin, The Order and Integration of Knowledge (Ann Arbor: University of Michigan Press, 1957). Neither of these volumes displays any interest in educational integration (as it involves teaching and learning at least). Thus, in limiting their focus solely to epistemological integration, they are not mentioned again herein.


19 Brooks, p. viii.

CHAPTER III

LOGICAL SCHEMATA OF "INTEGRATION"

"There's glory for you."
"I don't know what you mean by 'glory,'" Alice said.

Humpty Dumpty smiled contemptuously. "Of course you don't--till I tell you. I meant 'there's a nice knock-down argument for you'."
"But glory doesn't mean 'a nice knock-down argument,'" Alice objected.
"When I use a word," Humpty Dumpty said, in rather a scornful tone, "it means just what I choose it to mean--neither more nor less."
"The question is," said Alice, "whether you can make words mean so many things."

- Carroll, Through the Looking Glass, Ch. 6.

Most educational uses of "integration" can be schematized into a relatively small number of forms. The simplest reduction--to a single logical form--is this:

[Integration entails the joining of] A + B.

While this representation is accurate in a general way for many uses of integration, as such a simple reduction it has two weaknesses: first, it looks like an attempt to pinpoint some kind of essential or common meaning shared by all uses of the word--the very thing Wittgenstein warned about; second, it does little to clarify the specific problems surrounding many of the educational uses of "integration."
It is thus necessary to devise slightly more precise schemata. A survey of uses of "integration" such as that appearing as Appendix A indicates the existence of at least four distinguishable, if sometimes overlapping, classes of alleged educational integration: incorporation, fusion, correlation, dialogical. In what follows, these four classes are presented in logical form, briefly discussed in turn, and illustrated with examples.

A. FUSION

The general logical form of fusion integration proposals is as follows:

\[ A + \text{[is fused with]} B = \text{[and results in]} C. \]

Used in this way, "fusion" means that two (or more) elements flow or mesh together to become one new entity.\(^1\) On first blush, the original elements must lose their identity. Actual attempts at integration show that this is not always the case. Therefore, a second schema is presented, which attends to the fact that in many fusion attempts A and B retain some of their original characteristics and thus remain clearly recognizable following fusion:

\[ A + B = AB. \]

When "fusion" is used in this way, it allows more explicitly that fused elements may retain individual characteristics.
A number of conditions apply to fusion integration:

1. A and B are usually considered (by the makers of any given curriculum proposal) to be of roughly equal importance.

2. A and B are not necessarily, though they are typically, logically similar. In the case of curriculum integration proposals, this implies that A and B are often from similar forms of knowledge.[2]

3. A corollary of the first condition is that proposals to integrate things that are not logically similar are less clear as to how the two elements are to be joined.

4. The number of constituents is frequently greater than two. Thus, the form $A + B + C + D \ldots$ is not unusual in fusion integration proposals.

5. Such fusion may occur at different levels.[3]

These conditions are best illustrated by means of reference to cases. Proposals for integrated science usually involve the integration of biology, chemistry, and physics (Appendix A, #8c). That these three natural sciences are all part of the same form of knowledge is debated by almost no one. Further, few question that the three have been successfully fused in various curriculum offerings (as "general science," "integrated science," and so on). Thus, while elements such as geology and astronomy might be added, it is safe to conclude that a model case of fusion
integration is:

\[ \text{Biology + Chemistry + Physics = Science.} \]

This case illustrates two of the conditions named above: the fused elements are logically similar (#2) and more than two elements are involved (#4). Regarding the fifth condition named, the fusion of these three areas of scientific endeavor to form integrated science illustrates a higher level of integration than, for example, the fusion of botany and zoology to yield biology.

The absence of the second condition (that A and B are usually of the same logical form) is illustrated by proposals such as those for the integration of social science and expressive arts (#9f), science and language arts (#9g), or faith and learning (#43a). One wonders immediately what is meant by such proposals: "How are A and B to be joined when they are so different structurally?" While such proposals meet the initial condition—neither is implied as being more important than the other—why and how the two elements in each case are to be fused is not clear. Perhaps those making the proposal desire to accomplish two pedagogical ends through a single activity. If such a desire is behind these proposals, then one might want to apply a task-achievement analysis as a means of answering the question whether or not such attempts are, or even can be, integrative. For the moment, simply noting this difficulty with such proposals
must suffice; in Chapter V and VI, such variations from paradigm cases of fusion will be examined further.

Without implying anything about either the possibility or the advisability of fusing the respective elements, a number of other proposals from Appendix A that take the form of fusion integration follow:

#9b Health education + health career education.
#9h Social studies + English.
#91 Art + home economics + music + industrial arts.
#10 High school + college.

While inclusion here or in Appendix A does not imply that any of these combinations can be fused successfully, each of these examples does serve to illustrate further those conditions and characteristics of fusion proposals noted in the foregoing discussion.

B. INCORPORATION

Proposals for incorporative integration generally take this form:

A is incorporated into B.

Incorporation may be thought of as a form of integration separate from fusion or simply as a subset of fusion, for it does entail a fusing of the constituent elements. What sets it apart from a paradigm case of fusion is that incorporation
seems to imply that one element disappear into, dissolve in, or infiltrate the other. The following conditions are usually implied in proposals for incorporative integration:

1. A and B are not necessarily of equal importance.
2. A and B can be similar or different in logical nature.
3. B can remain largely unchanged or be substantially transformed as a result of the incorporation of A (that is: there are varying degrees of saturation of B by A).
4. B continues to function harmoniously subsequent to the incorporation of A (if integration truly does occur).
5. Incorporation may occur at different levels, from the single course to the entire curriculum.

A case appearing in Appendix A illustrates these conditions:

Dental health is incorporated into the entire curriculum (#12b).[4]

Where dental health is integrated into other courses, it is viewed as important, but arguably less so than other curriculum areas. Additionally, dental health has a logical/formal structure different from English, Mathematics and Social Studies; in fact, it is not clear within what form of knowledge, if any, dental health might appropriately be classified. The curriculum will not be altered substantially by the incorporation of dental health. Additionally, the curriculum will continue to function as smoothly as before, despite the introduction of dental health.[5]

The question might be raised regarding whether or not
"integration" is the appropriate term to describe an attempt to see dental health incorporated into a whole curriculum. Forced to reflect along these lines, one sees that, while such an attempt has the form or appearance of integration, it may, indeed, not be integration. Wherever dental health were to appear in the curriculum, say in an English course or a Science course, it would still be easily recognizable as dental health; that is: it may be a conjunction of two things, an interjection of one thing into another, or an interruption of one thing by another, but it will not be incorporative integration. This state of affairs leads one to wonder if the common (curriculum) senses of horizontal and vertical integration do not come closer to representing paradigm cases of incorporation than does the example of dental health.

Other examples illustrate other possible states that might obtain with regard to the conditions named. When Lenin proposes to transform the school into a weapon for the communist regeneration of society, he is suggesting, first, that "A," the purpose of regeneration, is more important than "B," the curriculum extant at the time of incorporation. Second, he is proposing something that is quite different in logical form (a purpose) from that into which it is to be incorporated (a school curriculum). Thus, either a purpose or a content area may be incorporated into a curriculum.
Third, the curriculum is not to remain unchanged; it is to be saturated by Marxist ideas to a transformative degree, unlike the dental health proposal, whose advocates, one suspects, expect at best occasional references to their point of view, that is: a low degree of saturation or transformation in the curriculum.

More examples come to mind which illustrate incorporative integration. A proposal is made to integrate fine arts courses into other courses (#12d), liberal education into engineering education (#13a) and into medical education (#13b). The incorporation of conservation into the entire curriculum is proposed as a way to prevent its becoming a separate subject, the least desirable course of action in the view of those proposing it (#12a). The apparent object in the proposal is that students will become conscious that conservation relates to all the areas of the curriculum (a proposal which, by the way, contains definite prescriptive dimensions). In each of the cases just listed, as in those discussed above, the curriculum into which the materials in question are integrated will be transformed to some degree.
C. CORRELATION

The usual form of correlation integration proposals is as follows:

A is shown to be related to B (by noting points of intersection or common interest).

Correlation is thus clearly distinguishable from fusion/ incorporation, for in correlation nothing is joined. Instead of fusing elements or curriculum areas, in correlation integration points of contact are noted, usually by the classroom teacher. While fusion and incorporation are structural-formal relationships then, correlation integration is a pedagogical or strategic activity. Inasmuch as nothing is joined, some might want even to withhold the title "integrative" from correlation proposals.

Another form of correlation integration is as follows:

A is related to B through C.

"Perspectival integration" (where many dimensions of life are related through a world-view) seems to fit this correlative schema. At a lower level, courses such as History also serve to relate simultaneously more than one other discipline.[8]

A number of conditions usually apply to correlation integration proposals:

1. A is usually similar to B, either in form or in area of interest (inasmuch as there are grounds for comparison
2. Neither A nor B is necessarily taken to be more important than the other.

3. A given subject or discipline area might be related in correlative fashion to any number of other disciplines of knowledge.

A paradigm case of correlative integration is that sort of noting of historical events that teachers of literature do as a matter of course in their teaching. History is not made secondary by implication; if the subject at hand is literary and the mention of historical events enhances the learning process, then nothing at all is implied about history, except perhaps its importance to an understanding of literature. Those similar proposals claimed to be horizontally integrative may also fit into the logical class of correlative integration.[9] The correlation of history and literature happen to illustrate the case where the "integrated" elements are similar (condition #1). The impact of ethics on scientific research (Appendix A, #28c) illustrates the opposite state of affairs: the two elements have mutual interest but they represent two distinct forms of knowledge.[10]

Examples that might be added to the cases mentioned include such as the following:

#26a The relationship between biology and chemistry.
#26c The connection between geology and general
The incidental pointing out of connections between events, changes, processes, ideas or methods in fields other than the field which is the focus of the course in question.

Each of the cases named demonstrates simultaneously a respect for disciplinary boundaries and an awareness that academic disciplines impinge on each other and on ordinary life at many points. On this understanding of integration, there is no need to abolish the distinctions traditionally drawn between the forms of knowledge; in fact, those forms are secured.[11]

D. DIALOGICAL

Dialogical integration is similar to correlative integration except in one important regard: logical similarity, which was noted as a characteristic typically shared by the elements to be related in correlative integration, is not typically required for dialogical integration. The basic form of proposals for dialogical integration is as follows:

A is brought to bear on B

or

B is done in a way prescribed by A.
The conditions that usually apply to dialogical integration include the following:

1. A and B are usually of different logical form. Thus, unlike correlative integration, intersections of interest and points of comparison cannot necessarily be identified.

2. One of the two components is usually an activity or discipline and the other is usually an ethical, political, religious, or procedural claim or set of claims.

An illustration of dialogical integration may (again) be available in the example of Soviet education. Every aspect of schooling is to be brought into line with the purpose of furthering Marxist revolution. This revolutionary goal bears on school administration, attendance policies, the selection, sequencing and interpretation of curriculum contents, the selection of teachers, teaching methods, and so on. Marxist-Leninist ideology is brought to bear in a comprehensive way on education. Other examples appearing in Appendix A include the impact [read "dialogical integration"] of ethics on medical practice (#28b) and on scientific research (#28c), the organization of American education to suit the democratic ideal (#15a(ii)), and possibly the integration of Christianity and learning (#43b), a case tightly related to the focus of Chapter VI.
E. **DISCUSSION**

The four-part division suggested here goes some way already to making clear why confusion so frequently accompanies the use of "integration": the kind of integration intended in proposals and descriptions is rarely specified. Surveying and schematizing cases is a useful exercise in its own right, but much more than that is required for one to understand adequately how "integration" works. Thus, the direction of this study now becomes one of detailed exploration instead of survey and classification. The following chapter pursues in more detail the question of the "meaning of integration."

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1. These distinctions reflect ordinary English usage more closely than do the ERIC definitions reported in Chapter IV.

2. Stipulating logical similarity may also imply that fusion proposals are somewhat like correlation proposals in at least one respect.

3. See examples in Appendix A (#8a-c, #9a-m, #10) and the discussion of levels in Chapter IV.

4. See also uses #1, #2, #4, #6, #7, #12, and #13 in Appendix A for further examples of incorporation.

5. In fact, one wonders how realistic are those proposing the incorporation of dental health into the whole curriculum. It seems that dental health will be the loser if curriculum-wide incorporation were attempted, for the subject-area teacher, in English, Science, or Social Studies,
for example, even were he not hard-pressed to think of how to incorporate dental health into his area, is going to be hard-pressed to break old habits and think of the topic at all.

6 The reason that the term "integration" is still used will become more clear in Chapter V.

7 See Appendix A, #15a. Marxist transformation is thus distinguishable from dental health vis à vis the first condition: the relative importance of the constituent elements.


9 As noted in the previous section, horizontal and vertical integration may also demonstrate incorporative integration.

10 C.P. Snow would say they represent two different worlds.

11 That distinctions between forms of knowledge remain unchallenged in correlative integration is significant for Hirst's argument that the forms of knowledge thesis does not necessarily vitiate any prospects for integration. See Paul Hirst, "Curriculum Integration" in *Knowledge and the Curriculum* (London: RKP, 1974), pp. 132-71.
CHAPTER IV.

THE MEANING OF "INTEGRATION"

The man who sees all life as business, or as science, or as poetry is obviously lacking in real integration because he finds himself unable to deal with a very wide range of life that does not fit his oversimplified picture.

- Tyler, p. 111.

Having catalogued in Chapter III and Appendix A most of the educational uses of "integration," it is now possible to take further steps in the process of clarifying the concept, and, ultimately, of unraveling "the integration of faith and learning" as well. First, it is possible to ask, "What is the meaning of 'integration'?" "What is 'integration' about?" "With what does the concept have to do?" The first part of the answer to these questions appears as Section A following, "The Concept of Integration."

Following that, in Section B, a review of some attempts to define the concept is presented. This review serves a number of purposes. First, it acts as a measure against which to compare the fruits of the discussion of meaning in Section A. Is this study working along established lines or is it somehow off the mark? More notably, surveying definitions appearing in the literature serves a function
similar to one of the functions of Chapter III (and Appendix A): it underlines the wide range of possible forms or meanings that "integration" takes or carries in educational discourse. A discussion of this range of usage will provide an important link between the examination of "integration" immediately following and the discussion of possible sources of confusion that appears as Chapter V.

A. THE CONCEPT OF "INTEGRATION"

1. A Note on Meaning and Definition

The objection might be raised that "meaning," as it appears in the chapter title, should be enclosed in quotation marks. This is not a trifling objection. "Meaning" has been the subject of much study in the past few decades and it is by no means settled yet what "meaning" means. Given this unsettled situation among scholars, the following course of action appears to be the wisest. First, it is important to be clear about what one means when one speaks of the "meaning" of a term such as "integration." Recognizing this need, the second sentence of this chapter includes clarifying questions: "With what does the concept have to do?" and "What is 'integration' about?" Second, one must make clear that the phrase "the meaning of integration" is intended more in the sense of "the meanings . . ." than "the meaning . . ."
In fact, this view of meaning is implicit in Chapters II and III where both the note on linguistic method and the schema of forms indicate that there is not just one "real," "true" or "official" "meaning of 'integration.'" Worded differently, this study is not a search for "the definition" or essence of a word but rather is an examination of usage, both established and new.[1] Third, one is wise to note other discussions of meaning which bear on, and in some cases, provide justifications for, the view of meaning assumed herein.[2]

2. Cognate Terms and Related Concepts

An illuminating exercise which helps one become clear about the meaning of a term is to list or examine cousined terms, both cognates and related concepts. Such a list helps locate the key concept within a field. In Chapters V and VI, that location will go some way to explain the recent popularity of "the integration of faith and learning." For the moment, if the key concept is taken as "integration," one can quickly see the following:

"Integration"

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>integrate</td>
<td>tense of verb.</td>
</tr>
<tr>
<td>integrated</td>
<td>simple past tense of verb; acts adjectivally, completed process, state achieved.</td>
</tr>
<tr>
<td>integrative</td>
<td>adjective (process)</td>
</tr>
<tr>
<td>integrating</td>
<td>present participle (process implied)</td>
</tr>
</tbody>
</table>
integral  essential part of whole
integrity  consistency of belief, word, and action over time
integer  a whole number.[3]

Momentarily limiting discussion to the first four entries of the list reveals a characteristic of words having "integrate" as their root that will receive detailed attention in the following chapter but is worthy of mention at this point: some forms of the concept clearly have to do with end states while others clearly have to do with processes.

A number of different families of concepts are related to integration. A list of these concepts echoes some ideas already encountered in the discussion of "Calls for Integration" in Chapter I. It also anticipates the survey of proposals for integration that appears as Appendix A. One family of terms has to do with harmony:

unity,
organic,
wholeness,
holistic,
health,
adjustment,
co-operation,
balanced,
organized,
unified.
Related to these concepts is another set having to do with parts, wholes, disintegration, and such concepts as "meaning," "significance," and "synthesis":

differentiation,
classification,
cataloguing,
ordering,
analysis.

Still another family of uses has to do with the joining of one thing to another:

fusion,
incorporation,
mixing.

A fourth family of related terms frequently connected to curriculum integration is that family containing variations on the idea of discipline:

interdisciplinary/arity,
transdisciplinary/arity,
multidisciplinary/arity,
a-disciplinary/arity,
cross-disciplinary/arity.[4]

Many of the words and phrases reported in Chapter I's survey of criticism of subject-based curriculum might be gathered loosely under the concept "disintegration," omitted immediately above in the list of cognate terms but obviously
related to "integration:"

disintegrate
disintegrated
disintegrative
disintegrating.

Much remains to be said about many of these concepts. For now, it is necessary only to comment on the usefulness of this bare survey of cognate and cousin ed terms. That usefulness is mainly that the attempt to fill out the concept of "integration" is placed or located in its field of usage. Such placement is necessary if one is to understand properly the meaning of "integration."

3. "An Exploratory Concept"

A short answer to the question, "With what does 'integration' have to do?" might well read thus:

Integration usually has to do with the making of an organic, harmoniously functioning whole from discrete or even disparate parts. This process of integration can take place at different levels. It always is based on some organizing principle, purpose, or theme. Some bases are able to facilitate greater breadth than some other bases. Likewise, some bases surpass others in the dimension of suitability (or appropriateness) to that which is being integrated. Breadth and suitability are
the two elements constituting the adequacy of a basis. The harmony or integration finally achieved is usually a result of and in proportion to that adequacy. Each of the underlined terms will now be given detailed consideration in turn, with the greatest degree of attention being given to the matter of organizing principles, purposes and themes.

a. "Making"

This verb might easily be replaced by "constructing," "building," "bringing together," "putting together," "assembling," and other such phrases. Unfortunately, no verb chosen for this part of a description of "integration" will solve the problem that arises: whether and to what degree integration is a process, an end state, or both. Although thorough treatment of this problem follows in Chapter V in the "Process-Product" discussion, the problem bears mention here inasmuch as it must appear in any explication of "integration." For now, it is sufficient to note that the process of making a whole, whether completed or not, is entailed at some point in the concept of "integration."

b. "Parts and Wholes"

Making a harmoniously-functioning whole from individual parts is the business of integration of any kind. In fact, some writers focus exclusively on this aspect of
integration when they define "integration."[5] While one wants to agree that harmonious joining is a necessary aspect of integration, one wants also to caution that integration involves much more.

A useful approach to the matter of parts and wholes in curriculum integration specifically is provided by observing parallels with the nature of personality or psychological integration.[6] Broudy defines personal (or personality) integration as "the unifying of actions or values so that they blend rather than conflict."[7] Thus, his concept closely approximates the conventional meaning of "integrity."

Hopkins offers a definition which anticipates the definitions that appear later in this chapter but is presented here because it bears so directly on the matter of parts and wholes. In his view, "psychological integration" has to do with

... the internal aspects of behavior exhibited by an individual in resolving the conflicts which arise within his movements in his environment. When the internal aspects of the movement are characterized by wholeness, that is, when the individual operates as a connected whole to aspects of experience, or when his physical, emotional, and intellectual movements are in organic relationship that makes for maximum functional use, he is said to be integrated.[8]

In Hopkins' definition, the "blending" of which Broudy wrote is seen not as a blending of actions and values, but a much narrower conception of conflict resolution. Two years after
the above citation appeared, Hopkins spoke (in the introduction to the book he edited) of resolving "disturbances" and then argued the identification of integration and intelligence.[9] Watson's view is worth noting here as well. Preceding Hopkins by a few years, he spoke of psychological wholeness or oneness as the "bringing together into a perfected existence the parts of a child."[10] It is not necessary to quote further with regard to psychological integration. It is clear by this point that one's personality can be either a harmonious or a disorderly whole.

The appropriateness of this psychological comparison for curriculum lies in this: in curriculum integration as well, it seems to be the case that parts can go together to make either a harmonious or a disorderly whole. To recall again the survey of criticism in the opening chapter, a primary feature of that criticism is the claim that the subject-based curriculum is atomistic and disorderly, not a cohesive whole. Like a personality, a curriculum must be a reconciliation of competing values and forces. While resolution of conflicts is not the only issue integration involves, it still is important. Bellack adds an additional condition by noting that the parts of a curriculum must retain some autonomy without leading to "anarchy in the whole."[11]
Since integration entails more than parts and wholes, one must move on to other considerations. However, at least three additional connections will be noted before leaving off: The issue of parts and wholes is related to the matter of levels, to psychological wholeness, and to differentiation and classification.

c. "Levels"

The aspect of levels of integration has arisen once already in the discussion of the logical forms of integration in Chapter III. Examples of levels of integration can be drawn from many areas, including science and sociology. Science teaches that harmonious functioning or integration may occur at the level of the cell, the organism, or the group. In the area of sociology, Gerard mentions the possibility of integration at the individual or the societal level.[12] Gerard's sociological observation is a correct one though his way of proceeding from this observation into utopian speculation about the inevitable movement toward more integration in all societies is questionable. Two facets of levels of integration, however, can be distinguished following his observation, and these render his ideas a contribution. First, the trio—cell, organism, group—could be extended in either direction, viz. to the parts of the cell, or to the nation or world of which the group is a part. Second, what is a whole at one level is only a part at
The problems of curriculum integration mentioned in the preceding section can be seen in a new light when levels are considered. In the construction of any course there will be pressures to address a great number more issues and aspects than possibly can be addressed. In fact, these pressures (and the need to reconcile conflicting demands on the time available) occur at the narrower level of the individual class period or the unit and, wider than the course even, at the level of the curriculum for an entire year, four years, or twelve years. What is to be retained and what is to be jettisonned is, patently, a key curriculum issue. Yet, to say so is not to be trite, for integration of any sort may hinge on the successful execution of this aspect of curriculum-making: the task of reconciling parts to yield harmonious wholes at each level. Naturally, at any level where integration is a possibility, disintegration is also a possibility. Integration involves more even than parts, wholes, and levels, and so, again out of necessity, these considerations must be curtailed, this time so that a more central aspect of integration might be examined.

d. "Organizing Principles, Purposes and Themes"

The most important phrase in the expanded statement of the concept of "integration" given earlier in this chapter is "organizing principle or purpose or theme." The
importance of this phrase derives from the fact that the organizing principle, purpose or theme constitutes the basis or foundation of the integration being sought in any given case. If a number of individual parts are to be joined in the making of a whole, at any level, there must be some framework, reason, center, or ground. Dewey describes the great importance Plato attached to organizing principles and purposes:

Plato's starting point is that the organization of society depends ultimately upon knowledge of the end of existence. If we do not know its end, we shall be at the mercy of accident and caprice. Unless we know the end, the good, we shall have no criterion for rationally deciding what the possibilities are which should be promoted, nor how social arrangements are to be ordered. We shall have no conception of the proper limits to distribution of activities—what he called justice—as a trait of both individual and societal organization.[13]

Without disclosing the sort of pessimism Dewey attributes to Plato, O'Hara points to the same concern when he writes that the

. . . highest type of integration may be considered as that which prevails when among the parts to be integrated there exists a dominant part or element, naturally suited to take the position of a nucleus, and about which other elements can be organized according to their relative values or capacities in relation to the nucleus. In this type of integration, there is a strong unity derived from the natural adherence of the various parts either directly or indirectly to the nucleus.[14]

Knowledge of the "end of existence" and identification of a "nucleus" are not organizing bases of equal importance. But
they both function to give a unity of direction to an enterprise.

In the same way that integration in general demands an organizing basis, so educational integration makes that demand also. Recalling Chapter I again, one of the dominant themes of the criticism reviewed was that modern school curricula, whether subject-based or not, usually lack any central organizing purpose, principle, or direction. One writer sees the problem as a lack of "ordering schemas."[15] Another laments the absence of any "ordering principle."[16] In recounting the development of an integrative attempt at Berkeley, Tussman writes that "a dominating idea must come first."[17] He allows that it can be an examination of an historical period, or problem, an issue, or a theme, but the program must be based on a "singular curricular conception."[18] Petrie labels this "idea dominance" and argues that interdisciplinary enquiry for its own sake will probably fail unless some principle or sense of mission dominates the enquiry.[19] Dix calls for a new "synthesis [or] new philosophy which will again organize men's activities by providing sufficient clarity and promise to engage their allegiance."[20] Broudy, Burnett, and Smith call for agreement upon

... a comprehensive and systematic view of the curriculum for common, general education—a view which allows us to organize our thoughts, our techniques, and our enormous energies and
In effect, all these educational writers are identifying the same thing: the need for a basis for integration. They are all arguing that things cannot be joined together harmoniously without some overarching purpose, principle or theme, what both Bloom and Dressel name "integrative threads."[22]

Many of the proposals mentioned in Appendix A are intended to be direct responses to calls such as those just mentioned and cited. A few examples are quoted from the "themes, projects, problems" section:

1. outgroups (use #16b)
2. American West (16d)
3. environmental protection (17b)
4. world hunger situation (17a)
5. sidewalks (16h)
6. administrative behavior (18b).

In each case, the theme around which the unit is organized is intended to serve as an integrating basis. Interestingly, none of these examples that so clearly illustrate organizational bases fit neatly into the Fusion - Incorporation - Correlation - Dialogical schema of Chapter III. Perhaps a theme such as "The American West" compels correlation. Or perhaps the paradigms of Chapter III illustrate a type of epistemological principle whereby a mutuality of methods or areas of interest allows for fusion
of subject areas or correlation between them. Consideration of this classification problem will resume shortly. Meanwhile, other proposals abound in curriculum literature. One depicts a view of man as a biological organism in a cultural-physical environment to serve as the guiding principle. Another curriculum proposed has anthropology as a core. A third proposal comes with philosophy at the center, while a final example envisions a curriculum

... unified and dominated by a single interest, a single purpose, -- that of so understanding human life as to be ready and equipped for the practice of it.

In this context, the Harvard Report also comes to mind with its clear plea at the end of the opening chapter:

Thus the search continues and must continue for some over-all logic, some strong, not easily broken frame within which both college and school may fulfill their at once diversifying and uniting tasks. This logic must be wide enough to embrace the actual richness and variegation of modern life -- a richness partly, if not wholly, reflected in the complexity of our present educational system. It must also be strong enough to give goal and direction to this system.

A reading of educational literature reveals many more proposed bases for integration. Common to all these proposals is the promise of integration. In no case is the promise accompanied by a guarantee, a feature of such proposals to be noted shortly in discussing adequacy. It is necessary now, however, to move from these examples to consider three further aspects of organizing purposes,
principles and themes: the distinction between a principle, a purpose and a theme; breadth; and adequacy.

It is necessary at some point to explain why organizing principles, purposes and themes have been spoken of thus far as though separate. Some sort of distinction seems in order here but it is not an easy distinction to make. A paradigm case of a "principle" as it is being used here, would be the Roman Catholic curriculum based solely on the *Summa Theologica* of St. Thomas Aquinas. All theories, speculations, and ideas must be measured against Thomas' work. Thus, "principle" is taken here to mean something epistemological in nature. In the case of Thomas' work, the principle is simply one of comparison: the *Summa* and the world-view contained therein serve as an epistemological yardstick. A curriculum based on a "principle" is thus a curriculum based on a view of the nature of knowledge.

Again, the question arises of classifying the paradigm examples in Chapter III on this tri-partite schema. Fusion integration (if it is to be successful) usually demands either similarity of structure or commonality of interest among the elements to be joined. Where structural and formal differences exist, incorporation or correlation may be possible if a common interest or concern can be found. Is the word "principle" stretched beyond reason here when so many cases are subsumed under it? One may respond
that it is not if the epistemological element (common methodology or common interest in this case) is noted. Otherwise, one might want to add to "organizing purposes, principles and themes" something like "points of intersection" or "common methods." Leaving these classification difficulties for a moment (others will appear shortly), it is also necessary to explore how a "purpose" and a "theme" aid in bringing integration.

A "purpose" is better thought of as the educational or pedagogical end toward which a curriculum is directed. Such a purpose would not necessarily include any reference to the nature of knowledge. A model case of such a curriculum would be one that is designed to serve the sole purpose of making students aware of the world environmental crisis or food crisis. Curricula designed solely to train actors, musicians, carpenters, bus drivers, church ministers, or military officers, would likewise be based on an organizing "purpose." If an organizing principle could be said to be primarily epistemological: "that on the basis of which," then a purpose-oriented curriculum would be primarily practical: that "for which."

A theme, finally, is best thought of as that "around which" a curriculum is organized. A theme provides a strategy to give coherence to a curricular unit. It might be as narrow as "The Uses of Plastic in Society" or as wide as
"Man and His World" but it must serve to unite the various facets or elements of the portion of the curriculum in question. A number of questions arise concerning proposals which envision integration resulting from themes. First, are disciplinary boundaries respected when a curriculum is organized thematically. Where those boundaries are respected, and no criticism of disciplinary organization is thereby implied, will the curricular result be sufficiently integrative to warrant implementation of the alternative, thematic form of organization? Is there a "natural adherence" between the areas connected by the theme, or are the connections that result forced? Some refer to the harmony that obtains in any curriculum based on a principle, purpose or theme as "integration" (and others simply call it well-planned education). On this account, such a label might be attached to a clearly purposeful subject-based curriculum as easily as to any of the proposed curricula listed as examples in Appendix A. These questions and issues anticipate the discussion of "adequacy" which follows shortly.

A Marxist curriculum proves somewhat difficult to classify on the schema just presented. However, exploring the sources of that difficulty is a useful exercise. It is manifest to many that Marxist, or at least Soviet, education is education for a purpose. But there is a body of theory
leading back before Marx to Hegel that, many argue, includes a theory of knowledge and history as well as the more obvious views of politics and economics. This ostensibly epistemological foundation of Marxist thought renders the otherwise easily-classifiable Soviet education system a difficult entity. Perhaps, since Soviet education clearly is "education with a purpose," it is better to admit that the suggested three-part schema (purpose, principle, theme) does not take into neat account all cases that one might encounter in educational literature. Further, some cases possess features of more than one kind of basis. Such an admission precludes the necessity of violent classifications. Unclassifiable cases notwithstanding, the purpose-principle-theme distinction is a useful one and will be used again later. Furthermore, it is a fact that for integration to occur there must be some basis, and in most proposals that basis is a purpose, a principle, or a theme.

e. Breadth, Suitability, Adequacy

Where some organizing purposes and principles are quite restricted, others are comparatively wide-ranging. For example, while "sidewalks" might constitute an adequate basis or theme for an enquiry of a few hours' or days' duration, it is obviously not wide enough to serve as the foundational principle for an entire curriculum. On the other hand, a number of examples come to mind where one principle or
purpose gave or gives direction to a whole year of study or to an entire educational curriculum. One thinks of cases where unifying concepts, some obviously much more restrictive than others, are meant to guide an entire senior-high or college curriculum. Greek education comes to mind with its goal of the production of a good citizen.[28] One recalls also the medieval university with its integration based on theology functioning as the core and measure of the rest of the curriculum. A twentieth-century example is provided by the College of the University of Chicago which Chen notes as an example of a curriculum organized for one purpose: the development of an "intelligent understanding of contemporary environment and culture."[29] One might note the example again, as does Pace, of academies intended for the training of military officers.[30]

It is apparent in all these illustrations that organizing purposes, principles and themes must serve as the bases for integrated curricula of a variety of breadths, from the "sidewalk" unit to the entire system of education in ancient Greece or medieval Europe.

Besides breadth, any basis for integration must also meet the condition of suitability or appropriateness. Bloom offers an extended but very illustrative metaphor wherein he uses "intrinsic" to refer to the notion that any basis for integration must suit that which is being integrated.
The task of putting together a jig-saw puzzle may clarify the point. The ultimate objective is to put together the puzzle. If a picture of the completed puzzle is printed on the container, this—the end result—may be used by the puzzler to guide each step of his assembly. Usually, however, the picture is not in sufficient detail to provide all the necessary clues and many puzzlers refuse to use the picture. One person may sort out and assemble all of the edge pieces, thereby providing a frame in which to work. Another may separate pieces according to color, shading, or distinctive marks, lines, or figures. Most puzzlers will use several or all of these devices in piecing together sections of the puzzle. Thus, color, line, shading, and other such clues provide integrating principles at levels lower than the ultimate objective. Notice, however, that these lesser integrating principles are not irrelevant to the final integration; color, line, and shading have an important role in the effect of the final integration. In contrast, the individual who undertakes painstakingly to pair pieces by shape has chosen a procedure irrelevant to the final goal. Without some such principles as those of color, shading, line, and the like, the assembly of a complex jig-saw would become an almost endless trial-and-error task. Use of the principles eases the task and adds to the comprehension of detail in the final result. Our example suggests that the building up of any complex whole proceeds best when integrating principles intrinsic to that whole can be identified and used to relate the parts.[31]

Bloom's point is a simple strategic one: some integrative bases are more suitable and therefore more adequate than others.

The introduction to the concept "integration" that appeared near the commencement of this chapter included the claim that the integration finally achieved was proportional to the adequacy of the organizational basis of that integration. The condition of adequacy, it was noted there, requires of an integrative basis both breadth and
suitability. Neither suitability nor breadth is sufficient by itself to bring about integration by means of a principle, purpose or theme; adequacy demands both.

Exploring adequacy in this way leads inevitably to a reexamination of curriculum proposals meant to foster integration. Chapter I noted that one of the arguments originally given as a reason to develop general education was that "narrow-vocationalism" and "occupational specialism" were hindering the efforts of those who wanted to see students gain a truly "liberal education." Yet, military and vocational "education"—what many call "training"—are listed here as examples of integration based on an organizing purpose or principle. There seems to be a contradiction between the arguments for general education and the inclusion here of specialized institutions as examples of integration. The principle or purpose on which military and vocational curricula are based may be adequate in breadth as a basis for military and vocational training—assuming appropriateness for the moment—but fall short of the conception of education held by advocates of general education.[32] Bloom's question regarding such training would involve the assumption just mentioned: whether or not the principle of integration was "intrinsic" to the overall goals of the curriculum.

In summary, the condition that any basis for integration be adequate entails two further conditions,
neither of which is sufficient in itself. First, the basis, whether principle, purpose, or theme, must be broad enough to support the segment of the curriculum meant to cohere around it. Second, that basis must suit the materials, or be "intrinsic" [appropriate] to them. Where these two conditions are met, greater harmony results in the curriculum. One final comment is in order here as well, before passing on to consider various definitions of integration that have been offered. Without wishing to prejudge, one suspects that integration does not always result from implementing those proposals claimed to be integrative. Many times something having the curricular trappings of integration may occur without ever achieving true integration. As already indicated, the hope of integration is always imbedded in the language of integrated education; the guarantee of integration is not.

B. DEFINITIONS OF INTEGRATION

Having offered a concept of "integration" and expanded on its constituent parts, it would now be helpful to survey some definitions of "integration" from educational literature. Once again, this is not meant as an attempt to find "the definition of integration." For two reasons, searching for "the definition" would likely be fruitless in
the case of "integration": first, the usual function of "integration" in educational discourse may be that of a slogan (in which case, the only fruit yielded by a definition would be frustration); second, a single definition yields little real insight into the usage of the term anyway. Still, examining other attempts to define the concept and noting their emphases will reveal much about the varieties of work the term is required to do in language. Examining attempts to define "integration" may also be instructive in that it will point out pitfalls to be avoided in later considerations of the concept.

A review of definitions of "educational integration" might be organized in a number of different ways. The classification scheme followed below is chosen because one of the persistently controversial aspects of "integration" is the "locus" of integration—where does integration take place, within people or within curricula? Three kinds of answers are usually given to that question. Some educators view "integration" as a process that happens in people (psychological, pedagogical). Others view it as a state of affairs that obtains in a curriculum (epistemological). A third group of educators recognize a connection between the two and consequently argue that integration involves both curricula and students' consciousness.[33] The definitions following are treated in three sections to reflect these
three emphases. These same three divisions will appear in later discussion of the logical-psychological debate as well (Chapter V, B).

1. "Curriculum as Locus" Definitions

A typical expression of the view that integration occurs in curricula or in knowledge appears in Webster's Dictionary:

"The organization of teaching matter to interrelate or unify subjects usually taught in separate academic courses or departments."[35] The definitions offered by the ERIC Research Service run along similar lines. The four main descriptors related to this study are as follows:

"fused" has to do with the interrelations of two or more subjects.

"unified" has to do with the elimination of boundaries between old subjects with the result that new subjects are formed.

"interdisciplinary" has to do with the co-operation of two or more disciplines.

"integrated" "systematic organization of curriculum content and parts into a meaningful pattern."[36]

While the last term named may admit of the involvement of people, the first three clearly have to do with knowledge primarily.[37]

Within educational literature, one finds many definitions of "integration" where curriculum is taken as the locus. Again, much of the criticism surveyed in Chapter I is
criticism of curriculum. Duryea, for an additional example, sees departmentalization as the opposite of integration and calls for specialists to draw together so the relationships between their specialities might become clear.[38] Other educators write about applying knowledge to "real" problems or exploring problems by means of the tools and concepts offered by more than one discipline.[39] The curriculum, not the student's consciousness, clearly is taken as the locus of integration in these proposals.

Outside specifically educational thought, there has been a long tradition of attempts to unify knowledge by various systems of classification. Counelis has surveyed several dozen such schemas for the organization of knowledge, including not only those of Thomas Aquinas, Dewey, Plato, Bacon and Hegel, but many less known attempts such as those of Wundt, Comte and Bentham. The breadth of his study underlines the variety of bases and distinctions people have employed in their attempts to make sense of the universe of knowledge.[40]

2. "Person as Locus" Definitions

Many of the definitions of "integration" encountered in the literature view the person as the locus of integration. Among these, two definite lines of thought are identifiable: one line emphasizes personality adjustment and the other
emphasizes the student's construction of a meaningful educational whole from the various elements of the curriculum, what one writer describes as "a conscious process in which the individual continually seeks to organize and interrelate all his experiences in new meaningful ways."[41]

Those who emphasize adjustment either at the social or personal level see, with varying degrees of clarity, what tasks the school ought to do. Hanna and Lang, for example, list in the Encyclopedia of Educational Research specific things schools must do if they are "to lead in the task of integrating our value system," if they are "to serve the local and the larger community in fostering integration," and if they are "to provide an environment favorable to integration of the individual personality."[42] Megroth and Washburne, who view integrated learning as "that in which the heart, the head, and the hands work together," describe integrated learning—or its absence—by means of such contrasts as "wholesome and organismic" growth, as opposed to "partsome and disorganized" experience; and the individual making "a whole of his experience," as opposed to allowing separate experience to remain discrete.[43] Their summary of educational integration is worth citing at length because they see a relation between the curriculum and the student's personality adjustment, a rarely-made connection in the literature of integration:
the presence of the integration in the learning process will reveal itself at the first level in a constant attempt to organize facts into some sensible arrangement, to hypothesize and constantly to check the hypothesis in turn. At the second level integration will reveal itself in a continuous attempt to make sense of feelings, emotions, attitudes and values so they make a coherent and dynamic whole. And at the third level the individual will constantly revise his inner environment in the light of the outer environment as he observes it, and act on this revision so that the data he encounters are invested for him with force and meaning. And again, the individual who is experiencing integrated learning will have a sense of direction, a sense that the dynamics of his environments are pulling together and not apart."[44]

Watson's definition runs along very similar lines. He writes of educational integration

. . . involving wholeness or oneness or bringing together into a perfected existence the parts of a child that start off some in one direction and some in another and which have to be bound together if it can be done.[45]

Among those who view integration as adaptation or adjustment within and to one's environment, a small number of writers suggest that the ability to integrate among competing values and demands equals "intelligence."[46] If integration equals "intelligent, ongoing, interacting, adjusting behavior," as Hopkins defines it, then the phrase "educational integration" may make sense but "curriculum integration" probably does not. Very clearly, Hopkins (and Knudsen and others with him) sees integration as something that takes place in people, not in knowledge or curricula.
3. Interactive Definitions

Two methods present themselves to reconcile the conflicting views regarding the "locus" of integration. One is to point out that a word like "integration" is capable of doing more than one job of linguistic work and it can be used to mean both individual personality adjustment and integration of curriculum. A second method is to argue that curriculum integration and personality adjustment are somehow related. A few writers note the linguistic aspects of the case. Others, some of whom view the linguistic account as an easy way out of difficulty, argue that curriculum integration and personal adjustment are related.[47]

Wheeler, for one, argues that such a relation exists. He cautions regarding the difficulty of making clear the relationship between curriculum and personal integration, and then adds that educators must remember that integration is something that individuals themselves achieve or do not achieve. Though integration may be encouraged by the way in which content is offered, it is dependent on the extent to which learners themselves see the possible relationships. Integration is not something which can be produced for learners, though they can be helped by suitable arrangement of "learning-experiences-with-content." In any event, it is necessary to integrate ideas, rather than subject matter.[48] Wheeler's comments recall the attacks made on subject-based
curriculum, the kernel of which is that unsuitable curricular arrangements hinder students in their efforts to see the relationships that exist between the areas of knowledge.

Another writer echoes Wheeler's main lines of thought but stipulates that what is known must issue forth in personal behavior, an idea one suspects must be implicit in "the integration of faith and learning" as well. Tead writes that integration involves the ability

... to see relationships not readily obvious, to see how what is known can be integrated to some reasonable extent in a natural way into a coherent, meaningful overview related to creative conduct....

... discover some underlying unity about the affairs of the self, of society, and of the cosmos.[49]

Tead is presenting here an idea almost indistinguishable from "practical integration" (use #7) as reviewed in Appendix A. He is simply calling for the application of learning to life's situations.

Two features of "integration" have become very clear in this chapter. First, the concept unpacks in a complex way; it is not simple to define. Second, and a consequence of the first, different people use "integration" to mean different things. In these circumstances, it is worth exploring further the confusion that often arises when people talk about integrating a curriculum or integrating faith and learning.

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4 For further elaboration of terms involving the root "discipline," see Boisot, Hausman, Swoboda, C. James, Kocklemans, Cleveland.

5 Knudsen claims that integration is "the formation of wholes from parts" (p. 17); Dressel writes that integration entails the "interdependent parts of a larger whole relat[ing] or [being] brought into harmonious relation with one another" (pp. 10-11).


9 1937, pp. 3-19.

11 Bellack, p. 266.


16 Hutchins, The Higher Learning in America, p. 94.


18 Pp. 52,14.

19 Petrie, 1976, p. 2. See also Connole, p. 5. In "Towards the Integration of the Foundations of Education," Educational Theory 13 (1963), Ronald G. Jones argues that such a principle is not sufficient for integration but it is necessary (p. 75).

20 Dix, p. 64. Also see Broudy, p. 71.

21 Democracy and Excellence, p. 42.

methods are all able to function as integrative threads.


25 Organ, "Philosophy as Integrator," pp. 477-78; Meiklejohn, p. 49. Wise also lists the "preparation for life" as a sufficient organizing purpose (p. 93). Chen names the understanding of contemporary environment and culture (pp. 9-10).


28 Hong, pp. 6-14. He cautions that later Greek education, especially at Athens, had other purposes such as "personal advancement" and "individual excellence."


31 Bloom, p. 90.
In this regard, Hong wrote in 1956: "The technical role of the engineer, the physician, or the physicist is one which satisfies to some extent the search of the individual for purpose and unity in life. But the inadequacy of the single goal of technical competence has recently been recognized by scientists and the schools which train scientists" (pp. 38-9.)


A fourth class might arguably be added on the grounds that "integration" is frequently used and even defined without apparent recognition that it might have to do with people or with knowledge or with both.


ERIC Thesaurus (Phoenix: Oryx Press, 1982). As noted in Chapter III, these definitions do not reflect the categories developed in this thesis.

Numerous ERIC searches failed to produce a single citation that had to do with both curriculum integration and personal-psychological integration. This may indicate either a lack of such research or a predisposition on the part of those who compiled the ERIC thesaurus. The present author suspects the lack of citations results from a lack of writing and research in the area.


Arca and Vicentini-Missoni, p. 117; Bolam, p. 159. For further examples, see also Carter and Narramore, p. 13; Musgrave, pp. 32-35.

41 Dressel, "Integration: An Expanding Concept," p. 251. Dressel's views are noted again in Chapter V where "Process" and "Product" are discussed. The adjustment and pedagogy distinction is discussed in Chapter V as well.

42 P. 598.


44 Pp. 86-87.

45 P. 472. Also see Broudy, (1954), pp. 68-71 and Chen, pp. 307-9. Broudy writes (p. 68) of "... the organizing of one's energies for self-realization" because one cannot "actualize every possibility" and because "flitting from one flower to another is so often accompanied by strong feelings of drift and inner dissatisfaction."


47 It is not necessarily the case that only one of these views is right.


CHAPTER V

ANALYSIS OF SOURCES OF CONFUSION

In the old days, days as old as the twelfth century—the young lover would on occasion prove the ardency of his love by deeds of valor. If his true love were within sight when her beauty was questioned by another man, he might just break his head—the other man's head, I mean—then that proved that his—the first fellow's—girl was a pretty girl. But if the other fellow broke his head—not his own, you know, but the other fellow's—the other fellow to the second fellow, that is, because of course the other fellow would only be the other fellow to him, not the first fellow who—well, if he broke his head, then his girl—not the other fellow's but the fellow who was the—Look here, if A broke B's head, then A's girl was a pretty girl; but if B broke A's head, then A's girl was not a pretty girl, but B's girl was.

- Jerome K. Jerome (1895-1927).[1]

It is clear from the foregoing chapters that confusion surrounds "integration." In educational discourse, both as it is used and as it is defined, this term is given a great deal of work to do, so much work, according to at least one observer, "as to be suspect."[2] Consequently, the word has lost some of its original specificity, and many people using it now regularly precede their use of it with the warning that it has lost both power and precision but that there is no replacement available.
This chapter will examine some specific sources of the confusion surrounding "integration" and "the integration of faith and learning." What processes are at work when such language is used that it can generate so many problems? In what follows, five sources or areas of confusion are treated. First, "integration" is examined as a positive value term and as a slogan. Next, various psychological dimensions of "integration" are considered: the invasion of mental health connotations into epistemological usage; the evasion of the same; and the logical/psychological debate ("locus debate"). A third major section treats "integration" as a term open both to process and to product interpretations. Finally, after a short discussion of "integration" as a polymorphous term, the chapter concludes with an extended distinction between concepts and conceptions.

A. "INTEGRATION": A POSITIVE TERM

An important, and perhaps the most obvious observation one could make about "integration" is that it is a positive term. As noted in Chapter IV, it has to do with coherence, harmony, unity and wholeness. It is no wonder that the word has been used so widely in many fields of discourse, education prominent among them. It is also no
wonder that standard procedure in educational discourse now entails the inclusion of a codicil pointing out that one knows the word's limitations before one says much more about it.[3]

Evidence that "integration" has positive value connotations abounds in educational literature. It is contrasted with interdisciplinarity, which is viewed as cosmetic and only a partial-effort.[4] It is also contrasted with a curriculum where knowledge is divided into sectors which "do not relate to real life."[5] It is extolled because it is better than "conventional teaching."[6] In the area of the "integration of faith and learning" specifically, one writer contrasts "real integration" with three poor substitutes:

1) mere "interaction of faith and learning, a dialog,"
2) conjunctions, or unholy alliances characterized by the development of critiques of material without the provision of more satisfactory explanations,
3) disjunctions where instead of interest in culture and human achievement there is a "militant polemic against secular learning and science and culture."[7]

In fact, "integration [of faith and learning]" is even claimed as a goal by some people better known for their militant anti-secular polemic than for their desire to embrace sympathetically the human fund of knowledge.[8]
Article titles tell a story of their own. In 1935, "Integration: Potentially the Most Significant Forward Step in the History of American Secondary Education" appeared in a California journal.[9] More recently, even Mother Goose has found her way into the integrated curriculum.[10] Like "creative," "innovative," "democratic" and many other words in educational discourse, "integration" has achieved what might be called "semantic star status." Having achieved that status, "integration" provides what Jacques Ellul calls "the nourishment of [a] society."[11] Some educators have noted how "integration" has come to nourish educational society. Pring observes how various Schools-Council reports viewed integrated curricula as "holistic" compared to the "fragmentation" of subject-based curricula.[12] In their self-study report, the St. Olaf's College faculty note that educational integration "seems to be a universally recognized goal."[13] Gangel writes that the specific phrase "integration of faith and learning" has become "almost a symbol" or "a rallying cry which brings nods of approval from faithful multiplied hundreds of teachers."[14] Another educator cautions that, in his writings, "integration" is not "just another educational slogan."[15] Knudsen's observation is clearly accurate: "only a particularly obtuse educator or one quite insensible to happenings in the field" would fail to notice the status "integration" has achieved.[16]
Educators should not be surprised by such an achievement; if the desire for unity is "inveterate, universal, and endemic," then wide usage of "integration" is the result one might expect.[17] When a word carries connotations of approval, people borrow that word for previously-unimagined applications. As borrowing continues, and as borrowed applications are repeated, new uses or meanings become conventional uses or meanings. The semantic range of the term expands.[18] In the case of "integration," such great expansion has occurred that the word is now applied where perhaps, as Hirst and Peters suggest, new types of teaching and learning activities not meant to be integrative at all are described as integrative.[19] One wants to note, in fact, that any teaching done correctly is integrative—at least in the vertical and horizontal senses—and it is therefore not surprising that the word finds its way into educational discourse so frequently.

More than one observer has noted that "integration" is an educational slogan.[20] "The integration of faith and learning" may be one as well. If "integration" is a slogan, then a number of insights about the ways slogans function may be brought to bear on this consideration of "integration" as a positive term and on "the integration of faith and learning" as a positive phrase.[21]

In considering slogans, it is of paramount importance
to distinguish between prescription and description. It is now a commonplace in linguistics that language serves many functions. One standard distinction is that made between informative, neutral, or descriptive language and directive, emotive, programmatic or persuasive language.[22] In distinguishing the prescriptive and descriptive functions of language, one must recognize that the two functions are not mutually exclusive when people actually use language. The persuasive function constantly invades, or, as Richards words it, "poaches" on the other functions of language.[23] This invasion may be intentional or not; to pursue the question here would be distracting and possibly fruitless. The point of importance for this present study is simply that "integration," even in its ostensibly neutral and descriptive applications, cannot help but carry with it a "tagged imperative."[24] This point is argued very forcefully by Burke where he writes:

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... speech in its essence is not neutral. Far from aiming at suspended judgement, the spontaneous speech of people is loaded with judgements. It is intensely moral--its names for objects contain the emotional overtones which give us the cues as to how we should act toward these objects. Even a word like "automobile" will usually contain a concealed choice ...[25]
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What Burke writes about speech applies equally well to written discourse. A few pages later, he continues:

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Speech takes its shape from the fact that it is used by people acting together. It is an adjunct of action--and thus naturally contains the elements
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of exhortation and threat which stimulate action and give it direction. It thus tends naturally towards the use of implicit moral weightings: the names for things and operations smuggle in connotations of good and bad—a noun tends to carry with it a kind of invisible adjective, and a verb an invisible adverb.

His conclusion is that "the combative quality is ingrained in speech."[26] Berger and Luckman identify this combative quality as the "pragmatic motive" in language.[27]

The desire for unity among educators ensures that "integration" will be required to take on what Burke calls a "moral" or exhortative function in educational discourse. The use of "integration" will always imply that something is good or that some action ought to be taken. As a slogan in educational discourse, "integration" has descriptive power, but that power is less important than the prescription implied regarding the designated educational enterprise. "Integration" fits the class of "mixed words" identified by Wilson: those words which do both descriptive and evaluative work at once. He argues the particular importance of recognizing such words because

... it is usually just such words which we like to argue with; for they represent ideals which many people support, and which may be called into question. Unless we ... perceive the mixture, we shall find it impossible to argue about many topics. For many arguments are arguments about what is good and bad, and hence we are likely to employ a great many mixed words of this kind.[28]

That the "meaning of integration" figures in educational arguments no longer needs to be argued here. It is
important, however, to notice that Wilson's point about recognizing mixed words and the place of mixed words is often ignored by those people engaged in argument who most need Wilson's advice.

Slogans are not prescriptive because of any lack of descriptive power. As Komisar and McClellan point out, the contrary is true: slogans "are embarassingly rich" in reference—that is why they are so effective.[29] Thus, those educational writers arguing that "integration" has become meaningless perhaps misunderstand the situation. "Integration" has taken on new meanings. Again, as Komisar and McClellan say,

   . . . to say that a slogan is meaningless is to say that no attempt is made (or that there is no other way) to restrict this great diversity of possible particulars.[30]

"Integration" certainly suffers this lack of restriction, with the result that its users may not achieve all they wish with each use. On the other hand, sometimes they achieve more than they might imagine.

A second helpful distinction regarding slogans is made by Israel Scheffler. He points out that slogans have both "literal purport" and "practical purport" and must be criticized in two ways. "Integration" seems to operate in a parallel manner to Scheffler's example (from Dewey): "There is no teaching without learning." While the literal purport of this slogan seems harsh and leaves teachers in a bad
position, its practical purport, and Dewey's intention, is that teachers would see their own responsibility in learning outcomes. Teachers should "focus attention on the child" and not "always blame failure on the student."[31] "Integration" functions in similar fashion. Literally, it has to do with the making of harmoniously-functioning wholes from disparate, even competing, elements. "Educational integration," especially where it is used without its meaning expanded, is thus a rather ill-defined and generalized goal—a goal few educators would deny already having. Practically, those who use "educational integration," in any of its various forms, may do so with the possible intention of having teachers see that knowledge is not divided or that students are having to make an intelligent whole of all their courses. But it is clearly the case as well that phrases where "integration" figures centrally are often used with a purpose relating only loosely to the meaning of "integration"; primarily, that relation is for the purpose of gaining approval for a curriculum proposal because "integration" is a positive term. Recalling Wittgenstein's notions of language-games and forms of life for a moment, in the game of conceptualizing curricula and in the form of life that is education, "integration" takes on more than mere lexical meaning; it is intended to move teachers to certain kinds of action.

A third useful distinction in considering slogans is
that between the possible grammatical forms in which slogans might appear. Some slogans take the indicative form ("This is an integrative program") while others appear as imperatives ("We ought to integrate this program"). The usefulness of this distinction with regard to "integration" is this: except at the level of surface grammar, one cannot succeed in applying the indicative/imperative distinction to "integration" in use. That is, even when the grammatical form is indicative, the underlying logic remains imperative. So far, this bit of insight does not appear to further the examination beyond the initial discussion of prescriptive and descriptive language. But there is more to be said here. One of the standard strategies in linguistic analysis involves asking about necessary and sufficient conditions. In seeking to clarify "integration," one would ask, "What must an educational program look like before one will allow it the honorific title 'integrative'?" Asking such a question bears this fruit: the realization that while one might wish to specify the conditions an educational program must meet to be granted the title, the situation is that people writing in the field apply the word whenever and wherever they wish.

To conclude this discussion of "integration" as a positive term and as an educational slogan, one wants to point out that it functions like most slogans. It is used to
appeal to the emotions of educators that they might be moved to act in certain ways. As Kneller states,

The function of slogans is to move the emotions rather than to convey information. Slogans in education are used to symbolize the leading attitudes and ideas of educational movements. They are designed as a rule to confirm the faith of present supporters and to attract new ones. Since they do not claim to facilitate communication or to reflect usage, they are not to be condemned for formal inadequacy or for failure to represent existing meanings.[33]

To add to Kneller's remark, if a slogan like "integration" does fail to carry much specific information in particular situations it is because of the great amount of work required of it in educational discourse as a whole. Despite its shortcomings in actual use, the popularity of the word indicates that its users have serious educational policy issues in mind when they use it and that they see no alternative words available to express those concerns.[34]

B. PSYCHOLOGICAL CONSIDERATIONS

A number of psychological considerations affect the functioning of "integration" in educational discourse. First, connotations of psychological wholeness or adjustment frequently invade ostensibly pure curricular-epistemological uses of "integration." Some educators see a strong (and desirable) connection between curriculum design and psychological health. Other educators want to avoid talk of
psychological wholeness and adjustment because they view the task of the school as one of conveying information, not doctoring. The second major area where psychological considerations bear on "integration" takes the form of a long-running debate now known as "the logical and the psychological." The key disagreement in this debate has to do with the importance to curriculum design of psychology and learning theory compared to the importance of epistemological and disciplinary issues. Unfortunately for "integration," or at least for those who must use it or who want to get clear about it, the disagreeing parties in both these debates (adjustment-knowledge, logical-psychological) all choose the same word to express what they mean. Such mutuality of expression becomes a source of confusion.

1. Wholeness and Adjustment

By "educational integration," many educators mean integration of knowledge or integration of curriculum. Some consciously wish to exclude considerations of adjustment; some are not aware that, or do not care if the phrase might carry psychological connotations; some, who see a strong connection between curriculum integration and psychological health, are happy if there is a carry-over of psychological connotations into ostensibly curricular usage. These three groups all envision different policies in education, yet when
they discuss those policies, they all use the same term, "integration." Even the simple division above is complicated by the reality that not even those educators who deny that curing ought to be the business of schools would argue that schools ought to foster disintegration in students' lives. That is: the most such educators would claim is that curriculum should not (or does not) affect students' psychological well-being; if there is to be any influence, these educators would want it to be positive. Additionally, every one of these educators holds some conception of mental health.

In contrast to this minority of thinkers who have specifically disallowed curing as a task for schools, many educators argue that integration of personalities is a proper educational objective. Educators have defended this view for decades and do not appear to be retreating. Ciccorico, for example, cites the Foundation for Integrated Education's first National Workshop report in this way: integrated education is that sort of education "which builds or aids in the building of integrated personalities."[35] Hanna and Lang note, without arguing anything in defence, that integrated curricula are devised "to promote the integrative process [in persons]."[36] Knudsen defines the phrase "integration of a curriculum" as

... an expression used to describe the efforts of educators to provide opportunities for experiencing
which will facilitate the process of integration within a pupil and further facilitate his social adaptations.[37]

With a specific interest in "the integration of faith and learning," Gangel stipulates in his definition that integration means "the forming or blending into a whole of everything that is part of a . . . student's life and learning."[38]

These few citations make the point clear that some educators do see the integration of persons as a goal of education. While one wants to avoid psychologizing or imputing motives, it seems self-evident that those educators holding this view would benefit from any invasion of psychological connotations into ostensibly pure curricular usage of "integration." Put more strongly, it is difficult to imagine how such educators could refrain from attaching psychological health considerations to their own uses of "integration," even if those uses are ostensibly restricted to purely curricular issues.

The argument that curriculum integration is related, perhaps causally, to personality integration is strong. According to this argument, personality integration entails evolving a harmony or consistency amidst incoming information and the conflicting pressures and demands of life. If the educational curriculum is disjointed—and this does not imply a subject-based curriculum necessarily—then the student will face more difficulty in carrying out the task of
incorporating his educational experiences into the whole of his life than if that curriculum were integrated. A proportion even suggests itself here: to the degree to which a curriculum is disjointed, that curriculum will be difficult to make part of a harmoniously-functioning whole. Hanna and Lang go so far as to claim that evidence "may be cited indefinitely showing that harmony within the social environment begets harmony within the person."[39] As an important part of that environment, the school is thus seen as one of the sources of a student's personal adjustment or maladjustment. Dix, for one, argues a direct relation between curriculum departmentalization and personal disintegration. He also notes the positive inverse of this relation: when subject-matter is "integral," student adjustment is enhanced.[40]

The argument discussed so far—that educators ought to see it as their business to foster adjustment and psychological health—has been countered vigorously by those educators who see curing as the job of medicine and teaching as the job of education. When this latter view comes to bear on discussions of integration, it takes the form of calls for purely epistemological or curriculum integration and against any talk of personality adjustment. One wants to grant that it is easier to understand or describe how to develop integrated curriculum units or begin interdisciplinary
teaching than it is to tell how schools are to produce psychologically well-adjusted people. Dressel, in fact, tells of the tendency of contributors to the Fifty-seventh Yearbook of the National Society for the Study of Education to write about knowledge rather than about people. [41] The difficulty of articulating how curriculum and adjustment are related figures prominently in discussions where the separation of teaching and curing is argued.

The best-articulated argument that personality integration is not properly an aim of educators has come from R.S. Peters. At that, his argument rests primarily on the point that, qua educational aims, "mental health" is too difficult of definition to be of use to educators. [42]

Wilson's response to Peters warrants attention here. He argues that curing and teaching are not so far apart as Peters thinks. Furthermore, there are sufficient overlaps between the purposes of education and the purposes of psychologists and psychiatrists to justify speaking of mental-health as an educational aim. [43] Wilson stops short in his response before he addresses the main concern herein, however. He does not discuss whether the organization of curriculum bears on the mental health of students. Nevertheless, one might infer from his observations that he does see the involvement of curriculum when mental health is discussed as an educational aim.
The point in all this—Wilson's criticisms notwithstanding—is that some educators want strongly to avoid contaminating otherwise purely epistemological discussions with talk of wholeness and adjustment in people. When this group of educators wants "education," and, along with it, "educational integration" restricted to epistemological usage only, and another group of educators wants the semantic range of those same words expanded to include psychological meanings, a semantic tug-of-war results. Interestingly, since the meanings of words cannot be legislated, such semantic wars cannot be settled by simple stipulative definitions. The disagreement about the width of the semantic range of "integration" is, in fact, a substantive issue. As Dressel points out, all users of a term assume that their use is correct.[44] Apparently, in such circumstances, confusion naturally will attend the use of "integration"; the term is required not only to do many kinds of work but some of those kinds of work are antithetical in purpose to each other.

2. The Logical and the Psychological

The second area to examine related to psychology is the debate regarding which sort of considerations ought to be paramount in determining curriculum structure: the logical (structure of knowledge, nature of disciplines) or the
psychological (cognitive structures, pedagogical concerns). Most often, participants in this debate assume that one or the other must be chief. A minority of educators attempt to dispel that idea by trying to reconcile the two considerations.

This debate connects up with the concern to identify sources of confusion in the use of "integration" in at least two ways, one of which has already arisen in Chapter IV. The first connection regards again the locus of integration; when some people speak about "integration" in education they intend epistemological integration or that kind which has to do with the integration of knowledge. Others imply by the same language that sort of integration—aside from adjustment and psychological health—which a student has to "make" or "do" within his own consciousness if he is to make new information a part of the whole of his understanding. Because it has to do both with knowledge and with people, "the integration of faith and learning" is particularly susceptible to ambiguity along this dimension. The second connection between this debate and the sources of confusion being identified in this chapter lies in the possibility that the two senses of psychological integration—pedagogy and adjustment—frequently go by the same label: "psychological integration." Unless the speaker or writer specifies which sense is intended (what might well be called psychological
sense(1) or psychological sense(2)), barring contextual clues, the listener or reader will not be able to determine whether pedagogy or adjustment is intended in a given usage.

Turning to the logical-psychological debate, one finds an argument at least as old as John Dewey. In *Democracy and Education*, Dewey wrote as follows:

> The chronological method which begins with the experience of the learner and develops from that the proper modes of scientific treatment is often called the "psychological" method in distinction from the logical method . . . [45]

Dewey's intention in stating this in 1916, according to McClellan, was to point out that the "logical" and the "psychological" must be brought into a "congruence."[46] Dewey must be numbered in that small group who have attempted to reconcile the two claims on curriculum structure. One wants also to mention such people as Herbart, Piaget, and Bruner as educators who have given attention to the relation in question.[47]

Ausbubel is one representative of the current effort taking place in this area. While recognizing the undeniable distinction, he pleads that both elements be recognized as important:

> It should not be forgotten, however, that in addition to organized bodies of knowledge that represent the collective recorded wisdom of recognized scholars in particular fields of inquiry, there are corresponding psychological structures of knowledge as represented by the organization of internalized ideas and information in the minds of individual students of varying
degrees of both cognitive maturity and subject-matter sophistication in these same disciplines. I am making a distinction, in other words, between the formal organization of the subject-matter content of a given discipline, as set forth in authoritative statements in generally accepted textbooks and monographs, on the one hand, and the organized, internalized representation of this knowledge in the memory structures of particular individuals, especially students, on the other.[48]

This debate between logical and psychological begins to look more and more like a debate known as "subject centered" and "student-" or "child-centered." In fact, the logical-psychological issue is an important part of this wider debate.

The central question in the logical-psychological debate is "Where does or should integration take place?"

Many educators conclude that integration takes place in the curriculum. Whether by means of co-operation among teachers, by means of materials designed in the form of integrative themes, units or projects, or by some other means, the curriculum is so structured that the connections between some areas of knowledge are to some degree or other made obvious in the materials. Apparently, the assumption underlying this view is that if the connections between areas of knowledge are ready-made, what the student learns will be integrated. Many of the proposals listed in Appendix A are based on this assumption about knowledge and the nature of learning. Interestingly, educators using the term "integration" in such proposals tend to view it as something that occurs in

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knowledge or curriculum. Those who reflect on and write about the concept "integration" tend to view things the other way; they most frequently see integration as something that happens in a student's consciousness.

Whether those educators who emphasize that the locus of integration is people represent a majority or not is not clear. But this group is prolific. Frequently in the literature it is argued that integration is something the student himself will or must achieve.[49] Two different reasons are given to support this claim. Some say that integration must take place within students because it cannot take place within knowledge. Fethe, for example, argues that "the contents of the disciplines are irreducible."[50] The more-frequently heard reason given that integration must have the student as its locus is that sound pedagogy dictates that this must be so. Chen expresses this view rather strongly:

Integration, in the last analysis, is an individual matter. After all is said and done, it is the individual student who must do the integration. To do this, the student must have some purpose in study. A gripping purpose is a great integrating force. If, therefore, the student could be helped to conceive worthy purposes for his studies, the problem of integration would be much simplified.[51]

In his discussion of the child-centred curriculum, Pring describes the student's "interested enquiry" in terms very similar to Chen's "gripping purpose." The teacher is to assist, but the student's interest is to constitute the
integrating element. [52] Corey offers another expression of this view that pedagogical considerations must be primary:

The advocates of a prescribed program of study usually act on the assumption that "taking" well-ordered and carefully organized courses will result in a well-organized and unified education. This position overlooks the fact that in the last analysis it is the way the learner organizes his own experience that counts rather than the organization imposed by other people upon the subject-matter the student learns. [53]

Implicit in a view such as Corey's—and possibly rightly so—is the view that a curriculum may be integrated logically but students will still learn nothing unless the nature of learning is taken into account. An additional point warranting mention here concerns the concept of "learning" itself. If integration (in the sense of a student's incorporation of new ideas into his conceptual framework) is not taking place, then it is questionable if what is taking place can properly be called learning. [54]

A fruitful way to approach this debate is by asking whether logical organization is a necessary, a sufficient, or a typical condition for psychological (pedagogical) integration. It is not difficult to conjecture that students emerging from both integrated and non-integrated curricula—assuming momentarily the possibility that integration can take place in curricula—might possess a cohesive or a devisive understanding of the nature of things. That is: an integrated curriculum is neither necessary nor sufficient to
produce a student who emerges with an integrated understanding.[55] Hong makes two assertions in this regard:

... however isolated the teaching and however discrete the courses, educational integration nevertheless can be achieved by the student ... however cohesive the curriculum and however related the teaching, integration must nevertheless be achieved by the student himself.[56]

While Hong may answer the question of necessary and sufficient conditions, he leaves another question unanswered: "Is an integrated curriculum typically a pre-condition if the student is to emerge from that curriculum with an integrated understanding?" A number of educators argue that it is typical (though, as noted, few go so far as to argue that it is necessary). Miel writes that a student can organize separate experiences into an orderly whole "if he has the right kind of help."[57] Miel does not make clear the intended strength of her "if." In its strongest form, she would be arguing that an integrated program is necessary. The context indicates the contrary; she is arguing typicality. Another condition often involved is that the student have the sort of purpose Chen describes. This recalls the earlier treatment of the importance of organizing principles, purposes and themes as conditions for integration. In effect then, there are no necessary conditions and no sufficient conditions but there are at least two typical conditions for integration within the student: assistance and motivation. At that, there is a
lingering suspicion that even though a curriculum designed to attend to integrative concerns cannot be specified as necessary for integration, it certainly would be conducive to integration. [58]

How does one reconcile the factions in this logical-psychological debate. In what may appear as a simplistic move, Crittenden offers the phrase "the integration of knowledge in the learner." [59] His intention is that people recognize that the learner must assimilate into his life "the various bodies of knowledge and modes of inquiry." [60] This proposed phrase is actually sufficient to do the required job of work in this area. As many educators have recognized, neither epistemology nor pedagogy can be ignored without hindering the educational outcomes of a curriculum. Yet, as will become more clear shortly in the discussion of achievement words, attending to both the psychological (or pedagogical) and the logical (or epistemological) does not ensure integrative outcomes in any curriculum. [61]

The question was raised at the beginning of this section how the logical-psychological debate relates to sources of the confusion surrounding "integration." Two possible sources of that confusion take root in this debate, both of which may also figure in confusion generated by "the integration of faith and learning." The same phrase,
"educational integration," is used by different educators to mean quite different things. Some intend an epistemological meaning inasmuch as they believe integration takes place in knowledge and in curricula. Others intend psychological and pedagogical meanings because they believe integration ought to or can only take place in students. The conclusion of the adjustment discussion was that "integration" is used for opposite purposes by two disagreeing groups of educational thinkers. The "logical-psychological" discussion reveals that the term does the same thing in another debate. As was true in the adjustment debate, the confusion here is not "just a matter of semantics"; there are substantive philosophical disagreements involved, and confusion about the "meaning of integration" is one result.

A second source of possible confusion lies in the mutual use of "integration" by both the adjustment-focussed and the pedagogy-focussed "psychological integration" schools of thought. Though this confusion could not accurately be described as a tug-of-war, the two meanings of the word are quite different, despite their formal similarity. Once again, it would be fruitless to try to persuade one or the other group that their use of "integration" is incorrect. Wilson argues that it is advisable to refrain from using mixed words in trying to settle substantive/semantic arguments for to use "these words begs the question at
issue."[62] While one wants to agree with Wilson's point that defending various uses of "integration" usually would involve question-begging, it is apparent in educational literature that his advice regarding the use of mixed words goes largely unheeded to this day.

As was the case in considering "integration" as a positive term, it is again clear that when this problematic concept is considered in the context of the form of life of which it is a part—with the many substantive disagreements that characterize that form of life—the reason it figures in confusions becomes more clear.

C. INTEGRATION: PROCESS, STATE, OR ACHIEVEMENT?

Various cognate terms and concepts related to integration were listed in Chapter IV. Inspection of that list reveals that some terms having "integrat__" as their root are clear in their range of meaning while others are not so clear. "Integrate," for example, is a present, simple verb with univocal meaning in its general sense (though it has different applications in use). The adjective "integrative" is similarly univocal. The participial form "integrating" implies a process but is as restrictive in semantic range as its verbal root, "integrate."

Interestingly, with educators, the two most popular
members of this family of terms are the two terms that allow for more than one meaning in general usage: "integrated" and "integration." "Integrated" can act as a simple past verb as in "We integrated health education into the whole curriculum," or adjectivally as in "This is an integrated unit built around the theme 'Life in the Classical Period'."
The context usually makes clear which possibility is intended. It warrants noting that both meanings of "integrated" imply a completed process; the integrating is done. At least one educator has protested against the use of "integrated" because of this very feature of the word. Lindemann suggests the replacement "integrating education" because he wishes to attach connotations of process and to underline his view that students are progressing toward a goal.[63]

In contrast to "integrated," "integration" may function only as a noun. But, as such, it may imply either a process that is still going on or an end state. This two-fold possibility is recognized by at least a few who have contributed to the literature on integration. Hanna and Lang, for example, list integration both as "a state of perfect unity, toward which efforts ought to be directed" (i.e., a "goal") and as any of a number of processes regarding social, psychological and curriculum integration.[64] Dressel makes the same distinction. He
names "integration" as a state or goal and then as a process
used to achieve that goal or to maintain harmony between
parts within a larger whole.[65] A problem of ambiguity thus
arises in the use of "integration" in educational discourse;
the intended meaning of the word is not always clear because,
lacking univocality and contextual clues, any particular use
might be inferred to have one or the other of two quite
different meanings. "The integration of faith and learning"
suffers just such ambiguity: is it a process, a state, or
both? Black identifies this possibility with regard to a
whole class of words of which "integration" is a member:

Shift of meaning of the process : product type is
especially characteristic of words ending in
"-tion." (Thus "destruction" may refer to what is
done while something is being destroyed or to the
results of such activity; "selection" may mean
choosing or what is chosen; and so on.) But any
word referring to an activity is subject to this
kind of shift and may generate a corresponding type
of ambiguity.[66]

Black is not suggesting here that univocality is a
precondition for communication. But words like "integration"
require a good deal of what one writer calls "precisation" if
their intended meanings are to be understood.[67] Ambiguity
is not necessarily a vice. Though some lament the ambiguity
that currently surrounds the use of "integration," others
note the necessity of loose concepts.[68] Having granted the
necessity of life with imprecision, however, one wants to
cautions that ambiguous language is best used under the
condition stipulated by Bramwell: the intended sense should always be specified. [69]

"The integration of faith and learning" illustrates well the need for specification within the context of what sense is intended. The phrase might mean a process whereby someone was attempting to infiltrate, find common ground, or bring faith to bear upon learning. Equally as well, it might mean a state or achievement where someone had succeeded, or at least believed he had succeeded, in relating or joining the two elements. While the context may make clear the original intention in a given usage, the phrase itself offers no clue and thus remains open to any of a large number of possibly wrong interpretations.

A fruitful line of thought for this consideration of "integration" as a concept subject to process-product confusion has been developed by Gilbert Ryle (and others) and frequently goes by the name "task-achievement." Essentially, Ryle pointed out that what are frequently viewed as separate activities are not such. He lists a number of activity (performance, "try," task) verbs and their achievement (success, "got it") counterparts:

- searching finding
- kicking scoring
- treating curing
- listening hearing
Ryle is careful to point out that a person who succeeds does not "do" two separate things, say, treating and curing. Rather, he does "one thing with a certain upshot"; "some state of affairs obtains over and above that which consists in the performance."[70] As he explains at another point, achievement words

. . . signify not merely that some performance has been gone through, but also that something has been brought off by the agent going through it. They are verbs of success.[71]

Educational philosophers have used Ryle's distinction to gain much clarity with regard to the relation between the concepts of "learning" and "teaching." Green illustrates by giving two possible answers to the question, "What did you teach your class last hour?" This question might be taken to mean either, "What did you try to get them to learn?" or "What did you succeed in getting them to learn?"[72] Either interpretation of "teach" is defensible. The problem lies in the word "teach."

Without going into great detail about the teaching-learning discussion, it is possible to apply some of the findings of that discussion to "integration." One may approach the question in either of two ways: by asking "What task has "integration" as its achievement?" or by asking "What is the verb that indicates success at the task of
integrating?" Simply asking the questions reveals part of the answer: the same word (integration) or words from the same root (integrating and integration) may be applied to both "trying it" and "getting it." This feature of "integration" sets it in a class apart from such pairs of words as searching and finding or shooting and scoring. In fact, on this basis, "integration" appears more like some accounts of "learning": the one word must do two jobs of work—denote both the trying and the achievement. Thus, "integration" qualifies as a "double-aspect" word.[73] As such, it becomes the possible source of yet another confusion or ambiguity. This is even more the case when—in its natural linguistic context as an educational slogan—"integration" is going to figure as centrally as it often does in curriculum proposals and arguments about educational policy.

D. "INTEGRATION": A POLYMORPHOUS TERM

In his discussion of "education," Peters points out that "gardening" picks out certain specific activities but "education" does not.[74] To claim rightly that one is gardening, one must pull weeds, plant, water, or use a hoe; these activities are both implied and, to a degree, specified by the overall word, "gardening." But Peters asks what is
specified by "education." His answer is that "education" is a member of a class of words like practising, teaching, chasing and catching. Each of these words requires additional information, viz: an answer to the question, "what?" These polymorphous words cannot achieve full clarity of meaning without additional contextual information.[75]

The answer, "Oh, nothing in particular, I am just chasing" is not sufficient for the question, "What?" In the same way, the word "integrating," by itself, invites at least one further question. One wants to know what is being integrated. For example, does "Integrated English" mean Composition and Literature have been combined or does it mean something else? Thus the elements being joined or harmonized must be specified. Tied to this specification is the specification of the whole. Pring suggests that the person calling for integration desires greater synthesis and more profound meaning in education. In other words, that person envisions a certain whole or framework.[76] Just as specification of elements is necessary, so is specification of the envisioned whole if "integration" is to be clear in its various uses. A second phrase points to the need for two further types of specification. "The integration of faith and learning" seems to make clear the identity of the elements but fails to make clear how and to what degree those elements are to be integrated. Is one to be incorporated
into the other one? Again, to what degree? Are the two to be fused to yield a new entity? Is one to be brought to bear on the other? To what degree? Chapter III revealed that a number of logically different kinds of integration are suggested in educational literature. The kind of integration is sometimes made clear. When it is not made clear, ambiguity usually results. Some kinds of integration are able to operate to various degrees. The degree of integration requires specification as well.[77] The bare phrase in question, "the integration of faith and learning," makes none of these things clear.

At least four kinds of limiting information are required, then, for the achievement of clarity of meaning with many uses of "integration." The elements involved and the desired whole must be specified; the manner of joining must be made clear; and, in some cases, the degree of incorporation or influence of the one element upon the other(s) must be identified.

E. CONCEPTS AND CONCEPTIONS

The four areas explored so far in this chapter assist greatly in seeing whence some of the confusion surrounding integration arises. One final source of confusion remains to be considered: the difference between the concept of
integration and various conceptions of integration. An elaborated distinction between these two terms constitutes the final main section of this chapter.

The variety of meanings that educators require "integration" to carry illustrates an important feature of the term. While the statement "everyone knows what 'integration' means" is true in one sense, it is nonetheless the case that wide disagreement persists regarding exactly what "integration" does mean. Once again, the disagreement over meaning extends to "the integration of faith and learning." One is faced with knowing how to approach this linguistic difficulty. Distinguishing concepts from conceptions is a useful step at this point.

1. The Concept-Conception Distinction

"Integration" is a concept with a number of publicly agreed-upon meanings. As noted earlier, it is related to harmony, organization, unity, togetherness and so on. But people build into or onto that agreed-upon concept, with its lines of connotation, their own vision of what makes people whole or what makes a curriculum worthwhile. When any given conception of integration is built, however, it is not usually announced as such; it is often given simply as "the" meaning of the term. It is discussed as if an individual's personal understanding actually equals "the definition of
'integration'." Distinguishing the concept of "integration" from people's conceptions of it in this way is helpful, for recognizing the distinction can prevent some of the frustration and confusion presently surrounding the word's use.[78]

Exploring further the distinction between a concept and a conception, to the extent that most people agree regarding the meanings of the word "integration"--harmony, unity and so on--it is the concept of integration about which they agree. Disagreement about the meanings begins, as it does with most words, as the discussion moves from the concept to conceptions. A typical account of concepts would require that having the concept "integration" entails knowing how to use it properly in ordinary language.[79] Acceptance of this standard view of what it means to have a concept leads to difficulties in the case of "integration," however, because many people, who use it successfully in ordinary discourse, cannot agree with each other about its meaning. The variety of uses appearing in Appendix A illustrates this point. The inadequacy, in this case, of the account of a concept mentioned above derives from the fact that people who know the meaning of "integration" also have hidden ideals and agendas--perhaps unknown even to themselves--they would wish to see implemented in curricula. These ideals infiltrate people's thinking and color their definitions of terms.[80]
The most useful approach to this problem of infiltration is by means of the distinction between a concept and a conception. A certain class of word-uses that often goes by the name "concepts" is better called (and is sometimes known as) "conceptions." A conception is built around a concept. In this regard, Wilson mentions the distinction many philosophers make between

... what might be called the psychological sense of 'concept,' whereby it can include one's private associations ('my concept of a German is a blond beast in jackboots'), and a sense which is tied, or more tied, to the notion of rules of meaning.[81]

It is clear that on Wilson's account, a conception of justice would usually involve at least one of the publicly-accepted meanings of "justice," but would go much further. Rawls makes this distinction more clear in his discussion of justice. Before presenting his own conception of justice, he notes that

... various conceptions of justice are the outgrowth of different notions of society against the background of opposing views of the natural necessities and opportunities of human life.[82]

Two things about Rawls' comment are instructive for anyone wanting to sort out the confusion surrounding "integration" and "the integration of faith and learning." First, Rawls implicitly distinguishes concepts and conceptions by recognizing that "different notions of society" give rise to people's views of justice. Conceptions must be evaluated in situ. Second, the truth value of Rawls' comment would not be altered by changing the first phrase of the cited passage to
read "various conceptions of integration." That this is so renders his approach to his own conception of justice worthy of attention here, for Rawls defends his conception—justice as fairness—as a reasonable one as long as certain conditions are met.\[83\] He continues this line of thought with the suggestion that once the conditions are named, one is in a position to rank various conceptions of justice.\[84\] Rawls' approach holds an attraction for anyone attempting to judge different conceptions of integration: as with justice, so with integration, certain conditions must obtain for a conception to be considered adequate. The need remains, then, to establish what criteria would best serve to rank for adequacy (in the manner Rawls describes) various conceptions of integration and integrative conceptions. Appendix B attempts to establish and justify such criteria.

Returning to Wilson's distinction between the "psychological sense" and the sense which is tied to the notion of "rules of meaning," most conceptions of "integration" educational or otherwise, have the agreed-upon notions of wholeness and unity at their core. Around that agreed-upon core, however, will be a number of policy accruements. People will attach their educational visions, ideals and programs to the concept, possibly without recognizing that they are doing so. Some people recognize this as the process of conception-building and do not view or
announce the result as "the concept of integration." Those who do not recognize that they have gone beyond the concept into Wilson's "psychological sense" frequently persist in viewing their resultant conception as merely a concept, and insist that their definition is "the meaning" of the term. Consequently, arguments occur over the "true meaning" or "right definition" of integration, with those arguing failing to notice that they all agree, on at least one level, concerning the meaning of the term. However, their disagreement comes mainly at the policy or conception-al level implied in what are ostensibly only definitions of the term.

The distinction between concept and conception is roughly parallel to that between descriptive and evaluative language. As noted earlier in this chapter, numerous writers have distinguished usage (reportive or descriptive) definitions from programmatic (evaluative or emotive) definitions.[85] The key difference between the two kinds of definitions is that the latter sort include an implied right course of action. The program to be implemented is expressed in what is supposedly a purely descriptive definition. That definition may read, "Justice means enough food for all," or "Integration means the elimination of subject-boundaries." Either definition is actually a conception clothed—not very subtly in these two cases—as a concept. This invasion of the conception-al or programmatic into ostensibly descriptive
usage occurs in all areas of discourse where policies are debated. It should not seem unusual that it occurs in educational discourse, with regard to positive language like "integration" and "the integration of faith and learning" especially.

Educational literature furnishes numerous examples of how conceptions invade concepts. After providing a few brief definition-like statements, Dix asserts that an integrative curriculum must attend to social injustices, economic disparities and war.[86] He does not say that he is outlining his own conception of an integrated curriculum. Rather he presents his view as if that is the definition of integration. Hampsch does the same thing. He presents his conception— all knowledge is related through man's reason and is made meaningful through his relation to God—but does not call it a conception.[87] His own view is that he is simply defining "integration." Likewise, in his description of general education, Blackmer breaks into prescription by telling what a curriculum ought to do, again, without announcing and possibly without recognizing that he is presenting a conception.[88] The point of these multiplied illustrations is not that educators are wrong to build conceptions of educational integration. It is rather that when conceptions are mistaken for reportive definitions of a concept, confusion, argument, and frustration often follow. New conceptions are the
lifeblood of education. But educators need to recognize them as such and distinguish them from concepts and reportive definitions.

2. Conceptions of Integration and Integrative Conceptions

Lest the present discussion increase the confusion surrounding "integration" and "the integration of faith and learning," a further distinction is provided at this point. The preceding section notes that educational life is partly nurtured by visions of what ought to be—by conceptions of educational integration (which are nourished in their turn by conceptions of integration in general). Such conceptions of ideal educational outcomes need to be distinguished, however, from "integrative conceptions," for, while the two are definitely linked, they are far different from each other. An integrative conception is best thought of as a purpose, principle, theme, relationship, idea, concept, or topic meant to provide the cognitive or logical unity (a process that will be discussed in Appendix B with regard to the 'coherence' or 'breadth' condition) for some part (or whole) of a curriculum. Thus, an integrative conception has many formal similarities to the "organizing principles, purposes and themes," discussed in Chapter IV (pp. 81-7). An integrative conception has more to do with strategies directed toward accomplishing integrative curricular ideals than it has to do with defining
or defending those ideals.

Examples which appear in Appendix A are appropriate to illustrate integrative conceptions. For instance—and without implying success for the attempt—a narrow unit might be unified around the theme "Sidewalks never end" (#16h). Economic, geographic, historical, aesthetic and perhaps other considerations are all intended to cohere around this admittedly narrow, central unifying theme. It is obvious that, handled correctly, the theme "Sidewalks" might aid teachers in their attempts to help students see relationships between various areas of knowledge. Though perhaps this is not a fault, it is not so clear what social ideal or concept of integration gives root to "Sidewalks" as an integrative conception. An example of an integrative conception for a curriculum which clearly is connected to a specific social ideal or conception of integration in general comes to mind. It has been suggested more than once that an entire high school or college curriculum might be unified around the single purpose—granting the important differences between a purpose and a theme—of preparation for responsible citizenship in democracy (Appendix A, #15a), a curricular goal obviously flowing from a specific social ideal. The St. Olaf's faculty self-study, the 1945 Harvard Report (General Education in a Free Society), and Democracy and Excellence in American Secondary Education all describe integrative
conceptions meant to unify entire curricula.[89]

An important question needs answering at this point. What connections exist between integrative conceptions at the level of educational curriculum, and conceptions of educational integration or integration in general? One's overall conception of integration, whether of personality, society, or knowledge, is grounded in, and directed by one's Weltanschauung. That overall conception has much to do with what one will adopt as educational ideals and therefore with what one will find acceptable as integrative conceptions (of whatever breadth) for curricula. At one level, then, one has a world-view, a framework that includes what one writer describes as a view of the "chief ends of life."[90] As part of this world-view, one holds to some conception of integration, though it may go by another name. In many cases, people have never articulated their world-view, but they still think and act according to some, albeit primitive, world-picture.[91] Based on this level of conviction or belief about the overall nature of things, one may develop a view of what education ought to bring about. Finally, one's view of the ultimate nature and aim of education will determine what strategies one devises in the development of actual curricula. These different levels and their relationships to each other are illustrated by Diagram 5.1. As presented here, the diagram illustrates how each level of
conception directs and influences the level or levels above it and is influenced by the level or levels beneath it. The top

<table>
<thead>
<tr>
<th>Level</th>
<th>Type of Conception</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curricular:</td>
<td>integrative conceptions (principles, purposes, themes, etc.) for units or for whole curricula</td>
</tr>
<tr>
<td>Foundational [1]</td>
<td>conception of educational integration</td>
</tr>
<tr>
<td>Foundational [2]</td>
<td>conception of integration (of persons or in general), related to overall world-view or Weltanschauung</td>
</tr>
</tbody>
</table>

(Diagram 5.1)

level represents integrative conceptions; the bottom two levels represent conceptions of integration.

The diagram does not reflect the precision necessary regarding one central matter raised earlier in this study: the locus of integration--whether curriculum or persons--and, within the "student as locus" side, the pedagogy focus or the mental-health focus. The middle level of the diagram ("conceptions of educational integration") thus requires division into three parts. Expanded, that portion of the
Differentiating these three possibilities at the middle level of Diagram 5.1, and recognizing that educators have combined them in various ways, reveals that at the top level of Diagram 5.1, a variety of distinct kinds of integrative conceptions for curricula might appear. That variety would reflect differences of opinion regarding the locus of integration. Examples named throughout this study illustrate, in fact, that this is so.

Other parts of Diagram 5.1 may want expansion as well. The entire top level of the diagram--integrative conceptions--fails to make clear that some conceptions are meant to function for a brief unit (of, for example, fifty minutes) while others may be intended to furnish the coherence for curricular work spanning three or four weeks, a year, or even four years. Thus, integrative conceptions of various breadths are distinguishable within the top level of Diagram 5.1. Following the distinctions between various conceptions of educational integration in Diagram 5.2 (the elaboration of the second level of Diagram 5.1) one wants also to note that, within the "curriculum as locus" side, various kinds of
integration might result depending on which integrative conceptions are introduced into the curriculum. Recalling the distinctions made in Chapter III, integrative conceptions might be intended to promote fusion, incorporation, correlation, or dialogical integration. Furthermore, as Chapter IV made clear, one wants those conceptions at the curricular level to specify such things as the following:

- what elements are being joined to form a whole?
- what sort of whole is intended?
- to what degree is the integration to occur?

In short, in its simplicity, Diagram 5.1 purposely overlooks a number of crucial distinctions regarding the variety of conceptions available at both the conceptions of educational integration level and the integrative conceptions level. While violence is not done to the needed categories, some things are omitted. However, the important fact that each of the upper two levels is founded on lower levels, and that each of the lower two levels influences the higher levels is clear.

F. SOME PRELIMINARY CONCLUSIONS

Leiser opens his book Custom, Law, and Morality with this sentence: "A brief examination of the uses of the word 'custom' reveals that it is not univocal."[92] The lengthy
examination of "integration" carried out thus far has revealed the same aspect about that problematic word. At more than one level, "integration" lacks univocality.

Failure to specify the locus of integration leads to the possibility of one type of ambiguity: is the integration intended to occur within knowledge or within people? Yet, more is required. If the locus is people, does the intended meaning have to do with adjustment and psychological health or with pedagogy and the psychology of learning? This must be specified. If the locus is knowledge and the curriculum, what are the parts of the intended whole and in what way are they being combined or harmonized: correlation, fusion, incorporation, or transformation?[93]

A couple final examples are worth noting in this regard. James argues that an "integrated studies" curriculum should be available to all students, not just to successful students. She does not clarify what she means by "integrated studies," though there is thin contextual evidence that she means that concepts are more important than facts and that the problem approach is to be used primarily.[94] Another example of lacking specification is provided, albeit unwittingly, by Chen. At one point he expresses his interest in the "integration of the learning experiences of the student." A reading of the context reveals that he means the opposite of departmentalization, but Chen says no more.[95]
At that, his references to "learning experiences," usually used by educators to denote pedagogical and learning-theory concerns, is not conventional.

The two most general phrases, "educational integration" and "integrated education," possibly generate the most confusion. First, by definition, they are the least specific phrases. Second, they are the most popular phrases. The preceding consideration of "integration" as a positive term indicates that these phrases may be popular for the very reason that they lack specificity. The point of importance here is not so much that possible connection, as it is that specification or restriction of any kind is usually lacking when these two phrases are used. Whether desired or not, ambiguity and confusion inevitably follow such unspecific uses.

"The integration of faith and learning" deserves attention if for no other reason than that it contains the key term "integration" which is so problematic in other contexts. The next chapter examines this troublesome phrase in detail.

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3 Some discussion of this aspect of "integration" appeared in Chapter I.


Hong, p. 57.


Dix, p. 363.

Pp. 15-16.

Citation from Kallen, p. 493, quoted on page 1 of this study.

See Lindeman, p. 21, regarding the expanding range of "integration" specifically.

P. 73.


23 P. 24.

24 Green, pp. 34-8.


30 P. 200, emphasis theirs.


32 Beck, p. 229; Komisar and McClellan, p. 199.

33 Pp. 218-19.
34 See Beck, p. 220; Scheffler, p. 9.


36 p. 589.

37 p. 21.

38 Toward a Harmony of Faith and Learning, p. viii.

39 p. 590.

40 Pp. 365-67. Some have argued that harmony begets harmony in the other direction as well: integration among students will lead to integration in society as a whole. More than once in this century, the argument has been heard that education should be "an instrument of deliberate social reconstruction." Stanley, p. 255.


44 "Meaning and Significance," p. 11.


47 Bellack suggests these names (p. 296).


49 See, for example, the definitions in Chapter IV where the locus is taken to be the student; H.T. Morse, "The Design and Operation of Programs of General Education," In General Education (51st Yearbook of the NSSE, pt. 1), ed. Nelson B. Henry (Chicago: University of Chicago Press, 1952), p. 354; Capehart, pp. 199-200; David B. Krathwohl, "The Psychological Basis for Integration," in The Integration of Educational Experiences (Chicago: University of Chicago Press, 1958), p. 43.

50 In an aside, Fethe notes Otto Neurath's warning that scientific integration will take the form of an encyclopedia with many unrelated groupings, "Unified Science as Encyclopedic Integration," Encyclopedia of Unified Science (Chicago: University of Chicago, 1938), p. 20. Fethe gives up hope for a "purely epistemic" model of integration (p. 98).

51 P. 310.

52 1976, p. 110.


55 It warrants mention again that this discussion transcends subject-divided curricula.

56 P. 117.

58 Bloom's requirement that integrative threads be "meaningful to the student" before they are "likely to have any value for him" gives itself away in this regard. Even with proper pedagogy, he offers only a likelihood, p. 97.


60 P. 18.


63 P. 22. John Brubacher holds to a similar idea. He wants people to view integration as dynamic, not static. Modern Philosophies of Education (New York: McGraw-Hill, 1939), p. 34. Also see Taylor, "Integrative Principles," pp. 130-31; Capehart, p. 217; Ciccorico, p. 61; Holmes, (Idea of a Christian College), p. 48, where he writes that "Integration should be seen as an achievement: not a position, but as an intellectual activity that goes on as long as we keep learning anything at all."

64 P. 589.


66 Critical Thinking, p. 195.


69 Further discussion of ambiguity is to be found in Lionel Ruby's "Ambiguity" (pp. 523-39) and Stephen Ullman's "Words with Blurred Edges (pp. 124-33) in Anderson and


72 Pp. 140-43.


74 *Ethics*, p. 24.

75 See also Hirst, p. 103.

76 1973, pp. 126,130.

77 Warwick writes that ". . . to talk about 'integrated studies' *per se* is nonsense . . ." because there is more than one way to integrate (1973, p. 1).

78 Dressel alone mentions the concept-conception distinction with regard to "integration" ("Meaning and Significance," p. 8). He notes that the purpose of the NSSE study was to examine the "broad meaning and significance" of integration and then develop a more limited conception.


80 This infiltration occurs in the same way that
prescriptive language infiltrates descriptive language, as discussed in Chapter IV.


84 Ibid., p. 17. He writes, "... it is clear, then, that I want to say that one conception of justice is more reasonable than another or justifiable with respect to it, if rational persons in the initial situation would choose its principles over those of the other for the role of justice. Conceptions of justice are to be ranked by their acceptability to persons so circumstanced."

85 See, for example, Black, *Critical Thinking*, p. 170; Scheffler, *The Language of Education*, p. 34.

86 pp. 369-71.

87 p. 40.

88 p. 31.

89 See also Chapter III and Appendix A.

90 Aubrey, p. 49.

91 The distinction between a Weltanschauung and a Weltbild is elaborated by Wilhelm Dilthey in *The Essence of Philosophy*, translated by Stephen A. Emery and William T. Emery (New York: AMS, 1954), pp. 39-76. Essentially, Dilthey argues that a Weltbild is a simplified or pre-articulate world picture, while a Weltanschauung is an articulated, more schematic world-view.

92 p. 7.

93 Is the joining to be X + Y, X into Y, or X coming to bear on Y.

94 p. 389.

95 p. 307.

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CHAPTER VI
THE INTEGRATION OF FAITH AND LEARNING

But they have only analyzed the parts and overlooked the whole, and, indeed, their blindness is marvellous.
- Dostoevsky, *The Brothers Karamazov*

The purpose of this thesis, as stated on the third page, is to understand the degree to which "integration" functions usefully in educational discourse, especially as it appears in "the integration of faith and learning." To gain that understanding has involved a comprehensive exploration of the term's usage. Having explored that usage and clarified the sources of confusion surrounding "integration," it remains to examine in more depth the usage and meanings of "integration" in contexts of Christian education and theological education, and, of course, specifically in the troublesome phrase "the integration of faith and learning." Such an examination may be organized by pursuing answers to three constellations of questions:

- How is "integration" put to use in theological contexts? What forms does this usage take? Is "integration" as popular in these contexts as it is in educational discourse generally? Is it as problematic?
- What meanings is "integration" required to carry in theological contexts? Are its meanings clear? Why does it mean what it does in these situations?
- What utility has the term in theological contexts. Can, or does this theological-religious usage of "integration" bear any fruit at the levels of educational policy, curriculum, and practice or should the term be abandoned because of all the problems that attend its use? Finally, is "integration" worth pursuing in a curriculum?

In what follows, these constellations of questions will be addressed in an attempt to unravel the confusion that surrounds this particular class of uses of "integration."

A. "INTEGRATION OF FAITH AND LEARNING": USAGE

The first questions regarding "the integration of faith and learning" involve usage: How frequently is "integration" used in religious and theological contexts? In what forms does "integration" appear in these contexts? As part of the discussion of forms, and as a bridge to the discussion of meaning that appears as Section B, how straightforward or problematic is this usage?
1. Frequency of Use and Popularity

Repeatedly in this thesis, the popularity of the term "integration" in educational discourse has been noted. That it is used by educators at every level and in every subject area and discipline establishes the validity of the argument that the term is a popular one. Regardless of its failure or success at carrying descriptive content, "integration" is, as one writer phrases it, a "big word" in contemporary education.[1] One might expect that educators affiliated with the Christian church as well would eventually begin to use the word. Exactly this has happened. The following typical uses of "integration" from the literature of Christian higher education appear in Appendix A:

1) "Theology is the most important integrating factor in the curriculum" (#15b[ii])

2) "The integration of faith and learning" (#43a)

3) "The integration of Christianity and learning" (#43b)

4) "The integration of faith and education" [not meaning the discipline Education] (#43c)

5) "The integration of theology and psychology" (#44a)

6) "The integration of theology and education" [meaning the discipline Education] (#44c).[2]

Extensive reading in the literature of religious and theological education reveals that such uses as the six just listed are not only typical in that literature, but are, in fact, more popular there than "integration" is in educational
literature deriving from non-theological contexts. The reason for this popularity, hinted at above, will be considered shortly (in Section B, following). For now, it is noteworthy that a particular group of people--some Christians in higher education--use the term so extensively.

2. Forms and Problems

Logical structure and form are an important dimension of theologically-oriented uses of "integration." In Chapter III, the uses of integration were schematized into four main (if sometimes overlapping) forms or types:

- "Fusion" - where two or more usually-similar elements are said to be joined (Example: Biology + Chemistry + Physics, pp. 66-67).

- "Incorporation" - a subclass of fusion where one element is "lost" (as a subject-area in its own right) in the joining (Example: a Marxist view of history and society is woven into all curriculum areas, the areas retaining their subject names but the Marxism nonetheless present or even prominent, pp. 70-1).

- "Correlation" - where points of connection and/or common concern are noted or emphasized between two subject areas (Example: between History and Literature, pp. 72-3).
"Dialogical" - where a discipline or area of scholarly activity is carried on in light of, or under the constraints imposed by, another area (Example: medical research being conducted in light of ethical considerations, pp. 74-5).[3]

As the list of uses (on page 169) demonstrates, in its theological usage, "integration" appears in a variety of the forms differentiated in Chapter III.

The first example above (from Appendix A, #15b[ii]) does not specify how theology works to integrate the curriculum. One suspects that a theological perspective is meant to come to bear on the other disciplines, or that all professors in the given institution must, in an orchestrated and ongoing way, be correlating their own areas of specialty with the contents of theology. Speculating on how such phrases ought to be unpacked by a reader reminds one of Rattigan's comment that the meaning of "integration" depends on what is being formed into a whole, and that "confusion will arise when one fails to specify exactly what it is that he intends to form into a whole."[4]

The last five examples all take the form of fusion integration (A + B), though numbers 2, 3, and 4 (faith and learning, Christianity and learning, faith and education), containing in each case elements with differing logical structures, would obviously be much more difficult to "integrate" than the last two, both of which speak of the
apparently straightforward integration of two disciplines (Theology and Psychology, Theology and Education). It becomes apparent that theologically-derived uses of "integration" may have some of the same difficulties fitting on the schemata of logical forms developed in Chapter III that some of the questionable uses from educational discourse in general experienced: many have the grammatical form of paradigm fusion integration but obviously cannot be fused.

It is immediately clear, for example, that "faith" and "Christianity" and "learning" are three different kinds of things. To speak of integrating either of the first two with the third forces one to ask what (logical) type of integration is intended. That question invites another in turn: "What is desired by those who use 'integration' in these contexts?" Avoiding a detailed answer to the latter, meaning-as-desire/intention question for the moment, one wants to suggest that the second and third examples not only do not fit the general form of fusion, but that there is so little in common between the elements that correlation could likely not occur either. Perhaps some sort of high-degree incorporation is intended here (as anticipated by the listing of #15b-ii, iii with "Incorporation" in Appendix A). If the intended integration is high-degree incorporation, then the phrase could be unpacked along perspectival lines: the Christian view of things is to influence and inform the
educational enterprise at all points.[5]

The fourth example (faith and education) appears to be logically parallel to the first two (theology as the most important factor; faith and learning). It appears to suffer from the same problems as its parallels, and those who use it likely mean somewhat the same thing by it: some kind of dialogue or bringing to bear of Christianity upon aspects of education.

The last two examples noted above (Theology and Psychology, Theology and Education) seem to imply either the fusion or the correlation of two disciplines. How the two are to be integrated is not clear, but it is clear that those using the phrases envision some, as yet unspecified, kind of connection-making between Theology and other academic disciplines. Many dimensions of the relationship are left unclear by these two phrases: Is one discipline to be dominant? Does Theology place constraints on Psychology or on Education? One suspects that most church educators do not envision Psychology being allowed to constrain Theology. Are there points of common interest to be sought or explored. Is the discipline of Theology or are the claims of Theology the focus? What is the locus of integration: the student or the disciplines?[6] While all these questions anticipate the following discussion of meaning, they also help make clear one thing with regard to usage; theological usage of the term
"integration" is no more clear than general usage of the term.

In summary, just as educational uses of "integration" in general were not all of one logical form, so those uses having their roots in a theological perspective vary in logical form as well. Whether this variation is or is not a hindrance to unpacking the meanings of the various phrases will be seen shortly. It is clear, though, that the examples given (p. 169) appear to represent more than one distinct logical form: a less-problematic kind apparently involving the correlation of two disciplines; at least two more-problematic kinds involving Christianity or Christian faith acting in some dialogical or incorporative manner to influence the whole education-learning enterprise.

B. "INTEGRATION OF FAITH AND LEARNING": MEANING

The second set of questions regarding the integration of faith and learning involved meaning: What jobs are required of "integration" in theological contexts? Is the usage of "integration" clear or problematic in these contexts. Why does it mean what it does when Christian educators use the term? As Chapter IV (pp. 83-84) made clear, the "meaning" of the general term "integration" is quite clear. Yet, these are some of the areas that must be
examined to understand if, why, and how "integration" and "the integration of faith and learning" generate confusion in actual use. The discussion that follows divides naturally into a brief historical background, a survey of contemporary usage within the church, and an expanded look at one particular writer who provides details of his own conception of "the integration of faith and learning." Following these explorations in the area of meaning, the question of utility will be pursued.

Pring was quoted in the first chapter of this thesis to the effect that if one wishes to understand the meaning of a problematic term, one should try to understand "the kind of problem that is worrying" the person using the term because often what is meant, in this case, by "integrated curriculum," depends partly upon the "nature of the problems [that curriculum] is aimed to meet."[7] What Pring claims here as a means of understanding meaning is essentially the same thing Wittgenstein meant by a "form of life," that constellation of activities in which language takes form and takes on meaning.[8] It is in light of comments such as that of Pring, and the concept of a "form of life," that the structure adopted in this chapter is chosen in preference to others. One must consider the kind of problem that troubles Christian educators to understand why they use "the integration of faith and learning" and what it is they mean.
by it when they do use it.

1. The Historical Context

When one accepts that "the integration of faith and learning," "Christianity and learning," and "faith and education" must imply either incorporative or dialogical integration, it is possible to notice a common element in the three phrases. There is apparent in this usage a desire to reconnect what must, at some point, have been severed. A number of historical factors have worked together to influence modern Christian educators toward the use of "the integration of faith and learning." First, a widely-held, even somewhat romanticized view persists among Christians that Western culture and education were far better off at those times in history when the culture was more closely tied to an operating Christian consensus regarding values and the meaning of life.[9] According to this view, the decline of this consensus resulted in chaos in society. The shift toward secularization and its educational outworkings, however they are viewed, were outlined already in Chapter I of this thesis. The educational literature reviewed in that chapter (and in Appendix A) shows that, today, people of varying religious and non-religious persuasions perceive educational disintegration as an increasing problem. Many Christians see their relationship to education as being
primarily reconstructive and therefore insist on claiming some credit for the original (perceived) state of integration.[10] Such Christians are more vexed than most other educators by the present state of affairs.

This vexation, and ultimately, the meaning of "the integration of faith and learning" is more understandable if one reviews briefly and then completes the history of education commenced in the first chapter (pp. 4-8). Two contrasting views of how Christianity and culture ought to be related were noted in that chapter. One tradition, best represented by Tertullian and Jerome, viewed the kingdom of this world as anathema to the Christian church. On this account, separation of the church from its surrounding culture was the only appropriate path for the church to follow. While not the only alternative to the separationist view, the most important other view for the purposes of this discussion is illustrated in Thomas Aquinas' attempt to reconcile Christian belief with the cultural forms of his time. Both these traditions, along with some relative (Protestant) newcomers, continue to have influence within the church to the present time. With that very brief review complete, it is now appropriate to continue examining Protestant higher education where the historical survey of Chapter I left off—in the latter part of the 1800's.

At the same time that American public institutions
were adopting German models of research and scholarship, and some church-founded institutions were switching away from their ministry-training focus toward liberal arts, a significant historical shift was taking place within the churches themselves. Two successive "Great Awakenings," both of which occurred in both England and the United States, brought about a deep desire in many churchgoers for a personal piety. Though perhaps an orthodox notion in itself, this spirit-focussed, Nineteenth-century version of Christianity resulted in a revival of the same antipathy toward the present world with its concerns, troubles, and wisdom that had marked the church fathers Tertullian and Jerome. In this changing context, some churches began to question what business they had in liberal education at all. An important difference of theological interpretation was starting to show up in American, church-sponsored, higher education: some churches sought withdrawal from the world while others sought to accommodate themselves to it.[11]

At the end of the last century, just when it seemed fundamentalist piety was permanently entrenched in the English-speaking church world, some religiously-conservative theologians and educators began to call for a less-separationist approach to culture and to the various branches of learning. James Orr's was one such voice. In 1890 he asserted the existence of a Christian world view that "could
justify itself at the bar both of history and of experience."[12] He used the term "Weltanschauung," in fact, to point out that Christians could embrace the whole world of learning without fear.[13] Unfortunately for church education, no sooner had Orr and others like him begun to move the fundamentalist churches toward this more expansive and Scriptural view of Christianity than the "fundamentalist-liberal" controversy erupted at the turn of the Twentieth-century. With substantial issues to divide them, these two Protestant camps argued for two decades as to which group was Biblical and orthodox. The argument was never settled to the antagonists' mutual satisfaction. Among the losses suffered in this internecine conflict, the fundamentalist churches gave up much more of the little influence and interest they still had in higher education. They saw liberal education as an expression of the syncretism or compromise that always resulted from liberal theologians' attempts to synthesize and to accommodate Christianity to the modern mindset. In their desire to express their own view--separation from "the world"--and to retain their conservative identity, the fundamentalists largely restricted their own efforts to ministry education, the vision with which American higher education had begun two centuries earlier.[14] Meanwhile, the liberal church colleges abandoned their religious emphasis as it was expressed in
devotional and ministry preparation, to begin departments of religion where Christianity was but one among many subject choices that could be studied.

The divorce of fundamentalism from mainstream higher education was to remain in place until the end of World War II. In the late 1940's and into the 1950's, a new movement began to emerge out of the conservative Protestant stream of Christianity. This evangelical movement distanced itself from its fundamentalist parent in a number of areas, including two of importance here: the relationship of Christianity and culture, and the relationship of faith and reason. For two reasons at least, evangelicals desired involvement in the world of scholarship. First, they recognized the losses they had suffered by abandoning education. Conservative church membership was largely uneducated. Those members who were educated had to go outside the church to get their education. Now the evangelicals were arguing that the university had to be more than a "zone marked off for evangelism."[15] Second, they recognized a Biblical theme that if the Christian God created everything anyway, then there ought to be little to fear in the world of scholarship, at least where that scholarship is done correctly.[16] With this mindset, the evangelicals began to give higher education the attention they had given it 150 years earlier. In this mid-Twentieth-century context
of attempted recovery, "the integration of faith and learning" would serve as an ideal phrase to express the evangelicals' desire to recapture what they had earlier abandoned.

2. Contemporary Expressions of a Desire for Integration

Not every Christian educator in this century uses the same language to discuss the relationship of Christianity and education. Granting that in many cases Christian educators are talking about substantively different conceptions of education eliminates some of the difficulty in surveying current calls for integration. But even among those who apparently agree with each other as to what finally ought to be done, there is still healthy dialogue as to what kind of language ought to be used to express that desire. As a means of further establishing the context in which "the integration of faith and learning" is used, it is worthwhile to review some of the ways Christian educators are presently expressing their own agendas for the integration (or non-integration) of education and Christianity.

Before doing that, however, it is appropriate to note at the beginning that many in the contemporary world of church-sponsored higher education do not use the language of integration at all. The absence of such language in a sizable body of literature bears out the point that only a
segment of the present-day church has a particular philosophical or theological concern with re-establishing the view that the whole academic realm is the appropriate place for Christians to operate. Four identifiable groups of Christians fit this description; they are briefly noted in the following:

**Roman Catholics** - For many Roman Catholics (who follow the official teaching of the Church), the Church is viewed as the supreme authority in all matters, including academic and scholarly ones. For most Catholics in higher education, theology (especially that of Thomas Aquinas) is the *de facto* highest court in which to judge the academic disciplines. Consistent with this view of theology, they sometimes speak of the curriculum being integrated by means of theology.[17] The Roman Catholics have always held human reason in high regard and thus never questioned the appropriateness of their involvement in higher education. Though they have traditionally taught the academic disciplines in their own way, Roman Catholics have *not* abandoned higher education; for this reason they have no need to speak now of integrating faith and learning.[18]

**Liberal Protestants** - As noted in the historical survey just completed, many Protestants have always considered it essential to interpret theology in the categories current at any given time. They may describe this process with such
terms as "engagement" or "relevance." Others criticize them for being too accommodating. The point of importance here is that they never gave up their interest in higher education in the first place and so see themselves now as having nothing to regain.[19] If anything, liberals today are looking for ways to rehabilitate religion in their colleges, the other academic disciplines never having been in jeopardy.[20]

**Fundamentalist Protestants** - The fundamentalist-conservative wing of contemporary Protestantism--descendents of those who moved away from education in the Nineteenth-century--are presently divided in their use of integrative language. Bible colleges and institutes (which achieve a good deal of curricular unity by having only one mission--training ministers) rarely use integrative language. Surprisingly, some extreme separationist, fundamentalist elementary and secondary schools talk about "integrating faith and learning." For the most part, as liberals had no need for integrative language because they had never abandoned education, many fundamentalists maintain their opposition to any kind of higher education except ministry preparation and thus have no desire to speak about "integration" either.[21]

**Reformed Protestants** - Among this group which is most directly connected to the Protestant reformer John Calvin there has always been an active interest in transforming the whole of human culture with christian values and thinking.
Best represented by the Presbyterian Church and the (Dutch) Christian Reformed Church, this Protestant tradition has always maintained a system of schools and colleges in which the entire range of academic disciplines was studied. Without speaking of "integration," they saw all things cohering in a Reformed, confessional perspective. Similar to the liberal theologians on at least one dimension, this tradition never separated anything in the first place and consequently sees little need to call now for rejoining things.[22]

There are thus four bodies of literature within contemporary higher Christian education in which there is either no interest in, or no need to speak of "the integration of faith and learning." That these traditions do not use the popular language of integration does not imply that they have no interest in bringing their particular Christian perspectives to bear on education as they practice it. For varied reasons, these wings of the church have avoided the language which has been the focus of this study.

In contrast to these four groups, one finds the emerging evangelical movement as a prime user of "integration" and "the integration of faith and learning." One of the points held in common by the evangelicals and those of the Reformed tradition who, historically, have always retained what the evangelicals are just now trying to
regain, is a desire to see faith "brought to bear upon the
total educational enterprise" and be allowed to function
"comprehensively in shaping" what transpires in schools and
colleges.[23] Unlike any of the four traditions just
discussed however, educators within the evangelical movement
realize that to do so—to see Christianity and education
relate—will involve changing some widespread perceptions
among church people. One would not expect all evangelical
educators to share exactly the same educational ideals. Yet
it is interesting vis-à-vis this thesis that so many of them
share the same language when discussing those ideals.
Surveying, and quoting, a few expressions of evangelicals'
interest is instructive for anyone wanting to untangle what
those who use "the integration of faith and learning" mean.

To begin, Lockerbie's conception clearly involves the
person as the locus of integration. After listing art,
politics, physics, and "any other area of human learning" as
worthy of a Christian's attention, he writes that "the
integration of faith and learning must be incarnate in the
lives of those who believe [in Christianity] and live out
their beliefs in every area of their experience." He then
issues the following call:

... The goal of wholeness or integration must not
become an evangelical cliché reserved to [sic]
scholars. There must be integration of faith with
every vocation—the selling of used cars, the
making of political decisions. Indeed, we must
call for the integration of faith and living![24]
A number of important questions arise out of Lockerbie's method of describing the kind of education he envisions. Does opening up the use of a cliché to a wider public make it less a cliché and more a specific, meaningful descriptor? Does Lockerbie imply a kind of living qualitatively different from what most people, of whatever faith or belief system, desire anyway? What kind of integration does Lockerbie envision between faith and selling cars, or faith and "living"? Is that kind of integration even possible? Certainly it is not specified or made clear by the language or logical form of the call for integration.

Mayers, Richards, and Webber also see the student as the locus of integration. The theology teacher in the liberal arts college must "offer the integrative point of view and a situation in which the opportunity to integrate is made available." [25] Their conclusion does not speak of "the integration of faith and learning." However, they do mention again the integrative approach:

... the Bible department must reach out toward science, philosophy, literature, music, and art, as well as toward the behavioral and social sciences, in order to set forth a biblical world view and Christian perspective through which contact is made in all the spheres of life and into which the spirit and life of Christianity can be breathed. The student who receives his education in this atmosphere will live and study in the awareness that the Christian faith is not divorced from life, but rather that it is central to his whole approach to life. It will make a difference not only in his attitude toward his studies in the biblical field but also in his Christian understanding of the
other disciplines. And most important of all, the integrative approach will affect his own personal outlook on life, making him more conscious that God is indeed the Lord of life. [26]

Mayers, Richards, and Webber do not specify here how this integration or "contact" [dialogue?] is to take place. Nor do they expand elsewhere on the meaning of their terms. Yet Christianity clearly has the integrative role in their conception of a liberal arts college education. Speculating momentarily, "personal outlook on life" is language most consistent with perspectival integration. Perhaps they intend just that, or, as hinted at above, some form of dialogue between Christianity and the various dimensions of life.

One further work describes almost the same process without using "integration" or "the integration of faith and learning." Interestingly, having chosen "unity" to describe their view of the curriculum, Niebuhr, Williams and Gustafson find themselves using "integrity" when they come to the personal locus of the unity they are envisioning. They write:

The question of unity and direction in the curriculum involves the response of students to the personal demand implicit in their education. Though some professional studies may minimize issues of personal commitment and ethical responsibility, most professional education today exhibits a lively concern with these matters. In theological education they are never peripheral. The student may have an intellectual grasp of Christian ideas and yet be far from having found the way in which this heritage bears upon his own place in the Christian cause. We have continually
to seek the wedding of intellectual maturity to personal integrity and Christian commitment.

Unity then, in theological education, means more than logical unity, though that is a value to be prized. It is a matter of the interconnection of all topics in the curriculum and their being bound up with life experience in such a way that the student discovers exciting new possibilities through that central reality in his faith which gives meaning to the whole.[27]

These writers describe an "interconnection of all topics in the curriculum" within the personal life of the student. Not strictly epistemological, this kind of integration involves "the integration of knowledge," but seems to be perspectival at base.

A final example is provided by the American educator Frank Gaebelien. In his 1954 book The Pattern of God's Truth, Gaebelien became the first evangelical to make frequent use of "integration" as a term to describe his ideal for Christian education. He responded to an interview question in 1979 that the most important part of his life was the establishment of a school that had "an integrated philosophy of education" where relating all of learning to the Christian faith was the primary goal.[28] While his ambiguity may be forgiven because he was, in a sense, just "starting" a movement in education, a weakness of Gaebelien's book is that he uses "integration" (and "Weltanschauung") liberally but never specifies how that integration is to take place, establishes that it ought to take place, or provides details as to how a world-view impinges on a curriculum. He
does speak of "the bringing together of parts into the whole" but then fails to list the parts.[29] In Gaebelein's conception, the locus of integration seems to be the student. But in his discussions of teaching in the various subject areas, he gives no details of what one would actually do in a classroom, given the student locus, if one wanted to integrate Christianity and education. Gaebelien's use of "integration" never transcends the level of the slogan, though, given the historical context, he should be forgiven the omission.

Having provided an historical review and surveyed briefly a few contemporary examples of the use of "integration," it is now possible to move to the question of intention and desire: "Why do people within the evangelical stream of the church use such language?" "What do they 'mean' or want to accomplish when they do employ this language?" In light of the above citations, the short answer to that pair of questions is that some want nothing less than to see the view adopted that all the areas of the curriculum cohere epistemologically and in the student's consciousness because those curricular areas are connected within a theological framework, and the student's perspective is grounded in Christian faith. Though again, there are various ways to interpret the same language, religiously-oriented people who use "integration" in such phrases apparently
desire some sort of transformation both of curricular materials and students' experience by means of, or on the basis of the overall theological perspective. Thus it is appropriate to speak of reconstructing that which is perceived to have been severed. With these generally reconstructive motives at the foundation of their educational planning and pedagogy, it is no surprise that evangelical Christians in higher education should begin to use "integration" and "the integration of faith and learning." Despite its apparent lack of cognitive/descriptive content, "integration" denotes many of the very characteristics contemporary evangelical educators such as those quoted are seeking. Thus, it is already possible to distinguish a "meaning" or an intention in evangelical integrative language: educators desire that students see unity, wholeness, and coherence, some of the very qualities identified repeatedly in the literature surveyed in Chapter I as being absent in contemporary education. "Integration" calls up those kinds of positive images. The strict grammatical structure of "integration" slogans is not as important as the goals of those using the slogans.

One wants to recognize the circuitous nature of this approach to unpacking the meanings of phrases. But detailed examination of what people want a curriculum to do as a means of understanding their ways of talking about curriculum is
consistent with the Wittgenstein-ian and Pring-ian comments noted earlier. Furthermore, no other method avails itself, perhaps because of the elusive nature of all uses of "integration" (as noted in Chapter V), but also because so few who use the term expand on what they mean by it. As noted above, the phrases "the integration of faith and learning," and "the integration of faith and education" may be operating simply as slogans or expressions of certain people's religiously-motivated but poorly-articulated desire for certain educational outcomes. (In the discussion of "Utility" following shortly, the question will be raised as to how poorly articulated such expressions as these actually are.)

It is not the case that theological uses of "integration" must necessarily be unclear. Arthur Holmes is one theological educator who has specified what he means by his integrative language. Examining his conception of "the integration of faith and learning" in depth is worthwhile at this point.

3. A Specific Conception of "Integration"

Some years after Gaebelein first published his book, Holmes contributed two works which seem to clarify what Gaebelein envisioned. Certainly, they make clear Holmes' own vision for Christian higher education. In *All Truth is God's*
Truth and The Idea of a Christian College, Holmes provides comprehensive details of his Christian world-view and how it comes to bear in higher education. He frequently uses "integration" and has been, in fact, the main popularizer of the term within evangelical higher education.

To begin, Holmes claims that "the integration of faith and learning" is the distinctive of the Christian college. Other Christians in academia may agree with those in the Christian college on confessional matters, but the Christian student or professor in a university or a Bible college is not able to look at all the areas of knowledge in Christian perspective. Both are limited to conjunctions of various subject matters; neither is able to integrate. On Holmes' account, the Christian college does not fear the findings of any of the forms of knowledge. In fact, Holmes sees integration involving

... a thorough analysis of methods and materials and concepts and theoretical structures, a lively and rigorous interpenetration of liberal learning with the content and commitment of Christian faith. The Christian college has a constructive task, far more than a defensive one.

At another point, he stipulates that integration involves the student bringing his values to bear on his work within the forms of knowledge, something sounding very much like perspectival integration. Yet, integration is much more than that for Holmes. He also stipulates that integration is concerned not so much with attack
The kind of integration Holmes describes takes place at more than one point. He lists four areas or levels at which integration is to occur:

- Personal contact - the student should be motivated to study, have an inquiring attitude and a disciplined mind (pp. 49-50).
- Theological contact - there are areas of common interest to be explored between theology and the other areas of liberal arts study (p. 52).
- Interpretation - there are views and doctrines in some academic areas where the Christian may need to note conflicts with Christian theology (p. 53).
- World view - the Christian student sees all things as part of a whole (pp. 57-60).

The best illustration of Holmes' position may come in his argument that the task of the Christian college is similar to that of Athenian education—enlarging the vision so that the person can see the whole.[37] The Christian faith is to touch the entire range of life and learning to which a liberal education exposes students. Momentarily pursuing a via negativa, Holmes emphasizes that the Christian college does not view integration as a "militant polemic against secular learning and science and culture, as if there were a
great gulf fixed between the secular and the sacred."[38] Furthermore, it is not to be seen as an achievement or a position but as an intellectual activity that goes on as long as people keep learning anything at all.[39] In recognizing this facet of "integration," Holmes avoids the process-product confusion that bedevils many peoples' attempts to explain "integration."

More could be given of Holmes and his conception of the integration of higher Christian education. It is important to reflect on his conception briefly at this point, however. First of all, Holmes is to be commended for unpacking his conception himself to the great degree that he does. In doing so, he gives much descriptive power to the term. He cannot be faulted for being ambiguous (because he is clear). In fact, Holmes has done a great service to evangelical higher education by exploring as many aspects of integration as he has. He is specific about what ought to happen; that specificity may generate motivation to teach "integratively" among those exposed to such ideas.

In unpacking "integration" as he has, however, Holmes reveals something of importance about "integration" and "the integration of faith and learning." Nothing that Holmes specifies as part of his conception follows necessarily from the concept of "integration." Just as those surveyed on pages 185-89 all unpack their integrative language in
different ways, so Holmes is free to attach what clauses he likes to the concept of "integration." That is: he can build whatever conception of integration he chooses. He is free to do so because nothing is necessarily implied by the term.

C. "THE INTEGRATION OF FAITH AND LEARNING": UTILITY

Ultimately, the question of usefulness must be raised with regard to integrative language, especially when that language arises out of theological contexts. Do such phrases as "the integration of faith and learning" give any direction to the development of educational policy, curriculum, or pedagogy? Do these phrases help address such educational problems as those surveyed in the first chapter of this thesis? Barring that specific sort of usefulness, does curricular talk of "integration" serve any other useful purposes. Ought "integration" to be retained as a part of educational discourse?

It was argued that the utility of "integration" is best viewed in context. Examination of general educational uses of "integration" revealed widespread usage of a word often beset by a number of problems. It is a positive term and frequently operates as a slogan; it connotes quite different meanings— one having to do with what is taught, another having to do with students' understanding of what is
taught, and a third one having to do with students' mental health; it is a term that, in different contexts, must denote either a process or a state; it is a term that often has unnoticed and unannounced ideals and conceptions built onto it. The thesis has already established and traced in detail these dimensions of the use of "integration." In light of these contextual factors, what utility does "integration" have, in its general and in its theological uses? The answer to this question appears as three discussions: first, "integration" as a slogan; second, "integration" as a useful educational concept; and, third, the importance of integration in education and how that importance bears on whether or not "integration" should be retained.

1. "Integration" as a Slogan

The thesis has already established that "integration" is a positive term and frequently functions in educational discourse as a slogan. It has also established that "integration" retains many of its characteristic weaknesses in theological contexts. As used in religious language, however, "integration" does function differently (from general usage) on at least one dimension. The term was said to operate as a slogan in educational discourse generally; in theological and Christian education, its use may be primarily that of a slogan. Both contextual and textual evidence lead
to this observation. First, many evangelical Christians see it as part of their Weltanschauung that unity and coherence are a part of life. More so than those of a naturalist persuasion, religious people take it as an element of faith that the whole academic world is made sensible as it coheres in a certain world-view.[40]

More important than such contextual evidence is that evidence provided by observing the actual usage of the term. Except in the minority of cases, such as that of Holmes, where the writer elaborates his own intended meaning, more uses of "integration" in Christian contexts seem to rely on the term's positive connotations than on any of its descriptive powers. In other words, within evangelical higher education, it often appears to be used exclusively, or purely, for its value as a slogan. (That this is so may not be as much a problem as it first appears. The discussion will return to this matter shortly.) Additionally, the minority of those of a theological orientation who hold an interest in conceptual clarity have had no more success than other educators at determining the concept's meaning.

In most cases, then, where the reader is left to unpack the meaning of "integration" in its theological education uses, no actual direction is given to the educational task, whether at the level of policy, curriculum, or pedagogy. Even faced with attempting to sketch out what
kinds of curriculum-level conceptions might be developed in light of an overall desire for integration, one must admit that nothing necessarily flows out of that desire. Thus, while the term may catch something of the vision people have for education, it usually fails to give direction in solving the problems of education.

Not only does "integration" frequently fail to give specific direction to educators, but it permits a semantic and therefore a pedagogical license that frustrates many people who look for tightly prescribed descriptive content in the wording of policy and curriculum proposals. Others are frustrated not by a lack of descriptive content, but because the form of the expression (for example, "the integration of faith and learning") parallels the logical form of true fusion integration, yet the elements being "integrated" in many cases simply cannot be fused.

Fortunately, not all the consequences of using a slogan are negative. "Integration" has value as a slogan whenever it reminds teachers and students of the larger picture—whether that be the whole academic domain or life itself—of which their own studies are but a part. Whenever students and teachers are reminded of that larger picture, the disintegration discussed in Chapter I may be diminished. In these circumstances, "integration" is a useful term. The question was raised earlier if slogans involving
"integration" are really no more than "poorly-articulated" expressions of the genuinely educational desires of some people. In light of the utility of "integration" as a slogan, these expressions may not be that "poorly-articulated" at all. Just as Dewey did not intend to cast a shadow on teachers when he compared teaching and learning to buying and selling (though the grammar of his comparison would not immediately lead one to that conclusion), perhaps "integration" has a purpose to serve in the educational world apart from the grammatical form of many of the sentences in which it appears. When it elevates motives, or prods people to take the wider view of things that Peters calls "cognitive perspective" then that slogan has unarguable utility in educational discourse. Neither is there any question that "integration" or "the integration of faith and learning" has utility in evangelical higher education, with its goal of recovering what was lost through skirmishing with liberals and focussing on identity, missions, and numerical growth. Such language has value as a banner around which educators can sense a common vision with others of similar persuasion. Notwithstanding the drawbacks of usage, then, "integration" has definite value in educational discourse. This value may be differentiated further into three particular reminders that slogans involving "integration" may be to educators.

"Integration" frequently reminds educators and
students that, ultimately, education must be practical. If what is learned in the classroom is not applied, or is not shown to be true at some point in daily life, then "integration" may not be occurring. Moreover, according to some, the concept "education" itself is being stretched in meaning if such connections are not present. A term like "integration" functions to remind people of that condition for education.

"Integration" may work to remind people that while academic specialties are necessary for the progress of human knowledge and culture, they should be viewed in connection to each other, not in isolation, a reminder related to one of the chief criticisms being launched against contemporary higher education, both public and theological. "Integration" does not imply how various academic areas are to be related; but it frequently carries the exhortation that they ought to be related. With regard to that particular criticism noted in Chapter I then, "integration" may figure as part of the answer.

Finally, "integration" reminds educators that what students build or make out of all they encounter while in school or college is finally that student's "education." It is easy for academics to forget the need for the student continually to be seeing the connections between the various academic subject areas and between academic study and daily
life, a criticism of contemporary education noted earlier. A strength of "integration" and "the integration of faith and learning" is that they frequently carry the imperative that academics remember in all their teaching that the ultimate locus of what transpires in school is the student.

2. "Integration" as a Useful Educational Concept

What is one to think about "integration" then? The thesis began by surveying integration and disintegration in education. It then developed comprehensively that "integration" engenders conceptual confusion almost everywhere it is used. However, curriculum language that contains various forms of "integration" ought not to be rejected too quickly on the sole grounds that "integration" engenders the many difficulties it does. Its weaknesses --especially its status as a slogan-- aside for the present, "integration" serves useful purposes in educational discourse.

First, cases are numerous where "integration" carries limited and clear meaning. The paradigm case of fusion integration from Chapter III comes to mind as the best example here (pp. 65-68). Great economy and specificity are achieved by those who use "integration" to discuss the General Science course that results when Biology, Chemistry, and Physics are integrated in the secondary curriculum.
Likewise, "integrated English" (Composition with Literature) often suffers no ambiguity and carries specific meaning in curriculum discussion. Both examples illustrate that "integration" is capable of carrying determinate meaning.

Other examples of "integration" as a useful educational concept usually obtain whenever educators themselves unpack the meaning they intend the term to carry. For example, Holmes makes his own conception of "the integration of faith and learning" clear by explaining in detail (in multiple volumes) what he envisions. Having expanded and then delimited the concept to that degree, he, like many others, then calls for implementation of a vision. Unlike some educators, however, those who unpack their meanings in detail do not leave others in confusion as to whether the proposal warrants support or attack.

Both in Chapter V and in the "Meaning" discussion in this chapter, it has been argued that the utility of integration in educational discourse is limited by multiple weaknesses. The two examples just given, however, make clear that "integration" definitely does carry clear meaning on some occasions. Though the thesis will return shortly to the question of making this often-indeterminate concept more clear, for now it is possible to claim this much for "integration": it is possible to use "integration" with clear meaning, either by restricting its use to paradigm cases of
integration, or by explaining the intended meaning when the term is used.

3. The Importance of Integration and "Integration"

The question of retaining "integration" in educational discourse or recommending its abandonment hinges on three things: the strengths and weaknesses of the term in use, the availability or non-availability of an alternative expression, and the importance of integration to educators. The strengths and weaknesses have been treated throughout the thesis and reviewed again in the immediately-preceding sections. Those aside, educational discourse does not seem to offer an alternative term to catch all that people mean by "integration."[43] How important then is integration in education and (and therefore) ought "integration" be retained in discussions of it?

Chapter I makes clear that disintegration is a concern of contemporary educators. Much of the discussion in Chapters III and IV and Appendix A illustrates that educators are continuously envisioning new ways to achieve integrative ends in schools. Taken together, this concern over disintegration and the continual generation of new conceptions indicate the importance of integration in education. The problems named by the critics surveyed in Chapter I are real problems. Integration is important in
education and therefore is a worthwhile goal for educators. In these circumstances, "integration" ought to be retained in educational discourse.

The question still needs to be raised as to whether all those things proposed as integrative are worthwhile in their own right; would they be judged good on other grounds? "Things proposed as integrative" may subdivide into two classes: many non-integrative proposals and curricula include the word solely for its positive connotations; other curriculum proposals actually derive from a desire to see something integrative, and include elements in the design meant to bring that integration about. Those proposals and programs which include "integration" for its slogan value alone can still be judged for their worth on educational grounds. Interestingly, the other class of proposals which are sincerely meant to be, contain attempts to be, or actually succeed at being integrative also must be judged on somewhat independent grounds, besides any judgments that will be made specifically related to integration. To answer the question—and thereby judge the worth of those things proposed as integrative—thus must partially remove the observer from a discussion of "integration" alone into the much wider arena of curriculum evaluation at large. That is: including "integration" in a proposal does not exempt it from any of the conditions educators would normally
want to apply to a proposal in their evaluation of it. Both these classes of proposals, then, need to be judged on grounds separate from their claim to, or success at being integrative. Appendix B treats at length the evaluation and ranking of integrative proposals.

The hypothesis (on page 3) that "integration" functions usefully in educational discourse and therefore ought to be retained is thus shown to be correct, albeit with qualifications attached. In spite of all the problems that often accompany its use, "integration" is the best available term to discuss such an important dimension of education. Educators are left with the responsibility either to restrict their use of "integration" to paradigm cases, or to spell out in more detail their conceptions of integrative education. As they do so, the ills of education surveyed in the first chapter of this thesis may, to some degree, be cured. "Integration" clearly can function in that curative process. It remains for educational researchers to assess how integrative conceptions have been successfully implemented in various curricula, what conditions and predispositions lead educators to resist or embrace curriculum integration, and, possibly most important, what is the educational efficacy of curriculum integration.

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1Hong, p. 4.

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2 See Appendix A, pp. 260, 276-79.


4 Rattigan, p. 171.

5 More on perspectival integration appears in Appendix A, p. 288.


7 Pring, Knowledge and Schooling, p. 100.

8 See Chapter II, pp. 49-56.

9 Francis Schaeffer, Escape From Reason, for example.

10 Again, Schaeffer is a good example of one who argues thus.


13 Others who see the "world-view" as the central means of integrating include Harry Blamires, The Christian Mind
(London: SCM, 1962); Peter Wilkes, ed. Christianity Challenges the University (Downers Grove, InterVarsity, 1981). Wilkes writes that a "world-view is basic to every person's existence" and that "it is simply not possible to operate in the world as a human being without some way of making sense out of experience" (p. 15). See also E.F. Schumacher, "On Philosophical Maps," in A Guide for the Perplexed, pp. 1-14; Gordon Clark, A Christian Philosophy of Education (Grand Rapids: Eerdmans, 1946), pp. 13-50.


15 Don McNally, "The Coming of the Kingdom in the Canadian University," Crux 10,3 (Spring 1973):11.

16 The "cultural mandate" (that man should "subdue and replenish" the earth) is seen by many as sufficient reason to explore all the areas of learning. See Paul W. Gooch, Daniel Ostrovsky, and David F. Walker, "Towards a Christian Philosophy of Education," Crux 4,1 (Fall, 1966):19. Christian scholars regularly defend the view that no conflict exists where true religion and true science meet. Schaeffer, for example, claims there will be "no final conflict" between the two; in No Final Conflict (Downers Grove: Inter-Varsity, 1975), p. 44. Aubrey repeats the claim--"the religious man and the scientist . . . are on common ground when at their best"--and then claims the same for the humanities and religion (p. 45, 55-6). Douglas Knight, in "Religious Implications in the Humanities" argues the same connection as Aubrey (pp. 78-97 in Wilder).

17 Hassel, pp. 430-32.

18 For further defence of the idea that theology is queen of the sciences, see, for example, Deferrari, pp. 6-7; Dominic Hughes, pp. 275-81, who writes that theology has "the obligation to judge, use, and order its own subject matter and all other branches of knowledge" (p. 275); Neil G. McCluskey, Catholic Viewpoint on Education (Garden City: Doubleday, 1962), pp. 73, 154; Rattigan, pp. 164-67. In Rattigan, the authority of the Church also becomes quite clear. He writes that in "the Catholic college the problem of unity does not exist. The faculty and students, having accepted the Teaching Authority which God has vested in His Church, are able to bring to the classroom a common interpretation of man and his destiny" (p. 166).

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See, for example, Richard D.N. Dickinson, The Christian College in Developing India (Bombay: Oxford University Press, 1971); or Lewis Joseph Sherrill, Presbyterian Parochial Schools: 1846-1870 (New York: Times Press, 1969); John Barnard, From Evangelicalism to Progressivism (Columbus: Ohio State University Press, 1969). None of these works notes any interest (among theologically liberal colleges) in "integrating" Christianity or faith with any educational or curriculum matters. One writer (Westerhoff, p. 197) does speak of combining piety with scholarship ("the integration of faith and life"). This seems to be the closest approach of any theologically liberal educator to "the integration of faith and learning."


See for example, Erna A. Peters' M.Ed. thesis at the University of Manitoba (1971), The Contribution to Education of the Pentecostal Assemblies of Canada; or Leonard O'Neil's M.A. thesis at McMaster University (1949), A Survey of the Bible Schools of Canada. These theses make clear that the Bible schools see it as their mission to fight secularism and to train ministers. There is no mention in either thesis of "integration" or of "the integration of faith and learning."

Dutch reformed thinkers that express this view most clearly include H. Evan Runner, The Relation of the Bible to Learning (Toronto: Wedge, 1970), pp. 104-6; Nicholas Wolterstorff, Educating for Responsible Action (Grand Rapids: Eerdmans, 1980).


Mayers, Richards, and Webber, p. 176.

Ibid., pp. 176-77.


32 Ibid., pp. 17-18.

33 P. 54.

34 P. 17.

35 P. 54.

36 P. 48.

37 P. 38.

38 P. 16.

39 P. 48.

40 A strong form of this argument appears in the Calvin College Self Study, Christian Liberal Arts Education (Grand Rapids: Eerdmans, 1970), p. 59. The faculty of that college argue that not only does perspective facilitate integration but that any perspective but the Christian one leads to error.

41 Ethics and Education, pp. 30-31.

42 See Lockerbie, p. 26; Aubrey, p. 47; Wolterstorff, throughout.


________. "Educational Studies and the Cult of Specialization." Education Studies 5 (Winter 1974-75):189-96.


Deferrari, Roy J. Theology, Philosophy and History as Integrating Disciplines in the Catholic College of Liberal Arts. Washington: Catholic University of America Press, 1953


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Hughes, Andrew S. "Separate Subject and Integrated Approaches to Social Education." History and Social Science Teacher 13,3 (Spring 1978):163-7.


Jung, C.S. The Integration of Personality. London: RKP, 1940.


Leavis, Frank Raymond. Two Cultures? The Significance of C.P. Snow. London: Chatto and Windus, 1962.


O'Brien. "Learning to Read through the Arts and Humanities." Newark, Delaware: International Reading Association, 1977.


Schiff, Charlotte. "Initiating, Organizing and Administering a Linguistics for Reading through the Arts and Humanities Program in a School District and a School Building." Newark, Delaware: International Reading Association, 1977.


APPENDIX A

THE USES OF "INTEGRATION"

A. PRIMARY USAGE CATEGORIES

#1 "Social integration in a modern civilization is primarily an affair of cultural unity."[1]

This sense usually has to do with the harmonious functioning of society, whether at a local, national, or global level. Harmony entails that both individual citizens and minority groups (whether "minority" by virtue of race, politics, educational or employment status, sickness, criminal record, religion, or some special interest) "fit in" to society at large. This sense of integration was first used by Spencer in First Principles in 1862.[2] Some argue that it also entails the existence of a stable core of values or unspoken cultural premises.[3] The question about the contribution of education to cultural or social integration, as mentioned in the discussion of psychological integration in Chapter V, is frequently a part of this debate.

#2a Psychological integration.

#2b Personal integration.

These two phrases, which often are used synonymously, refer to the state of mental well-being or the process of achieving that state. The phrases connote balance, organization,
wholeness and the ability to make good choices from among the
alternatives placed before and the demands placed upon the
individual person. C.G. Jung's *The Integration of
Personality* is a classic example of a discussion of this
sense of integration.[4]

The two senses named thus far are not entirely
separate categories; as family systems theorists argue, the
family is the transition point between the individual and the
society. Also, as was indicated in Chapter I, the two sorts
of integration are thought by many to be causally related;
viz. if the individuals that constitute a society are not
integrated, neither will the society as a whole be
integrated.[5] In addition, the argument has frequently been
repeated that social disintegration leads to psychological
disintegration.[6] An illustrative case of this sort of
thinking from within education is "general education," which,
as will be noted below (uses #22-25), took as one of its
assumptions the idea that common learnings were necessary for
the preservation of democracy.

#3a Educational Integration.

Actually, a number of common and related phrases all have to
do with "educational integration" in its most general sense.

#3b(i) Integration of knowledge.
#3b(ii) Integration of all knowledge.
#3c Epistemological integration.[7]
It is worth noting that the above two senses (3b, 3c) seem to have much more to do with knowledge than with learners and learning.

#3d Curriculum integration.

Though less so than #3b and #3c, this use also seems to place more emphasis on what is known than on the knower. Thus, these uses recall the discussion of the locus of integration (in Chapter IV).

#3e(i, ii, iii, iv, v, vi) Integrated studies, integrated program, integrated curriculum, integrated course, integrated unit, integrated project.

#3f(i, ii, iii, iv, v, vi, vii, viii) Integrative studies and so on as in #3e above, but it should be noted that "theme" and "topic" can be added to this second ("integrative") list much more easily than to the first ("integrated") list (#3e uses).

It is worth noting in these two groups that the #3e uses again connote something that has been done to materials while the second set (#3f) seems to imply a process that the curriculum materials enhance or facilitate.

#3g Integrated learning.

While of the same form as the #3e uses ("integrated"), this phrase seems to imply a process more than the #3e uses do. This may be because "learning," which, if it happens anywhere, happens in people, is of a logical order different from any of the kinds of integration specified in #3e, with their loci in curriculum materials.

The above three families of uses (#1, 2, 3) are, by
far, the most common uses of "integration." They are also
the least specific compared to such uses as those taken from
non-educational language that follow in #4 below. Also, the
first two named are not usually misunderstood.[8] This
feature sets them apart from most of the educational uses,
which are the most usual candidates as sources of confusion.

Following, are a number of ordinary language uses of
"integration," of which the first three are paradigm cases of
two of the main logical forms outlined in Chapter III.

#4a "The integration of lake, air, road, rail and
sea transportation systems."

#4b "The integration of grazing and crop
agriculture."

Where #4a-b clearly imply a fusion of logical similars, #4c
connotes incorporation of one thing into another thing that
is not necessarily either logically similar or of equal
importance.

#4c Nation x is integrating foreign aid into its
national economic planning.

#4d Integrated psychiatric treatment.

#4e Institution x is attempting to develop an
integrated administrative structure.

#4f The staff of hospital x believes in integrated
medicine.

#4g Course x deals with mathematical integration.

Of these seven #4 examples, the first three are clear enough
for most readers to understand what is being integrated. The
last four examples require greater familiarity with the field
of discourse of which they are a part for a reader to gain full understanding of what is intended.

Three uses related specifically to the field of education follow.

#5 Horizontal integration.
Morse gives this name to the problem of relating concurrent learning experiences into a meaningful pattern.[9] Of those who concern themselves with this sort of integration, some address it strictly as an epistemological matter while others talk about the student building that "pattern" mentioned above. On any account, it has to do with the relationships between areas of human knowledge.[10]

#6 Vertical integration/Sequential integration.
This has to do with how what students learn fits in to what they have learned in the past and will learn in the future. Blackmer's description of "an ideal curriculum" entails the provision of

... as many opportunities as possible for a student to relate what he learns this year to what he has learned before, and to connect what he discovers in different subjects. It is the constant temptation of school and college teachers to forget that their students' educational experience is a steadily developing whole, that what they gain in any classroom will soon be lost unless it is somehow fitted into their total intellectual and emotional development.[11]

While this description also relates to horizontal integration, it makes clear the two central features of vertical integration: that it has to do with curriculum
sequence and that it has to do with the learning students do—the "intelligible sequence" they build—in school over a period of years. Where "horizontal integration" might be taken to have a "purely epistemological" connotation, "vertical integration" entails learners and, according to at least one writer, their "integrity."[12]

#7a Practical Integration.

As the name implies, this has to do with the relation between theory and practice.[13]

Concern for "practical integration" in education is either explicitly or implicitly expressed in many of the curricula described or mentioned in the following pages. At least two of the specific expressions deserve mention here. The first is that education or "book-learning" should be applied to "everyday life," i.e., learning is applied to experience. Canine calls it the "effective transference from classroom to outside world."[14] Broudy, Burnett, and Smith's "applicative" use of schooling is another label for the idea of practical integration.[15]

The second sense of practical integration warranting mention is that which entails the idea that the learning is done, at least in part, through experience. Internships, work-study programs, field-experiences, and co-operative education all flow from this conception of educational integration.[16]
#7b Education as preparation for life. This phrase also expresses concern for practical integration.[17]

One variant use of the phrase warrants mention. Though he also uses "practical integration" in the conventional manner, Organ distinguishes four other kinds of practical integration, none of which fits the standard usage of the phrase very closely. He distinguishes "psychological" (that is: mental health—the standard psychological sense); "activital"—having to do with "unity of action"; "intellectual"—having to do with "consistency of thought"; and "valuational"—having to do with possessing a workable set of values.[18] His definition of "practical integration" thus includes as much as some writers include when discussing "world-viewish integration" plus "personal" or "psychological integration."

As intimated in Chapter III, the above three types of integration (#5,6,7) can all be seen to involve the incorporation of one thing into another, i.e., that which one is learning in a given area of study fits into a wider overall pattern of past, present, and future study (horizontal and vertical) or of daily life. A connection between "vertical integration" and psychological integration (#2) is present, and to a lesser extent, so is a connection between "practical" and psychological integration.
These three types of integration are not curricular attempts as such; they are purposes of educators and curriculum designers. The stated purposes of Keele University's project, "Exploration Man," illustrates this point:

The project is concerned centrally with ways of organizing learning that seem likely to lead to a relatedness of the disciplines and their distinct methods of enquiry and verification. It also seeks ways of relating the knowledge of the student to his learning experiences, his feelings and his beliefs.[19]

While the passage cited uses none of the words "vertical," "horizontal," or "practical," it does make clear that these purposes are related to each other and are in view as goals of these particular curriculum-makers.

B. FUSION SENSES OF "INTEGRATION"

A great number of curricula have been devised which have as their goal the fusion, in the sense used in Chapter III, of two or more disciplines or subjects. Three paradigm cases of such fusion follow:

#8a The integration of usage + composition + literature + reading + spelling to yield integrated English or language arts.[20]

#8b Integrated social studies.[21]

The third paradigm case of fusion is that of integrated science. Its standard form in secondary school curricula is:
Integrated science warrants special mention for two reasons. First, it is an idea that has gained wide acceptance among both scientists and science educators. Second, it is an old idea compared to integration movements in other main curriculum areas such as English and Social Studies. These two factors have meant that a far broader range of literature than can be mentioned here is available.

Integrated science also provides a clear illustration of "levels" of integration, as discussed in Chapter IV. At one level, scientists speak of integrating zoology + botany to yield biology. Biology, when integrated with chemistry + physics (the most usual combination) yields "science" (as discussed in Chapter III). Finally, though it is not always clear what they mean, some people speak of integrating science with social studies, languages, fine arts, and the like.

The three sorts of fusion named (#8a,b,c) are generally referred to as "broad fields" integration, the main purpose of which is to provide "greater unity of experience by reducing the number of subject-matter barriers."[23] Broad fields integration—what some call "strong correlation" or "total integration"—is not the only form of curricular fusion that has been attempted.[24] Following are a number of recently suggested combinations:
#9a Microbiology + pathology + histology to yield integrated physiology.

#9b Health education + health career education.

#9c Machine shop + drafting.

#9d Career and consumer education + reading and language arts.

#9e Foreign language + social science. [25]

#9f Social science + expressive arts.

#9g Science + language arts.

#9h Social studies + English.

#9i Mathematics + English. [26]

#9j Mathematics + science.

#9k Pharmacy + medicine + dentistry + nursing + podiatry to yield "integration of health professions education."

#9l Art + home economics + music + industrial arts.

#9m English + history + geography + science. [27]

A number of things features of the preceding thirteen cases of integration bear mention, some of which were noted already in Chapter III. First, as did the examples listed as #8a, b, and c, these proposals involve integration at different levels: from the most basic (the three constituent fields of physiology) to the fusion of four curriculum areas which, if history and geography are taken to constitute the broad field "social studies," include or almost include three "broad fields" as usually defined. A second observation is that not all those things which are fused are from the same general
field as that with which they are being fused. Thus, while there are proposals to integrate health education and health career education (#9b), there are also proposals to integrate mathematics and language arts (#9i), or, an example that seems more likely to succeed, social studies and language arts (#9h). A further observation, and one important to any discussion of sources of confusion, is that all the cases of #9a-9m are of things treated as though they are logically similar entities and as though they are of equal importance. For example, in #9c, machine shop and drafting are treated as though they are of equal importance; neither is being taught "through" the other and neither is being subsumed into, infiltrated by, or guided by the other. This feature of fusion integration was noted in the earlier discussion of the logical form of fusion proposals. Fourth, and again as noted previously, fusion is seen to occur in two patterns in the examples given from #9a-9m. A and B are integrated to yield C, a totally new entity—a process some critics call mongrelization—or else they are integrated to yield what might be called "AB," a new entity whose constituent parts are easily recognizable as the former "A" and "B." This distinction is intended only as a means of loosely classifying the examples, not as a unilateral judgement. When Mathematics and English are combined (#9i), the component parts are easily discernible. This might not be
the case when the separate parts of integrated social studies are combined (#8b).

A couple other specific proposals that fit under the broad classification "fusion" need to be noted.

#10 The integration of high-school and college.[28]
The proposal here is that grades 11 and 12 are to be combined with the first two years of college to form the final stage of what would then be a 6-4-4 program. The main purpose of such a program would be to foster the student's vertical integration.

#11 The integrated day.[29]
Especially in elementary schools, the school day would be characterized by fewer breaks in the flow of thought and activity, and smoother transitions between different curriculum areas.

C. INCORPORATION SENSES OF "INTEGRATION"

Like social, psychological, vertical and practical integration (and, to a degree, horizontal integration), the examples that follow all speak of the joining of A + B (+ C etc.) but are of a logical form different from the examples listed in #8-11. Where the above fusions were of things equal or similar in important respects, those following might be better thought of as incorporation of one thing into another:
(A into B) where A and B are of different logical sorts or where one is more important than the other. [30] The result of such incorporation is usually the transformation of the latter entity (B) to some degree. [31]

#12a Conservation will not be established as a separate course but will be integrated into the other courses of the existing curriculum. [32]

This is a model case of "incorporative integration." Other proposals of this type include:

#12b Dental health into other courses.
#12c Career education into other courses.
#12d Fine arts into other courses. [33]
#13a Liberal education into engineering education.
#13b Liberal education into medical education.
#13c Speech into writing courses. [34]

It is worth noting that the #12a-d examples call for incorporation of some element into an entire curriculum where in #13a-c, the desired incorporation is into a more restricted curriculum area. This sort of integration is proposed at the level of the curriculum "unit," the "course," and, as in the proposal to integrate liberal education into one or another professional area of study, the "field." It is also noteworthy that social integration entails incorporating sub-populations into the society at large in a form parallel to the examples named here. Additionally, just as social integration implies social harmony, the integration
described in #12 and #13 implies harmony; in each case, the incorporation of A into B will, while changing B, hopefully not be the undoing of B.

In the remark preceding example #12a, it was noted that B is transformed to "some degree." There is a kind of "incorporative integration" spoken of where B incorporates A to such a great extent that it is substantially transformed by A, in some cases, even controlled or directed. Perhaps a better way to speak of this is to say that B is saturated, permeated, or infused with A as opposed to "low-degree incorporation" (#12-13) where A is swallowed up by B and B is not substantially affected. Examples that come to mind anticipate the listing of "world-viewish integration" (#45) and organizing principles and purposes but are provided at this point because they are formally similar to the examples in #12 and #13. Pfeffer argues the important place of art, feeling and sensitivity in life:

#14a Integration through art as an organizing principle.

Her call is worth citing at length:

Education must involve the total human personality—his reason as well as his senses, his emotions, his instincts, his creative impulses. It must integrate all human faculties. This can best be done by assigning a more central role to art and the aesthetic experience; there is no better way than through the aesthetic to educate our sensory responses to involve our feelings and creative instincts and reach the innermost depths of the human psyche.[35]
Pfeffer's goal is to remove the "false dichotomies that exist between the cognitive and the affective, between the scientist and the poet." If her call can be taken literally, Pfeffer wishes something much more ambitious than the mere incorporation of curriculum units or courses into other curriculum units and courses; she is attacking some of the deep divisions mentioned in Chapter I of this study.

#14b "Career education as an organizing theme around which education can be unified."[36]

This proposal may be similar to, but is not to be confused with the later examples, "integrative themes and projects" (#16ff.).

Both #14a and b are examples of a type of incorporation that differs only in degree or importance (not in form) from the examples named in #12 and #13 and those examples which follow. (This is not to underestimate the significance either of art or of career education.) Of the following examples, two relate to political purposes and the other to a religious principle. All three are to infiltrate to saturation degree and thus to guide all of education, and, possibly, all of life.

Lenin decreed this purpose for communist education:

#15a(i) "Transform the school from the weapon of bourgeois class domination into a weapon for the total destruction of class divisions within society, into a weapon for the communist regeneration of society."[37]

Broudy, Burnett, and Smith argue for a politically different
but logically similar purpose for integration.

#15a(ii) "... create a curriculum [which serves] the school's obligation to a democratic mass society and individual life in that society."[38]

#15b(i) The development of Christian character. This is cited in the Harvard Report as the "unifying purpose and idea" underlying American public education in the mid-nineteenth century.[39]

Though neither "integration" nor "incorporation" is mentioned in any of these three examples, all appear nonetheless to be model cases of saturation-degree incorporative integration based on an overriding purpose.

#15b(ii) "Theology is the most important integrating factor in the curriculum."[40]

#15b(iii) "Theology is the keystone of the arch of Christian learning."[41]

These last two expressions, one Lutheran and the other Roman Catholic, do not take a purpose (such as political direction) but an epistemological principle (and, many would argue, a discipline) as the organizing center of the curriculum. Neither of the last two quoted remarks makes clear the degree to which theology is to be the "center" of the students' lives or whether Christianity is to serve as a Weltanshauung. The Harvard Report citation, on the other hand, implies the level of Weltanshauung.[42]

One additional remark with regard to incorporative integration is in order before moving to a consideration of
themes, projects, and topics. First, where A is incorporated into B, it is of the same logical sort as B in some cases and not in others. For example, studies from one field such as liberal arts (#13a, 13b) have greater logical similarities—and, admittedly, great differences as well—to engineering or medical education than either dental health or political revolution have to the courses of the typical curriculum. Both dental health and political revolution are better thought of as purposes or ends than as "subjects." The purposeful, as opposed to epistemic or disciplinary character of these two matters does not, however, prevent their being incorporated into school subjects.

D. THEMES, TOPICS, PROJECTS, PROBLEMS

Integrative problems, projects, units and themes have frequently been viewed as the best alternative to subject-based curricula. Consequently, they have become popular and now are the subjects of vigorous debate as to their educational efficacy. Arguments launched in favor of such curricular approaches usually center on the idea that the real problems of life in the world cannot be neatly divided up into subjects, and that students should learn in school in a style that is better suited to the nature of the world outside the school. Such arguments are worth
considering seriously. As Sawhill points out, some concerns in life do not separate precisely along subject lines.[43] He names energy sources and law as two increasingly important areas that resist treatment in subject-based curricula and are therefore either treated poorly or ignored altogether. Sawhill does not imply in his comment that topics should be implemented and subjects jettisonned. Advocates of "enquiry" approaches recognize, to differing degrees, the need for disciplines as a prior condition for interdisciplinary work to take place. Fulcher, for example, writes that

"... an implication of the interdisciplinary study of integrative topics is that it encourages the development and maintainence of the identity and integrity of an individual discipline even as it recognizes the meaning and significance of topics that exist at the interfaces of disciplines."[44]

His definition of an integrative topic entails that "some of its details and their relations are apt to be misperceived or misinterpreted or omitted" if the topic receives attention from a single disciplinary standpoint.[45] From a point of view quite different from Fulcher's, the Goldsmith's College Curriculum Laboratory has developed an "almost exclusively child-centred" enquiry approach based on a conception of learning by discovery. Disciplines or subjects have almost no bearing on this curriculum.[46] Thus, the degree of variety among proposals of this sort is evident; some attend to disciplinary structures more than others. The distinction between "topics," "themes," "units," "projects," and
"enquiry" will become clearer when the following examples are discussed.

Units

#16a "Exploration man."
#16b "Outgroups in society."[47]
#16c "The sea."
#16d "The American West."
#16e "Power and energy."
#16f "Communication."
#16g "Growth and development."[48]
#16h "Sidewalks."
#17a "Hunger day."
#17b "Protect your environment."[49]

It is worth noting that the last two examples, while treated as "units," also functioned as specific student projects.

Projects

#18a Different disciplines combined in production of a course on the theory of curriculum design.
#18b Interdisciplinary study of administrative behavior.
#18c Interdisciplinary approach to environmental education.
#18d The production of a slidetape show can become a multidisciplinary exercise.[50]

None of the above examples is much unlike those of #16 and #17. Also, it is noteworthy that a project can be as wide as
a "field" such as administrative behavior or as narrow as the production of a slide show. Finally, there is an interesting similarity between numbers #18b and #18c and the example which follows (#19).

The following examples are not "enquiry approaches" per se but are listed at this point because of formal similarities to the preceding examples.

#19 "The multi-disciplinary research team."
This is really just a variant of the above, there being two main differences: there is no teaching purpose involved, and instead of one or a number of students beginning a project that will force them to use the tools, methods, or categories of two or more disciplines, scholars representing a variety of disciplines are brought together from the beginning by those people who have organized the project in question and who recognize the complexities involved in what they have set before themselves. This form of interdisciplinarity obviously presupposes the existence, benefits, and possibly the necessity of disciplines. Heckhausen calls this "composite interdisciplinarity."[51] Boisot names it "restrictive interdisciplinarity" inasmuch as each discipline represented places its restrictions on how what is being attempted is carried out.[52]

#20 "Faculty Approach."
The purpose of this approach, in Rollings' words, is to have
a number of teachers from different disciplines or subject-areas working together as a group to facilitate the study of topics "... which do not fall exclusively within the conventionally accepted syllabus" of any one subject.[53]

It thus appears as an enhanced form of team-teaching. It also appears to be somewhat parallel to the temporary or permanent multi-disciplinary research team mentioned just above (#19).

#21 The creation of new interdisciplines such as biochemistry, psycholinguistics, physical chemistry and sociobiology.[54]

This results from prolonged work by representatives of different disciplines working at points where their disciplines overlap or intersect. What may have begun at the level of merely noting relationships (see "interface" below) finally ends up a discipline--though a young one--in its own right. Heckhausen refers to this as "supplementary interdisciplinarity".[55] Boisot, who calls it "structural interdisciplinarity," adds electromagnetism and cybernetics as examples.[56] This form of interdisciplinarity, in at least one sense, "just happens." Because of this feature, arguments about whether or not it is a good thing are of limited importance. New "(inter)disciplines" are going to continue to come into being regardless of opinion, scholarly or otherwise. Detailed discussion of this type of interdisciplinarity is available in the main references.
recommended earlier.[57]

General Education

Under the title "general education" have appeared a number of quite different types of curricula. Their inclusion with themes, topics and projects is justified on the grounds that most of the curricular outworkings of general education are parallel to, if broader than, themes, topics and projects. If a unit can be based on a theme such as "sidewalks" (#16h), then perhaps an entire curriculum can be based on some broader theme such as "Western Civilization" or on some purpose such as countering destructive vocational specialism.

The purposes of general education, other than that just named, are mainly two. It is, a response to fragmentation in the curriculum and to the need for a common understanding of a cultural-philosophical heritage as the basis for the continuation of democracy.[58] Interest in general education had its zenith in the decade of the 1950's and was reawakened--at least in some forms--in the 1970's.[59] Many works on the subject of general education avoid definitions of the term (perhaps because it is more a generic term covering a number of different curricular attempts) but the Harvard Report points out that it does not mean either "education in knowledge in general" (if there is such knowledge) or "education for all in the sense of
universal education." Positively, the Harvard committee viewed it as that part of one's education having to do with one's "life as a responsible human being and citizen" as opposed to that part concerned with one's vocational specialty.[60]

General education has taken a number of distinct forms and usually comes under a number of distinct labels, three of which are sufficiently important as attempts at integration to warrant inclusion herein.

#22 Core curricula.

This is often treated synonymously with "general education." Certainly it is the most common form of general education. Essentially, core curricula consist of some course or courses—whether separate, correlated or fused—being required of all students.[61] When one considers specific examples of core curricula one finds a great degree of overlap with survey courses. It is for this reason that "distinct forms" and "distinct labels" were differentiated earlier in this paragraph. Frequently, the courses that constitute the core curriculum are survey courses of the sort discussed below.

#23a Survey courses (also called "integration courses")[62]

Hong names Amhearst's "Social and Economic Institutions" (first offered in 1914) and Columbia's "Contemporary Civilization" (first offered in 1919) as early attempts to
give all students a broader, more synthetic background in liberal arts to offset the perceived inadequacy of technical competence as a single educational goal. Such courses are often given either at the freshman or the senior college level. The purpose of the latter—the "capstone" courses—is to "equip the student with knowledge and intellectual disciplines necessary to provide a meaningful integration" of the subject-matter in the other courses. Besides the two examples named above, other course titles have included:

- #23b "Observation, Interpretation and Integration."
- #23c "History of Western Civilization."[65]
- #23d "Great Ideas."
- #23e "The Crisis in Values."[66]

A subset of the survey course is the "Great Books Curriculum," where students are exposed to readings ranging across the last twenty-five centuries and many fields of interest. Such curricula have been criticized on the grounds that the "greatness" of the great books does not guarantee that their study will be integrative. McConnell points out that great books "do not always speak in concert about human nature and experience or about fundamental principles."[68] Similarly, Hutchins notes that "a great book is hardly a great book unless it is a great experience to the student reading it."[69]
This combination of elective and required courses was initiated at Harvard in 1909 with the goal that every student might know "a little of everything and something well."[70] On this account the student "makes" his or her own integration, a task ostensibly easier than that of the typical student with no prescribed courses at all.

D. CORRELATION SENSES OF "INTEGRATION"

The next large class of integrative curricular attempts is that of correlation, which, like "fusion" and the other classes of attempts, can be further subdivided into a number of specific forms. Correlation is advocated on the grounds that the integrity of different disciplines of knowledge must be respected, but at the same time, students must come to see the connections between these areas. On this account, knowledge is "one whole." Barbour, for example, sees the purpose of correlation as the gaining of insight "into [pre-existent] relationships of one's own field to other areas of life," a notion similar to Peters' idea of "cognitive perspective."[71] This sort of integration has gone by such names as "related studies," "co-ordinated," "co-operative" and "connective" integration.[72] Some equate correlation and integration.[73] By whatever name, the
logical form of these attempts entails the teaching of A "in light of" B. Inasmuch as correlation-integration sometimes has this logical form, it is somewhat similar to fusion and incorporation. Pring, in fact, classifies correlation as "weak" integration compared to fusion, which he calls "strong" integration.[74]

A standard case of correlation is:

#26a The relationship between chemistry and biology.[75]

The lack of specification of the nature of that relationship underlies the necessity of further distinctions within the general class "correlation." At least two kinds of "dialogical" relationship or "interface" might obtain.[76] There may be a search for "common ground" implied here or there may be some notion of one subject or factor being "brought to bear upon" another. The following examples also are standard cases of correlation where the elements are specified but the intended integrative method is not:

#26b The connection between chemistry and physics (from Marx, above).

#26c The connection between geology and general sciences.[77]

#27 The connection between chemistry and other disciplines.[78]

Both #26b-c are parallel to #26a. Example #27 is not necessarily the same in implication because "other disciplines" does not specify whether, for example,
literature, philosophy and art are included. The result is that, on the basis of the phrase given, one cannot be certain what is intended: a search for common ground, points of intersection and areas of overlapping interest (as is likely the case with #26a-c), or a search for ways that chemistry affects or is affected by, say, artistic, philosophical, or literary considerations. For that matter, the phrases supplied in the #26 examples may have to do with "methodological borrowing," a form of interdisciplinarity to be considered shortly (#34-37).

The following four non-educational uses seem more clearly to be examples of "A bearing upon B."

#28a The impact that science and politics have on each other."[79]
#28b The bearing of ethics on medical practice.
#28c The bearing of ethics on scientific research.
#28d The interaction between scientific and social problems.[80]
#28e The impact of science on poetry.[81]

If these are examples of "A bearing on B," they may be similar to the "restrictive interdisciplinarity" mentioned earlier where various disciplines enforce limits on what may be done or how it may be done. (Such uses may also be related to C.P. Snow's notion of the "two cultures."") Both the "common ground" and "A bearing upon B" types of integration are sometimes called "dialogical integration."
Besides the two types of "interfacial" or "dialogical" integration—seeking common ground and observing how one thing bears upon another—the other major sort of correlation integration is "consultative," "corroborative," or "co-operative." In this type of integration, reference is made to one or more other disciplines in the course of teaching any discipline. In its weakest form this might entail simply

#29 "The incidental pointing out of connections between events, changes, processes, ideas or methods in fields other than the field which is the focus of the course being taught"[82]

A stronger form of this might entail

#30 Professors or teachers consulting each other regarding their separate courses and then co-operatively sequencing the contents of their courses or at least becoming aware of the contents of other courses.[83]

A third example anticipates methodological or substantive borrowing but it bears listing here as well. It is when the making of references or co-operative sequencing become so "dialogical" integration—seeking common ground and observing how one thing bears upon another—the other major sort of correlational integration is "consultative," "corroborative," or "co-operative." In this type of integration reference is made to one or more other disciplines in the course of teaching any discipline. In its weakest form this might entail simply

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A third example anticipates methodological or substantive borrowing but it bears listing here as well. It is when the making of references or co-operative sequencing become so common that one discipline is actually "using" the other. Pring writes:

#31 "Economists might stick to economics, historians to history, but the one might wish to use subject matter taught by the other and make curriculum arrangements accordingly."[84]

One final example of a specific type of correlation bears mention, if only for the reason that it demonstrates the myriad ways a curriculum can be reformed to foster some sort of integration. In 1936, the proposal was made that

#32 Oral and written English be checked in all other subject-area courses in high school and/or in college. Five distinct plans were proposed as to how this idea might be implemented.[85]

F. SOME ADDITIONAL USES OF "INTEGRATION"

Four other uses of "integration" bear mention but do not fit easily into any of the classes already named. Additionally--despite their appearance together here--neither

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do they form a class themselves on formal grounds.

Two types of interdisciplinarity might be lumped together loosely as "methodological integration." These proposals entail that the ends of one discipline be accomplished through the study of another, or that one discipline borrow, either temporarily or permanently, the concepts, laws, methods or "substance" of another discipline. Levit calls the latter type "procedural interdisciplinarity."[86] Other names include "auxiliary interdisciplinarity," "linear interdisciplinarity" and "multidisciplinarity."[88]

Considering the first type of "methodological integration"--interdisciplinary "accomplishing"--one finds the following:

#33a Reading through art/arts.
#33b Science through poetry.
#33c Science through language arts.
#33d Reading through arts and humanities.[88]

Though the two subjects in each case might be of epistemologically different structure (example: science and poetry), the proposal is considered "integrative" in that there is an overarching purpose by which the disparate elements are brought together.

An illustration of interdisciplinary concept borrowing is provided in
Other examples of borrowing include:

#35 The application of physical laws in understanding biological processes.

#36 The use in psychology of sampling methods developed in physical sciences.

#37a Science's reliance on mathematics.

#37b The reliance of history on geography.

#37c The reliance of pedagogy on psychological testing.

#37d The reliance of geology on paleontology.

Four distinct types of borrowing are illustrated here: concept (#34); laws (#35); methods (#36); and substance (#37). None involves any demonstration of connections between A and B or the enrichment of the discipline borrowed from. The purpose of borrowing in each case apparently is simple "use." The #37a-d uses are seen to be parallel to the type of correlation described by Pring earlier (#31).

Organ names two types of integration which are worth mentioning but do not require extensive discussion because both are relatively clear in meaning and neither is closely related to curriculum and pedagogical issues.

#38 "Encyclopedic integration."

This is simply any classification of information according to subject-matter.
"Historical integration."
This is any chronological ordering of events or processes.

One universally-understood sense of "integration" related to education warrants mention here though it is not a case of "curriculum integration," but is actually a subset of social integration (#1).

"Racial integration in schools."
Since this leads to no confusions of the sort being examined herein, no further mention of it is necessary.

Finally, one finds the following educational use, where a book title indicates nothing about what is intended by "integration."

"The integration of adult education"
A great number of such examples might be provided where ambiguity seems to be the rule rather than the exception. In this case, a reading of the book in question reveals that "integration" is intended to mean co-operation among delivering agencies so that duplication of services is avoided.[99]

G. "INTEGRATION" OF FAITH AND . . . USES
The small but troublesome class of uses of special interest to this study remains to be noted. It includes the following:

#42 The integration of education and life.
The intention here may simply be "practical integration" as discussed already (#7), or it may refer to something else. It is strikingly similar in form to the important one following. The meaning of neither is clear.

#43a The integration of faith and learning.[100]
#43b The integration of Christianity and learning.
#43c The integration of faith and education (in the sense of "one's education" as opposed to the discipline "Education").

These uses are unclear because of a number of factors already explored in detail in earlier chapters, especially Chapters V and VI. For the present, it is sufficient to note again that it is not clear how "integration" is intended: fusion, correlation, incorporation, or something else. Neither is it clear whether, if incorporation is intended, it is to be high or low degree incorporation. A third problem is that the phrases take the grammatical form of fusion and correlation integration proposals, yet one suspects that high-degree incorporation is intended. It is not apparent how "integrating faith and learning" would differ from the #15b uses where theology was the organizing center of the curriculum. Finally, it is not immediately clear either how the #43 phrases relate to such phrases as the following, all of which follow the standard fusion integration formula:

#44a "The integration of theology and psychology."[101]
#44b "The integration of theology and economics."
The integration of theology and education (as a discipline).

The uses may involve a simple search for points of contact or "common ground" between areas of study in a fashion parallel to the "weak dialogical integration" (correlation) of #26a-c. Oates, for one, uses "integration" in this sense of a search for common ground between bodies of theory.[102]

Others intend by such phrases as #44a-c and, more so, by the #43 uses, various degrees of "A being brought to bear on B" ("strong dialogical integration"). The strongest degree of this "bringing to bear" sort of integration is likely equivalent to the sort of integration alluded to in discussion of use in #15b.

#45a "World-viewish integration."

#45b "Perspectival integration."

Broudy, Burnett, and Smith speak of the student's "developing a personal Weltanschauung, a world-view or total ideology, for the conduct of his life."[103] In his discussion of how such development occurs, Cobb argues that paradigms, models, images, laws, and theories—whatever people use to understand the world and reconcile themselves with it—may serve as "frames of reference" or "integrative assumptions."[104]

More than one writer calls for a specifically Christian educational frame of reference or world-and-life view. McGuire, for example, speaks of developing a "catholic
Spykman calls for a situation where faith is "brought to bear upon the total educational enterprise and allowed to function comprehensively in shaping the entire educational enterprise." Ryan sees the process as "sacramentalizing" all of a student's "knowledge and skill," Kooistra, as the discovery of a "basic unity of life under the guidance of a religious commitment." These last writers quoted are clearly talking about that strong form of incorporation discussed with regard to #14-15--the sort where, when A is incorporated into B, B is transformed. It is apparently possible to make clear what one means by the integration of faith and learning; some writers succeed in doing so. Up to the time of writing, however, the overall situation has warranted further examination.

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1 Stanley, p. 36.


3 Stanley, p. 36.

4 London: RKP, 1940.


6 Stanley, pp. 57-63, 125-27.

7 T.R. McConnell claims that educational uses are the
most common of all uses of "integration" (p. 7).

8 As Chapter IV pointed out, "psychological integration" may be a source of misunderstanding in educational circles because it is used to mean "pedagogical integration" too.

9 P. 354.


11 Blackmer, p. 31. See also Morse, p. 354; Dewey, "The Child and the Curriculum," p. 185.

12 Mayhew, p. 221.


17 See Connole, pp. 8-9.

18 Organ, p. 186.

19 Keele Integrated Studies Team, Exploration Man: An


24 See Knudsen, pp. 21-25; McConnell, p. 7.


The problems encountered in talk about joining differently-structured elements were discussed in Chapter V. Hong calls this "additive integration" (pp. 38-9); Hanna and Lang call it "infiltration" (p. 594), a word reserved herein for another purpose because it has negative value connotations.

William B. Stapp, Integrating Conservation and Outdoor Education in the Curriculum (Minneapolis: Burgess, 1965).


P. 8.

P. 43.

Hong, p. 44.
41 Rocco Ernest Porreco, "The Theologian and the Philosopher," in Deferrari, 1953, p. 73. Further treatment of this matter follows in discussion of uses #42-45.

42 Wagar gives the label "doctrinaire integration" to #15-type uses, whether political or religious motivations serve as the center or source of the integration. W. Warren Wagar, The City of Man (Boston: Houghton-Mifflin, 1963), pp. 112-25. Margenau names this sort of integration "conversion integration," p. 5.


45 Ibid., p. 44.


47 Bolam, p. 160.


51 Heinz Heckhausen, "Discipline and

52 Boisot, pp. 89-97; Wise, pp. 395-98; Bellack, p. 272.


54 "Interdisciplines" is a neologism found in the book edited by Apostel et al. It is repeated here in a reportive way only.

55 Heckhausen, p. 88.

56 Boisot, pp. 94-5.

57 See especially Swoboda and Hausman in Kocklemans; and Darden Lindley and Nancy Maull, "Interfield Theories," Philosophy of Science 44 (March 1977):43-64.


60 Harvard Report, p. 51.


62 Hong, p. 56.

63 Hong, pp. 38-9; see also Rattigan, pp. 74-83.

64 Morse, p. 358.

65 Both at University of Chicago; see Morse, p. 358.

66 See Hong, pp. 56-7,201-46.

67 Mortimer J.D. Adler and Peter Wolff, with a preface by Robert M. Hutchins, A General Introduction to the Great

68 McConnel, p. 9.


73 See Connole's discussion of this identity (p. 4) and also his treatment of correlation (pp. 13-20); Knudsen, p. 25. Also see the NCTE's early major effort in this area, edited by Weeks.


80 Barbour, pp. 566-67; Paolo Manzelli, "Science,


84 Pring, 1976, pp. 103-4.


87 Heckhausen, pp. 87-8; Boisot, pp. 92-4; Piaget,


90 Bellack, pp. 26-72.

91 See Marx, cited above.

92 Heckhausen, p. 88.


94 Hirst and Peters, p. 65.

95 Heckhausen, p. 88.

96 Piaget, p. 136.


98 See also Margenau, p. 6.


This is the Carter and Narramore title though they do not use the phrase unreflectively or naively.


P. 17.


Martin R.P. McGuire, "The Integration of History," in Deferrari, p. 335. Recall from the discussion in Chapter VI that such a conception is not usual for Roman Catholic educators.


APPENDIX B

REQUIREMENTS OF CONCEPTIONS

If integration is as important as this thesis has argued it is, and if "integration" is to remain a part of educational discourse as this thesis has argued it should, then prescriptive criteria are needed to evaluate both curricular-level integrative conceptions and the conceptions of educational integration from which they derive. A prior question to "What conditions must a conception meet to merit the label 'adequate'?" may be in order here, however. That is the question of whether ranking can ever be done at all, in light of the argument (on pages 154-56) that curriculum-level conceptions ultimately flow from world-views. Will not any attempt to name conditions come to grief because world-views themselves must be tested along with the integrative conceptions which derive from them? The best approach to the second question seems to include an attempted answer to the first. That attempted answer follows and is divided into two parts which recognize the "integrative conceptions" and "conceptions of integration" distinction made in Chapter V, Section E. First, criteria for evaluating integrative conceptions are considered. These are followed by
consideration of criteria for evaluating conceptions of educational integration.

A. EVALUATING INTEGRATIVE CONCEPTIONS

What conditions must an integrative conception meet? Conditions for an integrative conception have to do with pedagogical strategies and accomplishments: What must a conception accomplish, take into account or reconcile? Various answers to this question might be given, depending again on what conception of educational integration gives rise to the integrative conception. All the distinctions discussed in Chapter V, Section E come to bear again here. Those distinctions point to the conclusion that integrative conceptions must be evaluated according to the job they are intended to do. As well, since different conceptions are required to do such different kinds of work, the "curriculum as locus," "person as locus," and "interactive definitions" distinction introduced earlier in the thesis (pages 100-107) will be employed again here.

1. Conditions for Curriculum-Focussed Conceptions

One would not expect that a conception meant to provide integration in a Geography unit of five-hours duration would have to meet the same conditions required of a
conception meant to undergird an entire post-secondary liberal arts curriculum. Some conditions will be required in common at all levels, but some additional requirements obtain in the case of broader conceptions. Thinking first of the narrow Geography unit example, at least two conditions come to mind.

First, and almost by definition, the integrative conception must provide a point of meeting or basis of coherence for the various bits of information entailed in the unit itself.[1] This "breadth" or "coherence" condition recalls the idea of organizational bases (from Chapter IV). If there are relevant curriculum materials that ought to but do not "fit in" to the unit because the conception is not sufficiently broad to take them into account, then the conception has failed to meet this condition.[2] Two clauses might be added here, the first to the effect that the conception would enable the student to see at least those connections understood and intended by the teacher. Some educators would stiffen this first condition further by stipulating that the conception must be fruitful in aiding the individual student to generate new ideas and perceive a connectedness among the fields of knowledge consistent with but beyond what the teacher intended.[3]

Besides the somewhat obvious requirement that a conception offer coherence to the facts within a curricular unit, a second requirement is necessary. The conception must
provide a means by which the information in the unit (of whatever breadth) can fit into the wider curriculum. One writer calls this the "external consistency" condition. "External consistency" entails that

. . . a unit must be clearly related to the goals for the course of which it is a part (or courses for interdisciplinary units). In turn, these must in some way further the overall curriculum goals. Finally, such curriculum goals must be rooted in a well-defined world view. If this is not done, the curriculum becomes a hodgepodge of units that have no "integrality," that may or may not promote the overall goals of the school—by accident rather than by design.[4]

Van Brummelin’s point recalls directly those criticisms reviewed in the first chapter, the main point of which was that there is no longer any glue holding the curriculum together. His point also implies quite clearly the direction of influence and control portrayed in Diagram 5.1 between conceptions of integration and integrative conceptions.[5]

The breadth and consistency conditions named thus far are similar to the degree that they both entail that an integrative conception facilitate integration among various bits of knowledge. The next condition that will be named is of a different kind, but is derived from the same type of curriculum-focussed conception of educational integration as these first two conditions.

At the same time that the basis for integration must possess both breadth and consistency, it must not be unwieldy. An integrative conception meant to operate at the curricular
level must be limited in the number of propositions or
concepts it contains. Both students and teachers would
likely encounter difficulty picking their way among the forms
of knowledge with an integrative conception that failed to
achieve conceptual economy. Thus, breadth and consistency are
tempered by a concern for parsimony. Stating this condition
does not imply that knowledge or curriculum are simple
matters. It does imply that the schemes intended to foster
integration within the world of knowledge and curriculum ought
not to be so complicated that they cannot be comprehended.

These three conditions all derive from and are
consistent with those conceptions which take curriculum to be
the locus of integration. Another type of conception (at
the middle level of Diagram 5.1) operates with students as the
locus of integration. It is to integrative conceptions
deriving from those conceptions of educational integration
that this Appendix now turns its attention.

2. Conditions for Student-Focussed Conceptions

Those educators who view students as the locus of
integration may be classified into the two-fold division
introduced earlier: pedagogy focussed and mental-health
focussed. A number of conditions might be listed which can be
used to judge those integrative conceptions appealing to each
of these two groups of educators.
Turning first to the pedagogy-focussed group, one wants to introduce what is perhaps the most obvious requirement: that students be able to make what is taught part of their own body of knowledge. Besides paying respect to the psychological aspects of integration discussed in Chapter V, this "pedagogical condition" addresses that element of integration frequently missing from proposals that attend to psychological matters: integrative conceptions must facilitate "connection-making" between the various forms of knowledge. Thus, this condition involves more than the required provision of a structure to facilitate learning. It also requires the provision of cues so that students are able to integrate that which they are learning both vertically and horizontally (as those terms are normally used).

This psychological or pedagogical condition is tightly related to the conditions of breadth and parsimony named above. If an excessive number of facts are unable to cohere around the integrative conception (that is: the first condition is not met), the resulting dissonance within students will also reduce the probability that the pedagogical condition will be met. On the other hand, if the material which constitutes any curriculum or part thereof is not presented in sound fashion (that is: the pedagogical condition is not met) then there is less likelihood that students will even recognize possible epistemological inadequacies in the
materials. The breadth and parsimony conditions will not even come to bear. Few educators would contest the inclusion of this pedagogical condition. In fact, some imply as much in connection with such concepts as "education," "teaching," and "learning," a fact that indicates something about why "integration" has achieved slogan status, and why "the integration of faith and learning" is so popular in Christian and theological education.

At least one condition comes to mind that relates to the mental-health focus of some educators. While it is not clear that what follows is really separate from and not just a higher degree of "practical integration," some suggest that all that one learns in any curriculum must be related to, through, and at the level of a world-view or Weltanschauung. White seems to imply this level of integration when he writes in *Towards a Compulsory Curriculum* that the student

... must, therefore, come to see that his understanding of different activities is intended to widen his options, to give him the material for his choices, and that his insight into different ways of life is intended to give him patterns of organizing this material, patterns from which he may select his own way of life, of which, if he rejects them all, at least will make him aware of the need to adopt a way of life and help to construct his own—is intended, in short, to acquaint him with the form without which the mere material makes no sense.

If the student lacks that form without which the material makes no sense, or if the student has adopted a form inadequate for the material at hand, then cognitive
dissonance, which might be viewed as a mild form of mental illness, is likely to follow. Epistemology is related to mental health, and whether educators do or do not see curing as their job, mental stability is somewhat contingent upon the student's ability to reconcile what he is learning with what he believes and knows already. The "mental health" condition for an integrative conception then is this: the material and the presentation of the material must be reconcilable within the student's present perspective or world-view. And one wants to add immediately that where conflicts occur in this reconciliation process, the student must be assisted in resolving the conflicts. This condition, like the "practical integration" condition to which it is closely and obviously related, is manifestly an ethical condition not all would accept, and not one necessarily entailed in the concept of educational integration itself or in integrative conceptions that might flow from that concept.

3. Conditions for Interactive Conceptions

The difficulties caused by the separation of curriculum and students in discussing educational integration become more evident as one tries to specify conditions that apply purely to one or the other kind of integrative conception. Educational integration involves both students and curriculum (so pp. 100-107, 129-38), and "interactive"
conceptions are the most likely to work in actual educational situations. The following conditions were named in the foregoing sections:

- Curriculum-focussed conceptions
  - coherence or "breadth" condition
  - "external consistency" condition
  - condition of conceptual parsimony
- Student-focussed conceptions
  - "pedagogical" condition
  - "mental-health" condition

One wants to suggest that since interactive conceptions recognize the importance of both curriculum and students, that all these (above-named) conditions apply to interactive conceptions as well.

At least one additional condition not implied thus far comes to mind that applies to those conceptions meant to address both epistemological and psychological aspects of education. Integration entails that all school-acquired knowledge fit not only into students' acquired stock of knowledge of cognitive framework, but that it also fit into their larger life pattern. Students must see their newly-gained knowledge of, say, Geography, bears, even if only in a minor way, on all they think and do. Their values and actions must reflect this new knowledge, or the question may rightly be asked whether it is, in fact, "knowledge" and not just
inert information. This condition might appropriately be called the "action condition."[10] Some also call it "practical integration," and, as such, it is widely, though certainly not universally, accepted as a necessity in education. One wants to note that the claim that knowledge ought to result in certain kinds of action is an ethical claim. More clearly than the first three conditions for integrative conceptions already named, this condition is a normative condition which is not implied necessarily in the concept of educational integration. Peters may be demonstrating his acceptance of this very aspect when he introduces his concept of "commitment" and "cognitive perspective" in *Ethics and Education*. Regarding the first, he writes that education involves "the kind of commitment that comes from being on the inside of a form of thought and awareness." Peters expands what the commitment entails:

A man cannot really understand what it is to think scientifically unless he not only knows that evidence must be found for assumptions, but knows also what counts as evidence and cares that it should be found. In forms of thought where proof is possible, cogency, simplicity and elegance must be felt to matter. And what would historical or philosophical thought amount to if there was not concern about relevance, consistency, or coherence? All forms of thought and awareness have their own internal standards of appraisal. To be on the inside of them is both to understand and to care. Without such commitment they lose their point. I do not think that we would call a person 'educated' whose knowledge was purely external and inert in this way.[11]

Peters offers a second element which bears on the practical
integration condition, when he continues in Ethics and
Education with his discussion of cognitive perspective.

The account of the cognitive requirements of 'being
educated' is still, however, incomplete. For a man
might be a very highly trained scientist; yet we
might refuse to call him an educated man. This
would not be because there is nothing worth while
about science; for it is a supreme example of a
worth-while activity. It would not be because such
a man cares nothing about it and has no grasp of its
principles; for the hypothesis is that he is
dedicated to it and has got a good grounding of
principles. What then is lacking which might make
us withhold the description of being 'educated' from
such a man? It is surely a lack of what might be
called 'cognitive perspective.' The man could have
a very limited conception of what he is doing. He
could work away at science without seeing its
connection with much else, its place in a coherent
pattern of life. For him it is an activity which is
cognitively adrift.[12]

Both these requirements which Peters wants built into the
cancept of "education" are attractive here as requirements for
that class of integrative conceptions that attempts to attend
both to students and to curriculum. What Peters prescribes
goes beyond the mental-health condition already discussed.
The mental-health condition required that an integrative
conception aid the student in fitting his knowledge into those
things he already knew and took to be true. Following Peters,
this new condition is a stipulation that the student be
committed to those things he is learning and that he apply his
knowledge in his everyday life. None would object that
education ought not to be related to life; the point here is
that those curricular level conceptions intended to foster
integration must, *ipso facto*, foster the kind of commitment that Peters is requiring in "education."

4. A Review of the Conditions for Integrative Conceptions

All the conditions named thus far might be reduced to two overarching requirements: any integrative conception must attend to the nature of knowledge and aid in the integration of that knowledge; any integrative conception must aid the students in learning and making what they learn part of their own consciousness; without injury to mental health. The parallel between these two overarching requirements and the familiar "logical and psychological aspects of teaching" is not incidental. Educational integration requires both.

With these criteria in hand, one is more fully in a position to rank curriculum-level integrative conceptions in the way Rawls spoke of ranking conceptions or theories of justice. If various conceptions and the curricula based upon them are meant to bring about integrative (educational) ends, and not all competing conceptions can be implemented, then one wants to be able to differentiate the useful conceptions from those which should be rejected. Evaluation in the larger arena of educational outcomes is part of that differentiation.

Evaluation of conceptions at this level must also be done, at least in part, with reference to the conceptions of educational integration in which they find their root. In
light of this apparent necessity, the discussion now moves to consider conceptions of educational integration and how one might go about ranking them.

B. EVALUATING CONCEPTIONS OF EDUCATIONAL INTEGRATION

As one moves from setting out criteria by which to judge curriculum-level conceptions to setting out criteria for evaluating more foundational-level conceptions (to refer to Diagram 5.1 again), one needs to be aware of a number of things:

- the possibility of becoming trapped in an infinite regress in which every level of conception must be evaluated with reference to other, lower, more foundational levels.
- the question that was raised on page 289 as to whether integrative conceptions can actually be ranked at all.
- the great variety of conceptions of educational integration that exists, including . . .
  - Curricula as the locus of integration, including:
    fusion
    incorporation
    correlation
    dialogical
  - Students as the locus of integration, including:
pedagogy focussed
mental-health focussed

- Interactive conceptions
  (which attempt to recognize both aspects)
- the fact that this variety of conceptions at more foundational levels will engender similar variety at the curricular level.

The short response to these concerns is reassuring: both levels of conceptions can be ranked; the possible regressive entrapment is avoidable; the variety of conceptions is not necessarily problematic.

To the extent that Diagram 5.1 accurately illustrates how conceptions at one level derive from conceptions at another level, those conceptions intended to foster educational integration (within either curriculum or students) may be measured against their own theoretical sources (whether, psychological, epistemological, or pedagogical). But this relationship works in two directions, and it is the other direction of the relationship that eliminates some of the concerns listed above. If one attempts to rank foundational-level conceptions of educational integration one either is pulled into the regress mentioned above (ultimately resulting in arguments about metaphysics), or one sees that conceptions of educational integration must be

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evaluated by some other means.

Some salient features of the first possibility (the negative one) are illustrated by the following example. Unity, coherence, or "integration" may occur in educational programs based on the shakiest of foundations. Clearly, those involved in church-ministerial training and those carrying out Lenin's exhortation to promote Marxist revolution through education are at cross purposes, and will appraise each other's philosophical underpinnings as being the shakiest possible. Yet, integration may occur in either of the programs mentioned. Moving from the philosophical, foundational level (world-view level) to curriculum-level integrative conceptions which derive from it clearly does not help much in determining the worth of conceptions of integration and educational integration at that foundational level. Apparently, another means of evaluating conceptions is necessary.

Such a means is available by which to evaluate integrative conceptions; exploring it moves the discussion to the the second (fruitful) possibility suggested above. Inasmuch as the conceptions in question are educational conceptions—they are intended to describe educational ends (and means)—their efficacy can be judged according to their success in fostering those
educational ends. For any conception which has been implemented in a curriculum, those wanting to judge need to ask such questions as these:

- "Did the students see the unity within the unit?"
- "Were the connections between the unit and the rest of the curriculum evident?"
- "Were students encouraged by the conception to strike out on their own in other directions?"
- "Was the conception easy to grasp so that students were able to concentrate on the ideas touched by the conception, rather than on the conception itself?"
- "Were the students helped by the conception to make the contents of that curriculum unit part of their own stock of knowledge?"

In other words, like integrative conceptions, conceptions of educational integration are to be evaluated by the rather simple yardstick of whether or not they bring about learning. Thus the conditions elaborated in the previous pages for curriculum-level conceptions ultimately constitute the conditions, vis a vis education, for conceptions at all more foundational levels as well.

Thus, one concludes that rather than evaluating conceptions of educational integration by making reference to ever-more-basic foundational levels, one
must look the other direction and evaluate the curriculum-level integrative conceptions deriving from them. To make reference to Diagram 5.1 again, three levels were distinguished.

<table>
<thead>
<tr>
<th>Curricular</th>
<th>Integrative Conceptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundational [1]</td>
<td>Conceptions of Educational Integration</td>
</tr>
<tr>
<td>Foundational [2]</td>
<td>Conceptions of Integration Conceptions of Integration (related to world-views)</td>
</tr>
</tbody>
</table>

Diagram B-1

Ranking conceptions at the Foundational[1] level is thus done with reference upwards into the curriculum and outcomes level (evaluating for efficacy) rather than downwards into the world-view level (evaluating for consistency [which one expects to find] or, ultimately, the "correctness" of a world-view [which in one important sense, does not matter]).

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1. Hong labels this "organic integration" (p. 3); Margenau calls it "unity of understanding" (p. v).

2. The key word here is "relevant." Naturally, an adequate conception will exclude some facts from a curriculum unit. Additionally, some things taken as facts, or "knowledge" turn out to be mere beliefs; some
beliefs will be barred from curricula by certain conceptions.

3 Some might suggest that these clauses being attached to the first condition are actually more closely related to the pedagogical condition added later. That this is so indicates the kinds of problems which follow any division or schematization of conditions for conceptions.

4 Van Brummelin, p. 17.

5 Diagram 5.1 noted that integrative conceptions ultimately derive from world-views. This derivation has not gone unnoticed in the literature. Van Brummelin wants to see curriculum "rooted in a well-defined world-view, in the absence of which, a hodge-podge will result." This conclusion is consistent with the criticisms surveyed in Chapter I. For example, Rattigan attributes disunity in education to a lack of agreement on "the nature and destiny of man" (p. 165). Gordon Clark argues that the "fundamental factor determining the building of a curriculum is the choice of a criterion . . . [which can be done] only on the basis of a world view that defines the aim of education" (pp. 138-39), A Christian Philosophy of Education (Grand Rapids: Eerdmans, 1946).

6 This principle of economy is commonly known as Ockham's razor.

7 The separation of curriculum from people necessary to name these conditions points to one of the weaknesses of any definition of "integration" that restricts its locus to curriculum, while ignoring students.

8 "Few" is not just a manner of speaking. Most educators do agree on this point.

9 P. 50.


11 Ethics, p. 31. Others who address this same
commitment mentioned by Peters include Lockerbie, (p. 26) and Aubrey (p. 47)