

January 1977

## Is Curriculum Integration Like Miscegenation?

John H. Chambers

*Tasmanian College of Advanced Education*

Follow this and additional works at: <https://ro.ecu.edu.au/ajte>



Part of the [Curriculum and Instruction Commons](#)

---

### Recommended Citation

Chambers, J. H. (1977). Is Curriculum Integration Like Miscegenation?. *Australian Journal of Teacher Education*, 2(1).

<http://dx.doi.org/10.14221/ajte.1977v2n1.4>

This Journal Article is posted at Research Online.  
<https://ro.ecu.edu.au/ajte/vol2/iss1/4>

# Is Curriculum Integration Like Miscegenation ?

by

John H. Chambers

Tasmanian College of Advanced Education

At my last college in London, it was the practice for students to study one subject for general educational purposes for three years and a second subject for two years, this latter subject also having some connection with subjects taught in the schools. One day at a staff meeting the deputy principal argued that some secondary schools in London were already engaged in inter-disciplinary and 'integrated' studies, that our college should not only be preparing students for the actual world of schools but should be leading in new ideas, and that therefore the college should be teaching 'integrated' material to its students. His suggestion was that one of the two-year subjects we offered should be of an 'integrated' nature; to be called European Studies, it would enable us to draw upon the discipline-knowledge and the staff that the college already possessed. The historians could teach European history, the philosophers European philosophy, the literature lecturers European literature, the geographers European geography, the artists European art, and so on and so on. We would, he thought, be getting the best of all possible worlds. His suggestion was enthusiastically received and duly got underway despite the reservations expressed from certain quarters. There were four-week units on European history, European literature, European art . . . . At term's end there were distinct rumblings of discontent from the students, and the staff involved were having misgivings. Prior to a meeting to review the progress of the course, I asked some of the students about their feelings and received answers of the sort, "We get a bite of the cherry and they take it from our mouths", "The work is too superficial", "What's the real point of the course?" In truth, there was a great deal of discontent and muddle, and in the middle of the muddle the deputy left for a position at one of Britain's ancient universities, while the staff struggled to give life to his premature infant.

The moral of the story is, I suppose, that an important idea is liable to be ruined by superficial understanding and misdirected enthusiasm. After all, *what* was being 'integrated' in that European Studies course? Was there inter-disciplinary (I-D for short) study going on? In what sense was the study *inter*-disciplinary? Is 'Europe' a unifying concept that has its meaning and significance written on its face? What was there in *common* among the different parts of the course? In what epistemologically-useful way is a continent by itself a unifying feature that provides meaning? The fault with this particular European Studies course was that it was never made clear either what was being 'integrated' or brought together in an I-D way with what possible results, or what

was the educational point of it all. Had such issues been examined, I assume that the course would have been approached in a rather different way.

In this article I want to ask and to try to answer the question, 'In the organization of the school curriculum, what do the words 'integration' and 'inter-disciplinary' *mean*?' and to examine certain fundamental epistemological issues in doing so. My answer will be quite tentative and sketchy; I see it as merely the sort of initial move that must be made if this very important area of curriculum concern is to be even superficially understood. There may well be some even more epistemologically-fundamental answers that also need to be sought, but what I have to say is, I believe, pointing at least in the right direction.

Let me emphasize that I am talking about curriculum integration in the school, i.e. about the content of courses, about the variety of learning planned for children to acquire in the schools, not about methods used in teaching or learning the content. (I'm not suggesting that the methods used have no effect on the learning acquired. Of course there is an effect. But if we are to be quite clear about what ought to go on in schools then we must be fully aware of the conceptual distinction between the learning that is to be acquired i.e. the curriculum, and the methods by which that learning is brought about.) Nothing at all about so-called traditional or progressive methods of teaching follows from what I say here. In this sense of curriculum, traditional and progressive methods are equally possible with any sort of curriculum. And connections between methods and content will be logically contingent. Neither am I talking about some kind of integrated problem-solving approach to working at the content of the curriculum on the lines for instance of John Dewey's omniscient model (Dewey, 1938). Furthermore, I am not talking about the time organization of the school day. The term, 'integrated day' is sometimes used to describe a flexibility of time organization, but I am not discussing that here; so-called integrated days are equally possible with any sort of curriculum. And I am not talking about the integrated understanding that a child may acquire as a result of studying the various types of knowledge that feature on a curriculum.

The term, 'I-D', despite its obvious complexity has some meaning. I understand it as bringing together different disciplines (see next paragraph) to focus on a topic of interest or to help solve a problem. In the I-D parts of a curriculum various disciplines will be used to try to solve a problem or to throw light upon a topic of interest. An I-D problem will be a problem that requires an answer in the world of practical application, and that requires more than one discipline to be brought to bear to solve it; an I-D topic will be a topic of some intrinsic interest that requires more than one discipline to understand it. Typical I-D problems will be town planning, bridge building, educating children — indeed in educating children there will be an unlimited number of problems whose solution can only be achieved (to the extent that they can) through an I-D approach. Typical I-D topics would include pollution, poverty, the environment and war.

By the term 'discipline' I mean a well-established, relatively discrete subject with a recognizable conceptual scheme, a particular pattern of enquiry and an accepted name. It is probably best to define a discipline denotatively, by suggesting that history, literature, botany, psychology, philosophy (or a sub-division of these, e.g. British history, Australian literature, marine botany, Freudian psychology, philosophy of mind) as studied in CAEs and universities are disciplines. A discipline will usually be a branch of a form of knowledge (see below), but may also in a complex way draw upon more than one form of knowledge. The ways in which the concepts 'subject', 'discipline' and 'form of knowledge' are inter-related is of course itself an interesting question into which it is not possible to look in this article, except to say that the word 'subject' may be merely a useful and general name for any area of the curriculum bounded for the purpose of convenient study, and that subjects that feature on school curricula may or may not be disciplines in the above sense and are usually not co-extensive with a form of knowledge as described below; for instance, the subject mathematics, as usually taught in a school, may involve aspects of historical or scientific study. It is not *merely* a mathematical study in either a discipline sense or form-of-knowledge sense. It will be seen that I am in no way suggesting that a discipline is a logically-fundamental division of knowledge. Nevertheless it is clear that we do have paradigms of disciplines, for example, botany or history as studied in CAEs and universities, and it is these paradigms that will provide the meaning for the word, 'discipline' as used in the term, 'I-D' in this article.

In I-D work, the nature of the claims and statements from the disciplines will remain the same in the suggested solution to the problem or in the attainment of understanding of a topic, so that an analysis of any conclusions reached or points of view held after an I-D study will show various disciplinary facts and assertions meshed or woven in some way, but still retaining their original character. For instance, the finished town plan will be a complex mixture of statistics, economic claims, artistic value judgements, moralizing at various levels of sophistication, claims about historic worth of buildings, scientific statements of a physical, botanical, biological, geological sort, and so on. The recent report on post-secondary education in Tasmania (Karmel, 1976) was an I-D study, consisting of claims about educational worth, economic assessments, assumptions and generalizations, statistical tables of population distribution and growth, statistical projections, sociological evidence, hypotheses and arguments, and psychological assumptions. (I assume that statements about educational worth are themselves mixed and I-D, being complex meshes of philosophical, psychological, moral, sociological etc. considerations; so we have I-D work in at least two levels in education reports, which is just one cause of their contentious and equivocal nature). If the Karmel report were set for study as part of a curriculum, what would be encountered by a student would be various sociological/historical facts, economic generalizations, and so on. For instance a student may claim to have learned that between 1966 and

1971 Tasmania experienced a net migration which was most pronounced in the fifteen to twenty-four year age group (Karmel, 3.10), and that small tertiary institutions are expensive to run (Karmel, 6.1). i.e. the student would have learned many things, *but things generally locatable within disciplines*. I-D work and curriculum then, is complex and difficult, but at least something of the conceptual basis and structure contributed by the various disciplines can be understood. And to the extent that we can understand the contributory disciplines, to that extent we have some possibility of understanding an I-D approach. To the extent that we can understand such things as the economic assessments and assumptions, the education value judgments, the statistical projections in the Karmel Report on Tasmanian tertiary education, to that extent can we *follow* the evidence and understand the recommendations. The logic of the *connections* between the evidence and the recommendations may of course be a further matter but I cannot discuss that here.

Can the same sort of claim just made for I-D work be made for integration?

It certainly sounds as though whatever it is that is 'integrated' is more permanently mixed or meshed than whatever is achieved in an I-D fashion. But what *is* being 'integrated' in a so-called 'integrated study' or 'integrated curriculum'? I can understand what things are being integrated when mathematicians use integration in the calculus; many small movements become a large movement, many infinitesimal changes in position become a curve, and so on. I can understand what has gone on before a bomb *dis*-integrates; a steel casing is made to surround a set of chemicals of a potentially explosive combination. I can understand what is meant by racial integration; South Africa's Cape coloureds provide a good instance. There, miscegenation between slaves, Hottentots, early white inhabitants of the Cape, and sailors on the town in Capetown has produced a unique racial mixture, or has achieved racial integration. The opposite of racial integration is presumably South Africa's present Apartheid policy where races are segregated rather than integrated.

In these sorts of contexts I can understand what is meant by the word, 'integration', and what things are being integrated. I can also understand something about the resulting product; a curve, a bomb, a new racial type. But just what is to be made of the suggestions about curriculum 'integration'? Equivalent to the small movements, the infinitesimal changes, the steel and chemicals, the different racial types, there will be various pieces of knowledge drawn from the various disciplines such as botany or history. But in place of the large movement, the curve, the bomb, the new racial type, what is there supposed to be? A new knowledge acquired, a new unity of learning, a new discipline?

In short, *What is the epistemological thesis underlying talk about curriculum integration?* Can we, logically can we, provide children with new sorts of knowledge and understanding through doing something called 'integration' in the curriculum? Or do we in fact have precisely the same sort of result as we have when we approach the school's

curriculum problems and topics in what we say is an I-D curriculum? Do we in short have in schools the acquisition of the same learning and end-products as we have with I-D work or curriculum, but we give it a new and fancier name, 'integration' or 'integrated curriculum'? Here it may be important to note that I am referring only to what goes on in schools under the name, 'integration'. I am not referring to curriculum pursuits and learning acquired in the more rarefied reaches of academic work where something that perhaps may sensibly be called 'integration' is occurring, where new subjects with a fair degree of rigour may be emerging. For instance, environmental science, which attempts to describe the laws governing the interaction of the biological and the physical environments and which deals with the contact area between biology and chemistry, perhaps appropriately *may* be called an integrated study. Therefore that part of the curriculum of a college in which it occurs may be called an integrated curriculum. But I think it is manifest that this is not the sort of thing that goes on in schools: the subject that goes under that name in schools being merely a mesh of separate scientific disciplines (see below).

Perhaps the issues can be made a little clearer through an examination of the nature of knowledge types. This is a vast project so a quick analysis or resume will be liable to indulge in over-simplification and misinterpretation. Nevertheless, I think that some brief examination of the nature of knowledge types is necessary if there is to be even a minimal understanding of the concepts of 'I-D' and 'integration' in the school curriculum. Probably the two best known and most widely canvassed epistemological schemes in school curriculum theory are those of Phenix (1964) and Hirst (1965, 1966, 1970, 1974). There seem to me to be certain logical flaws in Phenix's analysis which rule it out (see Hirst, 1974, 57), and in what follows I shall be assuming that Hirst's approach is approximately on the right lines.

Hirst's thesis can be put quite succinctly in the claim that all human knowledge and understanding can on analysis be reduced to a number of discrete and mutually-irreducible types, distinguishable on the basis of concepts unique to them and of tests for the truth of propositions within them. Hirst nominates seven such basic forms (basic in the sense that they are what our conceptual understanding makes clear *now*, not basic in the sense that there can never be further forms evolved). They are pure mathematics and logic, science, knowledge of minds, moral knowledge, aesthetic knowledge, religion, philosophy. What appear to be further sorts of knowledge will then be, according to Hirst, complex mixtures of these fundamental types, and all human knowledge and understanding will necessarily presuppose such basic types, as will all human enquiry that goes in search of knowledge and understanding.

Hirst is not referring only to organised or disciplined knowledge; the thesis applies to knowledge of everyday affairs and commonsense knowledge. After all, any item of knowledge, whatever its level of sophistication or abstraction, must involve a conceptual structure of some sort

and it will be this conceptual structure and the truth criterion for making claims about it that give it its special quality. Everyday and commonsense knowledge will therefore also have the features Hirst indicates. It is just because we accept commonsense knowledge so easily and without question that makes it seem different in type from the knowledge contained in Hirst's seemingly more abstruse and academic forms. But the taking of commonsense knowledge for granted does not make it any different; nor does its unorganised appearance, since any particular aspect or proposition will still lie within a form. Quite esoteric and abstruse claims of science can become as though they were commonsense for the researcher at the fringes of his discipline, and can be taken just as much for granted by him as things assumed true by the first year infant school child. Five year old Johnny may say that the red stone is hard and the white rubber is soft, while Professor Herbert Dingle (1972) may argue that Einstein 'got some of his sums wrong' in the theory of special relativity, but they are both making claims about the empirical world and to that extent they are in the realms of natural science. A distinguished philosopher of science has put the connection between everyday knowledge and disciplined knowledge in this way: "A study of the working of science must begin with a study of the language of description and explanation. We must begin with the logically simplest kinds of descriptions and explanations — those we formulate in everyday language to deal with everyday situations. "(Harré, 1960, p.7.) Similar claims about a continuum between everyday knowledge and more sophisticated knowledge can be made with respect to the knowledge of the other forms. In view of the usual claim that infants' teachers are not concerned with the disciplines, it is revealing to look at what goes on in an infant school class in these terms: when they are manipulating Dienes rods children are working within the form, mathematics; when watching a plant grow from a seed in wet cottonwool, or when engaging in sand and water play they are beginning to develop scientific understanding; when watching a friend at play to try to decide his intentions, or when making a decision of his own, a child is beginning to have knowledge of minds; when learning to take turns, children are in the moral realm; when they act out a nursery rhyme or paint a poster colour picture they are squarely within the aesthetic area; and when they say a prayer at morning assembly they are engaging in at least some sort of religious exercise. The children themselves will not make such distinctions explicit of course, and perhaps neither will the teachers. Nevertheless the children will be working within these forms of knowledge.

Hirst's analysis, while doubtlessly questionable as to some details, makes a good case for the existence of a number of irreducibly distinct forms of knowledge, and the disciplines as usually understood such as botany and history, will be either branches of a form (botany is a branch of science) or else complex mixes of two or more forms (history is a mix of knowledge of minds and of science, as outlined below). By saying, 'questionable as to some details', I mean that we can ask questions about the nature of the truth criterion for our knowledge of minds, and about

whether works of art make artistic statements that are analogous, say, to scientific statements. I do not mean that the thesis can be questioned in the way some writers in the sociology of knowledge have somewhat simplistically questioned it by saying that all knowledge is culture-relative. Learning in an I-D curriculum brings these disciplines to a focus on a problem or topic of interest. Hirst's analysis has been outlined in an attempt to answer the question, "Do we in short have in schools the same learning from the same sort of curriculum as with I-D work, but we give it the new and fancier name, 'integration'?" Now if the term, 'integration' in 'integrated studies' or 'integrated curriculum' had a meaning in a school curriculum distinct from the meaning that can be attached to the term, 'I-D', such meaning would have to attach to the *new unity* of the learning that was to be derived or achieved. This new unity would be analogous to the new unity produced from disparate racial types through miscegenation, or to the unified curve that integration produces from small movements in the calculus. I suggest that there is no such analogy in the curriculum of the school student. Of course it is not fundamentally important whether we use one name or two for the learning that is acquired in an I-D curriculum. What is important is that we should be aware of the epistemological foundations of the things we teach in schools, so that we can have a proper basis for decisions we make about what learning should feature in a school's curriculum. But names can lead us astray in our expectations and in our beliefs about the foundations, and more importantly perhaps, in our beliefs about the possible curriculum arrangements that we can make. I suggest that the term, 'integration' leads us astray in just these ways. This is why I want to use only the term, 'I-D' and to drop the term 'integration' from school curriculum discussions, with perhaps the possible exception of a special use suggested below.

Hirst's thesis has further important implications for the curriculum, that must be discussed at this point. A number of advocates of curriculum integration believe that any curriculum organization is as acceptable as any other, but Hirst's thesis would seem to give the lie to such a claim. His thesis indicates that it is not possible to reconstruct the curriculum just as anyone likes, because the nature of the fundamentals of the knowledge that is to be acquired are in a sense, given, and cannot be disregarded if we are to be concerned with the acquisition of *knowledge* rather than with indulgence in fancy or irrationality. "All knowledge occurs within some logical structure which is what it is. There simply is no such thing as knowledge which is not locatable within some such organisation." (Hirst, 1974, p.135). The term 'knowledge' in the present discussion is akin to 'justified true belief', knowledge being connected with objectivity, truth and reason. For example, someone possesses knowledge when he says that the earth is spherical. He knows that the earth is spherical and we can all agree that he is in possession of knowledge, not because any particular person has said so, but because it is so, because it can be shown so by a myriad of mutually-supporting experiments tied to the world of experience. The 'flat-earth'ers' just are wrong. Their flat-earth thesis can be sustained only through the introduction of the most preposterous auxiliary

hypotheses such as, 'the higher our altitude, the stronger our eyesight'; hypotheses that can quickly be shown, to anyone interested in truth, objectivity and reason, to be false. I introduced this example of knowledge because I said that it is not possible to reconstruct the curriculum just as we like, if we are in fact concerned with knowledge. The fact that the earth is spherical is not an isolated fact, but one that interrelates with a host of other empirical truths that fall within the fundamental form, science. Thus to know that the earth is spherical is to know something that is fundamental to a rational understanding of one's place in the universe. And in Hirst's analysis all knowledge is so traceable to its place within one of the fundamental forms.

We have several fundamental forms because, in order to deal with the real world, conceptual structures have had to be separated out alongside the truth tests that both support the structure and help inform the structure. When we re-organize the curriculum; if we are indeed concerned with knowledge, we merely reorganize the ways in which the fundamental structures are acquired; we delude ourselves if we believe otherwise. And I take it that we must be concerned with knowledge because knowledge is so fundamental in human activity; knowledge is essential for a properly-grounded understanding of our situation in the world, but not just any sort of knowledge: knowledge rather of the fundamental types that structure our understanding and upon which we necessarily draw day by day. After all, even the affective areas of human endeavour have their knowledge core. So an attack on the structure of the curriculum may be completely acceptable, but will have certain epistemological limits. An attack on the knowledge foundations that underpin any curriculum will be misplaced. Some curriculum theorists have mistakenly thought that the first is possible only by way of the second (Hirst, 1974, p.139).

None of the 'integrated' approaches to the school curriculum has achieved a new unity of knowledge. All they appear to have produced is a new mesh or aggregation drawn ultimately from various branches of the different forms of knowledge, new meshes or aggregations that are certainly I-D, but only I-D. Advocates of 'integration' see these same meshes or aggregations as 'integration' only because they have not examined the epistemological presuppositions of their position sufficiently — what it would be for knowledge to be integrated.

Of course I am not suggesting that one form of knowledge never *makes use of* another form. Of course it does. Indeed one form may be logically necessary for progress in another form. But to be logically necessary is not to be logically sufficient. It may be that no serious progress in physical science could have occurred without an appropriate development in mathematics, but that does not mean that scientific knowledge and understanding is reducible to mathematics. Phenix makes this point when he writes that he

... decisive difference is that in empirical science the deductions must finally be checked against observations. In mathematics the only requirement is internal consistency within any given theory. In empirical

science the chain of propositions must also be consistent with the results of actual physical measurements. (1964, p.102).

For instance the physicist may 'idealize' a mechanical problem by putting it into purely mathematical terms. The 'idealized' problem can then yield a solution. But the solution must then be verified by experiments in physics. Again, it may well be that we cannot draw moral conclusions or make moral judgments without reference to various scientific facts about the world, but this does not turn our moral judgment into a scientific one. These kinds of interrelationships between our knowledge of different forms are manifest and multitudinous, but they are not evidence for any supposed 'integrationist' thesis about the school curriculum. The conceptual scheme and the truth criteria are peculiar to the one form of knowledge alone, whatever use we may make of knowledge drawn from the other forms.

Having outlined Hirst's thesis, it will be clear that such a subject as environmental science, mentioned earlier, while no doubt new, and while providing something of a new unity, is still within the overall form of science. It does not overlap forms of knowledge. It may well be that such new areas are necessary if we are to continue to have developments in our knowledge — progress would clearly seem to be possible at the interfaces between branches of a form. Thus new subjects may be breaking down the distinctions between subjects and disciplines, but they are not breaking down the distinctions between forms; we are getting new sub-forms, not new forms or 'integrations' across forms. And what is apposite to the present article is that none of this applies to the work done in a school curriculum.

If the use of the term 'integration' were to mean the use of scientific facts to make moral judgements, the use of mathematical tools in drawing scientific conclusions, and so on, then there would be a meaning for the term 'integration', but equally there would be nothing new, nothing that we have not had in the most 'traditional', 'conservative', 'subject-centred' curriculum. In other words when meaningfully used, the term would not be doing the sort of work it was presumably introduced by curriculum theorists to do. Furthermore, it would be confusing since it could then be claimed that the same school curriculum was *both* subject-centred and 'integrated'.

There is perhaps a way in which the term, 'integration' can be given another, quite meaningful use at the level of school curriculum talk. It might be suggested that it be used when reference is being made to some of those studies that are already well-established in schools but which are not as logically-basic as Hirst's seven forms of knowledge or the subdivisions within these forms, and which were referred to above as "well-established and I—D". Hirst calls these sort of studies *fields of knowledge* and *practical theories of knowledge* (Hirst, 1965, 1966). Fields of knowledge are grouped around some common interest or topic, while practical theories of knowledge have the additional unifying purpose of a practical concern. 'Our Neighbourhood', 'Modern European Man',

'Pollution', geography and history are fields; medicine, home economics and educational theory are practical theories. My suggestion is that we perhaps call the well-established fields such as history and geography, 'integrated studies' rather than just I—D studies. Such subjects have a long tradition of maintained study, well-established disciplinary names, and the man in the street has some notion of what they are, but they are different in logical type from forms or divisions of forms; they are not as logically-basic. The term, 'integration' may be appropriate in their case because they are meaningful wholes unified around the 'methodological' concepts of time and space: of happening through time and of organization across space. This is not to say that history and geography are logical wholes in the way that a form of knowledge or a branch of a form is a logical whole. It is to say that the 'methodological' foundations connected with the development over time and organization through space bring together the more fundamental material deriving from the forms of knowledge, and of which history and geography consist, into a meaningful 'psychological' whole or unity.

That a study such as history can perhaps be regarded meaningfully as an integrated study because a 'psychological' whole, can be shown by briefly analyzing its features. History studies historical events. Historical events take place across periods of time. Historical events include the Battle of Actium, life on the Ballarat goldfields, Mohammad's Hegira, Galileo's scientific experiments, World War I. Broad or narrow, these are historical events to be explained in an historical way. Historians describe, explain, interpret and relate events one to another, attempting to see them as wholes and to outline the circumstances and causes surrounding, and the reasons for actions taken by human beings in the past. In history, the individual pieces are important for their own sake as objects of knowledge also. The historian is distinguished from other scholars not only because he is interested in happenings through time, but also because of the emphasis he places upon the role of *individual* motives, actions, accomplishments, failures and contingencies. It is these that give historical events their 'inside'. It is these that make history different from a mere empirical or scientific study and give it the dimension that in Hirst's terms lies within the form, knowledge of minds. Historians, whenever it is appropriate, give explanations in terms of motives and reasons, not just of causes. In history it is often appropriate to ask why certain people acted as they did and to answer at a level different from that at which the phenomena of rocks and animals are explained. We understand what it is to have purposes of our own, what it is to strive, what it is to be a human being, but with rocks and animals it cannot be claimed that there are inner workings that are understandable.

The second dimension to history is of course the scientific one. While it is true that historians describe past events and in that sense there isn't anything 'there' in the way the scientist's material is (usually) there, there is no difference in principle between this aspect of the historian's work and the work of scientists. Certainly the historian deals with the past but

the past is not an epistemologically-fundamental category. It has to be interpreted from the evidence which remains, but to the extent that it has left evidence that is accessible, the past is accessible in the way that the present is accessible to the scientist. The historian, like the scientist has an hypothesis in mind. When this requires more than reference to intentions, decisions and beliefs of individuals, he can get the help of archaeology, numismatics, palaeography, sigillography, chemistry and so on, through both their procedures and their established laws and theories, to draw their historical conclusions. In brief, the argument is that history is a complex inter-relationship of the more logically-fundamental forms, knowledge of minds and science. The historian's final output of article or book is a largely ordinary — language kind of description and explanation using these more basic forms of knowledge. But because of the given 'methodological' background of connection and development through time, there is no forced joining of these contributory forms.

This is why I think it can be suggested that the term, 'integration' perhaps can be appropriately applied to a subject such as history at the school curriculum level. It seems that a similar case for calling geography at the school level an integrated study can be made, and perhaps a case for some of the other well-established fields of knowledge that have traditionally featured as school subjects. However I do not think that such a case can be constructed for such curriculum groupings as "Our Neighbourhood", or "Modern European Man". Studies such as these are fields in Hirst's sense, but lack the 'psychological' and 'methodological' unity provided in history and geography by connections across time and space, which give the term 'integration' some meaning. They are I—D studies consisting of propositions, claims, arguments, assumptions of the sort earlier suggested as characterizing town plans or educational reports. They will themselves *involve* the more integrated statements and arguments of history and geography.

Although I have rejected as redundant or misapplied, the usual use of the term, 'integration', it is important that I emphasize that I am in no way opposed to properly-directed I—D studies. Indeed, I believe that certain I—D work in the school curriculum (as in moral and sex education) is of extreme importance. But a superficial understanding of the epistemology, a misdirected enthusiasm and a glib use of the term, 'integration' may do more harm than good to the important cause of I—D studies in schools — the sort of harm indicated in the example of European studies at my last college, mentioned at the beginning of this article. For unlike the issues with which, say, the Karmel Report in Tasmania had to deal, issues which *could only* be approached in an I—D way, the European studies course had no problem to solve, no issues to decide, not even an organizing focus or real centre of interest. Its reason for existence was the worst of all educational reasons — educational fashion.

### References

- DINGLE, H., *Science at the Crossroads*, London, Martin Brian & O'Keefe, 1972.
- DEWEY, J., *Logic: The Theory of Inquiry*, New York, Holt, 1938.
- HARRE, R., *The Logic of the Sciences*, London, Macmillan, 1960.
- HIRST, P.H., Liberal Education and the Nature of Knowledge, in Archambault, R.D. (editor) *Philosophical Analysis and Education*, London, Routledge and Kegan Paul, 1965.
- HIRST, P.H., Educational Theory, in Tibble, J.W. (editor) *The Study of Education*, London, Routledge and Kegan Paul, 1966.
- HIRST, P.H., *Knowledge and the Curriculum*, London, Routledge and Kegan Paul, 1974.
- HIRST, P.H., and PETERS, R.S., *The Logic of Education*, London, Routledge and Kegan Paul, 1970.
- KARMEL, P. (chairman), *Report of the Committee of Post-Secondary Education in Tasmania*, 1976.
- PHENIX, P.H., *Realms of Meaning*, New York, McGraw Hill, 1964.