

Biblical Knowing and Teaching

by Donald Oppewal, a Calvin College Monograph, 1985

Introduction

This monograph addresses professional educators who wish consciously to relate educational decisions to a biblical world view. It is not a survey of all of the linkages that could be made between Christian belief and educational policy. It will focus mainly on two matters: a theory of knowing and a classroom methodology which is compatible with it. A general conception of how one comes to know anything, called by technical philosophy an epistemological method, will be linked with a general strategy for classroom teaching, called methodology, one which is a single generic strategy rather than a set of pedagogical moves suggested by 'methods of teaching'.

The treatment of epistemology will not be as extensive or thorough as philosophers might wish, since it is not addressed to philosophers. The treatment of classroom method is not as detailed as some educators might wish because it will result in a theory of methodology rather than a set of specific methods of instruction. It should, however, enable the classroom teacher to select from a vast repertoire of 'methods' those which are most congruent with the generic methodology offered.

Since not all epistemological topics or questions are directly related to classroom instructional methods, the method of acquiring knowledge will be emphasized, and this discussion will deal less with how philosophers determine the validity of given beliefs than with constructing a biblically grounded understanding of how we come to know anything (a rock, a person, God), and its instructional counterpart.

For fully fifty years Reformed thinkers, such as educational philosophers and others, ably assisted by biblical scholars, have developed a rationale for the existence of the Calvinist school movement. They have turned to various facets of theology for help in providing directions for the Christian educational enterprise, for lower, secondary, and higher education.

Biblical doctrines like covenant, cultural mandate, and Kingdom, to name just a few, have sprinkled the pages of many a popular article and serious essay. While these have been helpful in supporting the need for distinctly Reformed education, they have only weakly spelled out what specific policies and programs characterize such schools. For example, the doctrine, of the covenant, peculiar in language at least to Reformed thinking, has been used chiefly to establish the case that in the biblical view the parent community, and not the institutionalized church or the political state, is the proper locus of educational authority. This has led those committed to such beliefs to reject the public school governance model as well as the parochial school model. Such schools are then distinctive because they turn the direction of the educational enterprise over to a citizen-parent group rather than to the church or civil government.

However, this use of the covenant doctrine does not yet speak to distinctiveness in the goals of such schools, or in their curriculum, and much less in their teaching method or classroom management models. Some attempts to use the doctrine to identify goals have given some help in identifying the goal as one that includes the affirmation of culture.¹

In addition to the biblical doctrines noted above, one that has helped shape more specific directions for educational distinctiveness is the doctrine of human nature, a biblical anthropology. Numerous writers have argued that the biblical vision of the human being is that of holism. While this is not the only view present among Reformed thinkers,² most educators have adopted a holistic view for their educational thinking.³

This literature on education developed particularly in the last decade is replete with evidence that the Bible reflects a view of man which opposes all dualisms, particularly when such dualisms identify higher and lower elements, with the location of the image of God in one element but not in the other. An early

proponent of this holistic view is Cornelius Jaarsma, who adopted the term "organic unity" to capture his view. By it he meant that the image of God resides in man by virtue of his being, unlike all other creatures, a "self-conscious center of all experience."⁴ He held that the self, while able to be analyzed into functions or components (like mental and physical or psychic and physiological), could not be dealt with in schools through any one component without destroying such organic unity.

A group of scholars and theologians, supported with careful biblical exegesis, have articulated what they call "a holistic view of man." As they see it:

Man is one, a centered unity dependent upon God and responsible to Him. The basic terms for man used in Scriptures do not indicate parts of man, the sum of which is man as a total creature. Rather each of the basic terms refers to the whole of man from a specific point of view. The difference is of far-reaching impact between man as a whole functioning in various relations and man as composite of different elements in which the lower "bodily" parts are related to the higher rational-moral or "soul" parts.⁵

Other sources contain more tentative judgments. A cautious view speaks in the language of not-only-but-also. N. Wolterstorff, as an example, puts it thus:

The Christian life is not the life of a pure spiritual soul which happens, for some God-alone-known reason, to be attached to a body. It is not the life of a mind, a rational-moral principle, which happens to be imprisoned in a chunk of flesh. Rather it is the life of a creature who is soul and body, inner man and outer man, a conscious personal being and a biological being.⁶

Attributing the rejected view to residual Platonism in Christian thought, he holds such view to be "at almost every juncture, an anti-Biblical conception," and offers instead to underscore the difference, that "We are, on the contrary, physical and biological creatures who are at the same time conscious, personal creatures."⁷

The sources given above explicitly reject the notion of a hierarchy of functions within the person, and hold that the totality must be redeemed. All conclude that it is the whole man which must be educated. Each gives its own version of the Biblical case for such a position. Numerous other sources indicate that this is a widely argued position on anthropology and its implication for Reformed schooling."⁸

Reformed literature contains little that carries this anthropology into the arena of epistemology and knowing. Even less has been written about teaching methodology as it might relate to such a view of knowing. This has left classroom methodology as an independent variable in the beliefs about the school, and has encouraged the perception that methodology is but a grab bag of motivational devices and techniques for teaching specific kinds of lessons.

This monograph attempts an answer to the question: How do persons, conceived as whole beings, come to know anything, whether it be God, an idea, or an object? It presupposes that the case for holism in human nature is sufficiently treated by Reformed thinkers, and focuses on the biblical and theological evidence for holistic knowing as that which should shape Christian thinking about teaching methodology. It will give some attention to the implications for achieving distinctive goals and an integrated curriculum.

Holistic Epistemology

Descriptions of how the human being comes to know are as numerous as positions in anthropology, metaphysics, and ethics. The philosophical literature abounds with disputes between schools of epistemology, and new ones are always being formed and refined.

Were education not the enterprise in which adults teach the young both what knowledge is and how to separate it from superstition and error educators could well leave such disputes to professional philosophers. Unlike shoe salesmen or engineers, teachers and the education profession have usually claimed to impart knowledge, and not shoes or bridges, to their clients or pupils. And the claim is that educators deliver not only a product (knowledge) but teach a process (method of acquiring knowledge). In popular language it is the claim that in schools a society teaches the young not only what to think but how

to think. Schools transmit, in textbooks and lectures, a body of accepted knowledge, but also model by way of teaching method, a way to acquire knowledge.

Thus textbooks in philosophy of education typically include attention to epistemology, identify the various schools of philosophy, like idealism, realism, and pragmatism, and show their respective implications for goals, curriculum and teaching method.

If a Christian educational vision is to permeate the whole educational enterprise, educators must attempt to articulate a model classroom methodology which comports well with its goals and curriculum, as well as with a biblical anthropology. The case for a holistic theory of knowing will now be made, followed by its implication for classroom instruction.

Spectator and Respondent Theories

Many models of knowing exhibit what may be called a spectator theory of knowing. In it the knower is depicted as examining some evidence (whether with the senses or by the mind) and noting the degree of correspondence between such evidence and objective reality. The outcome of such a process is beliefs which are taken to be true reports of how things are. This view can be called a spectator theory of knowing because the verification process is mental, a seeing with the mind, although assisted by the senses. The method does not require any action upon such objective reality to confirm or repudiate beliefs.

Another variation on the spectator view is that of coherence as the test of truth. It holds that knowledge is reliable in the degree to which a given truth is internally consistent with others and that all are derived by rational deduction from self-evident truths.⁹ One example of this latter view may be given to show that epistemology has educational consequences. It is in the school subject called geometry, and the point will be to show that in teaching the subject matter a method of acquiring knowledge is simultaneously taught.

Geometry typically begins with certain axioms or postulates, like "If equals be added to equals the sums are equal" and "Parallel lines never intersect." From these all other propositions about lines and shapes are 'proved' or found to be true, because they have been derived from the basic axioms as self-evident truths and from other theorems. Believers in this method applied to all of life, and not just to lines and shapes, are inclined to view mathematics in general as the model method of getting truth. Students who ask why they should study geometry and other forms of higher mathematics are told that it teaches them how to think clearly, even if they never become engineers or consciously use these proofs anywhere else.

The mathematical mode of knowing, when it is taken to be superior to other forms of knowing, is a claim that best fits the coherence theory of knowledge, a variation on what is here a spectator theory of knowing. A similar case could be made that when teaching the content of science, a paradigm of knowing, namely the scientific method is also taught. This would comport with a correspondence view. Proponents of this method assume, for example, that creationist accounts of the origin and age of the earth can be verified by only the scientific method.

What shall the educator wishing to think biblically do with such curricular content, and its implied epistemological method? Is reasoning from self-evident truths to their deductive conclusions the paradigm method for all knowing for a Christian? Is a Christian version of coherentism compatible with the Biblical way of knowing? Or is a version of correspondence theory what the Bible reflects?

A number of Reformed philosophers and theologians have rather recently argued that correspondence or coherence epistemologies are flawed.¹⁰ Some have argued that they do not comport well with the biblical perspective on knowing.¹¹ From these arguments it is clear that thinking about epistemology is in ferment among Reformed thinkers. In ferment is not only *what* an appropriately Christian method of acquiring knowledge would look like, but also *how* it is to be defended, how a plausible case for its Christian character can be made. In theological language, this is the area of apologetics, that is, defense of the faith.

One standard technique, in Christian philosophical circles, is to defend Christian beliefs by turning attacks against them back against the critics, showing that the criteria used to find Christian beliefs wanting would also show the attacker's beliefs to be lacking in reliability.

Belief in the existence of God, for example, has been challenged by positivists as having not reliable grounds. A Christian defense often proceeds by showing that the tests of truth posed by opponents would also render belief in the existence of persons untenable. Success at this maneuver in Christian apologetics makes Christian beliefs no less respectable or reliable than those held by opponents. Destroying the opposition's criteria thus renders their rejection of Christian belief self-referentially incoherent. This attacking of the attacks is a basic strategy in establishing an affirmative answer to the question "Is Belief in God Rational?"¹²

This approach, however, leaves unanswered the question of just what are the methods to which a Christian epistemology is committed? By what method are Christian beliefs justified, or at least permissible?

In the ongoing dialogue among professional philosophers about religious knowledge, many tactics are possible. In trying to establish the philosophic respectability of theism as an alternative to other schools of philosophy, the tactics maybe different from those which seek to give aid and comfort to believers in theism, although both sets of tactics attempt in scholarly fashion to show that there is no inherent contradiction between faith and reason. Dialogues with both those outside the faith and those within the faith must go on, for the Christian faith is surely under assault from all sides; professional philosophers as well as the layman wonder about religion's continued viability, so much so that this is being called a post-Christian age.

Since this monograph is addressed to those within the Christian faith it need not use the philosopher's analytic tools either to attack opposing ideologies or to attempt to find common ground arguments which defend the faith. It can instead use the tactic of Scriptural evidence that Christianity, as a belief system, does have grounds for its beliefs; it does have an epistemological method, however different that may be from the reigning epistemological models. This essay for Christian educators attempts to provide such reassurance.

It would seem that a plausible approach should be to discover in Scripture itself patterns which indicate that it does exhibit, but of course not offer a case for, a theory of knowing. Scripture is no more a textbook on epistemology than a textbook on science. It is a record of those who experienced God, and who acted in obedience or disobedience to God. We shall have to infer from Scripture what theory of knowing biblical writers reflected, and whether it reflects a spectator or respondent theory of knowing. The case will be made that it reflects the latter.

The Interactive Model

A promising approach, and one rich with implications for teaching methodology, is one which we call a respondent or interactive theory of knowing. Briefly put, it is that knowing is a process of thinking and doing, of mental and physical acts. To know a rock is thus not only to engage in mental acts about its nature in the scheme of things, but also to push or pull it, to act upon it to discover its nature or know the truth of it. Similarly, to know God is to engage in constructing mental acts about Him (rooted in revelation) but also to know Him by responding to Him, by what Scripture calls obedience or disobedience.

While the above seems to describe two separate acts, separated in time and even place, such is not the intent. It is rather that mental action is only one aspect and physical action the other, both constituting together the act of knowing. Put in the technical language of one Bible scholar:

The perceiving subject exists in an active relationship with that which he perceives, not in the "tabula rasa" relationship of passive observer. Thus the perceiver and the perceived exist as poles of a dynamic continuum, rather than as dichotomized, static entities.¹³

Scriptural instances of the use of the term "know" in this sense of a "dynamic continuum" abound. When Abraham knew Sarah and she conceived and bore a son, it is not merely a euphemism for sexual intercourse, but a Biblical paradigm of all knowing. It captures the concept of interaction as that which constitutes knowing, in this case a person. It is in the give and take, in the mental acts of classifying Sarah as female and wife and the physical act of sex, that he knew her. Without the act of intercourse (itself a term from Latin suggesting two-way action) the knowing is that of spectator, not participant.

When Job says "I know that my Redeemer liveth" (Job 19:25) he is not uttering this, spectator-like, as a process of rational induction or deduction, but out of holistic engagement with God, undergoing and responding, of perceiving God as having such and such qualities, and of living with poverty, illness, and despair. It is uttered as a conclusion to both his mental constructs and his doing.

When in I Samuel 3:7 it is said that "Samuel did not yet know the Lord," it is not that he had no mental constructs of God, since we assume that he had been told such by Eli the priest since being brought as a child to the temple by his mother Hannah. It is that he had not yet interacted with (obeyed) God, and thus did not know Him. The calls in the night constituted information, not knowing, until Samuel could say "Here am I, Lord."

Christ also spoke in this manner when referring to truth and knowledge. He spoke of "doing the truth", "living in the truth," "abiding in" and thus "being in the truth."¹⁴ Knowing the truth in such a setting consists not simply of mental acts of accepting propositions about Christ, but of doing what Christ did, and thus knowing Him who said, "I am the way, the truth, and the life."

If the foregoing are not to be disposed of as merely poetic utterances or isolated word studies, they suggest that Scripture indeed consistently speaks a special language when it comes to epistemology and a description of knowing. It excludes forms of thinking in which only propositions are regarded as relevant to knowing, and in which belief is defined as a product of certain mental acts following accepted rules of logic.

Scripture distinguishes between 'believe in' and 'believe that', where the latter refers to propositions or assertions, such as belief *that* Christ arose from the dead. Scripture instead says to believe in the Lord Jesus Christ, and you shall be saved, implying a different conception of knowing. As the book of James has it (James 2:14-20) mere belief *that* God exists is what devils possess. Belief in God includes the response of discipleship, not just intellectual perception that some such being exists. When James says that "faith without works is dead" (vs. 26) its epistemological significance is that head knowing is incomplete knowledge without deeds. James notes of Abraham: "You see that his faith and his actions were working together, and his faith was made complete by what he did" (vs. 22).

Philosophers may try to pull apart thinking and doing, allowing only the thinking to produce knowledge, with deeds or doing being a separate act of applying such knowledge. Scripture does not talk that way. It talks instead, as the passage above indicates, of "working together" and of faith being "made complete" by doing. James even notes a parallel between a holistic view of man and a holistic view of knowing when he concludes: "As the body without the spirit is dead, so faith without deeds is dead" (vs. 26).

The distinction between belief *in* and belief *that is* one that is susceptible of many interpretations in ordinary language.¹⁵ The point being made here is that the first is not merely a linguistic oddity, and is not simply reducible to the second.

The Apostle's Creed, that great ecumenical creed of Christendom, uses believe in consistently, as in "I believe in God, the Father"..."and in Jesus Christ," and continuing with "I believe in the Holy Spirit." These all suggest the holistic view of knowing in which there is commitment to a way of life out of which these propositions arise. They are not uttered as intellectual assent as the result of reasoning from first principles to these conclusions.

Thus, both Scripture and creeds speak a different language when it comes to a model way of knowing. Some Reformed thinkers have caught this vision when faith (knowing) is declared not to be assent to propositions, rationally derived. The Biblical alternative is sharply stated in the following extensive quote:

How, then, ought we to think of faith? I suggest that the model we must have in mind is not that of believing propositions, but rather that of believing in a person. You all know, from your own experience, what it is to believe in a person. It is to trust him, to be loyal to him, to serve him, to give him one's allegiance, to be willing to work for him, to place one's confidence in him.¹⁶

While the context of the above quote indicates that the paradigm of knowing is knowing God as person, it is here offered as a model for all knowing. Thus knowing an idea or an object has the same components. While it may seem strange to talk of being 'loyal' to a rock, it would be redolent of Scripture to do so. Knowing God's creation does not follow an utterly different model from knowing Him who created it, and who exists in it. To know a rock is then to have both mental and physical acts relating to it. To know its nature is not simply to perceive it in the mind as belonging to a given class of objects, but also to act upon it, break it, stack it, sit on it, etc. In a word it is to be in interaction with it, in the best etymological sense of that word. Knowing is an action between (which is what *inter* means in Latin) the knower and the known. To pull the two apart is to reduce knowing to a mental proposition-making act. To do physical action alone, without the associated mental acts, is the other side of such reductionism, doing as blind stimulus-response behavior. Neither is the full Scriptural meaning of the act of knowing.

The more authentically biblical model of knowing as an interaction between the knower and the known is named by some theologians as co-relation, in which the knower is in the Truth, participating in it and walking in it.¹⁷ Others have called it a *praxis* theory of knowing, stressing its action, or practice, component as a necessary supplement to thinking.¹⁸ All have given extensive documentation and scriptural exegesis too elaborate to be given here.

Revelation's Role

Revelation is a key term in theological talk concerning epistemology. It refers to the whole area of Christian belief about both the nature and source of truth or knowledge. Reformed thinkers have distinguished between two sources of revelation: general and special. The latter refers to scripture and the former refers to the physical creation and history.¹⁹ What has not been treated sufficiently is the question of whether the two sources of knowledge call for commitment to two methods. The thrust of this section on holistic knowing is that a single generic method of knowing is compatible with the biblical message and will lead to a single generic classroom teaching method that is most appropriate for teaching the young how to know in an identifiably Christian way.

Revelation, as a theological term for the acquiring of knowledge, has been treated by numerous theologians. Archbishop Temple, for example, in a discussion of 'Revelation and its Mode,' puts it this way:

...there is no imparting of truth as the intellect approaches truth, but there is event and appreciation; and in the coincidence of these the revelation consists.²⁰

Thus Temple asserts that perception of the existence of some objective reality is not yet revelation. It occurs if and only if there is "appreciation" or response.

All creation and not just Scripture is revelational. For, according to the psalmist, the heavens declare the glory of God and the firmament shows his handiwork (Psalm 19:1-6). And according to Romans 1:18-21 such revelation is available to all men. But some "suppress the truth by their wickedness" even though "what may be known about God is plain to them" (vs. 18 & 19). Note in the above that it is not lack of intellectual insight which prevents some from knowing God, but wickedness, i.e., an improper response. Thus revelation occurs only in the coming together of objective event and appropriate response. As one interpreter says it:

As we respond in unbelief ... our discernment is clouded and our decision making is perverted. Only as we respond in faith... can we discern clearly and decide rightly.²¹

Stated even more bluntly is the following:

Because man is a religious being, all knowing necessarily involves obedience to the Word of God. Knowledge is not a matter of (cognitive) facts plus (attitudinal) values. All knowledge involves analytical distinction, but no more than it involves commitment to obedient action: we can only really speak of 'knowledge' when an integral subjection to the norms for human acting is involved.²²

From none of the above description of this interactive model of knowing is there any implication that there is no place for intellectual operations in acquiring knowledge or receiving revelation. Intellectual insight is an integral part of knowing. But belief statements arise out of interaction, out of encounter, rather than being the end of knowing. They are derivative, not ultimate; they are a means and not an end. When Job asserted, "I know that my Redeemer liveth" it was within the fact of encounter; when Paul said, "And we know that in all things God works for the good of those who love Him..." (Romans 8:28), it was not rational deduction but interaction. Neither is there any implication that truth or revelation is not also objective, existing independently of the knower. Denial of such objectivity would make man the maker of truth and knowledge. The interactive, encounter model set forth above holds that such objective reality (the revelation) and the human responder are two foci of a single process, with the responder discovering or uncovering what is by what is done to it. This model is a rejection of the spectator views discussed earlier in which the knower perceives objective reality with the mind rather than out of encounter. It is also far from the pragmatic model of knowing in which the knower creates truth by testing its consequences.

The following extensive quote is instructive in noting how Scripture speaks in a language quite unlike that of a Greek mode of knowing which has so pervasively affected Christian thinking on this matter:

The understanding that present day Christian have of "know" and "Knowing" is often unrelated to the meaning of these words as revealed in scripture. . . (it) has been influenced by philosophical inquiry, especially as it came from the Greeks. For them 'to know' was to be involved in objective investigation apart from context, . . . apart from one's immediate experience. 'Knowledge' for the Greeks was a fixed possession. It sought the essence of things, not the relationship of the person to that which could be known. This "knowledge" was outside the person; it contained no personal significance nor did it require personal commitment.²³

In summary it has been argued that the method of knowing that is most compatible with the biblical revelation is one in which the usual dualisms of thinking and doing, cognition and action, are rejected in favor of a single generic mode incorporating both. Knowing propositions, whether facts of history, theorems in geometry or noting that a rock is hard and heavy are all partial or incomplete forms of knowing. They are subsumed under the interactive method of knowing, one in which the action on the known by the knower completes the act of knowing.

Explication and elaboration of this holistic view have been necessary before we examine its implication for teaching method done Christianly. Looking ahead to the next section it should be already clear that what we seek is a generic classroom instructional model which can incorporate the various phases of knowing into one methodology.

Holistic Classroom Methodology

Crucial to a search for a method of knowing which is generic enough to embrace all knowing is the distinction between methods and methodology. The former is plural, the latter singular; the former is a series of discrete teacher maneuvers which can be used in varying combinations as the situation demands; the latter is a single generic and normative flow which allows various methods but endorses some more than others. The plea here is that what Christian educators should have is a methodology which is anchored in the Judeo-Christian epistemological tradition.

Classroom teaching methods are often portrayed as little more than techniques for effecting learning, each having a different configuration of teacher and student behaviors. Thus there is the lecture method, the simulation method, the audiovisual method, the demonstration method, the inquiry method, the Socratic method, the activity method, just to name a few. The general impression is given that the successful teacher is the one whose repertoire of such different strategies is extensive, and that the selection of each is made in the light of the peculiarities of the learners or the material to be learned.

Some treatments of teaching method assume that the nature of the subject matter dictates the strategy. Teacher training institutions and some state certification codes lend support to this impression by requiring methods courses in each of the several teaching areas or subjects. Thus, if one curriculum area is called science, it follows that a course will teach the peculiarities of the methods of teaching science. The same would be true for art methods, reading methods, language arts methods, and so forth. Such courses may in fact have much overlap, with only minor differences in terminology, as when science methods may highlight something called the demonstration method, and social studies highlight the lecture method. The different terminology masks the similarity, as both will feature a teacher talking with some visual aid or realia giving assistance. What is common to all such discrete methods courses is the assumption that the peculiarities of each kind of material somehow dictate how data are to be learned or known.

At a higher level of generality teaching method is sometimes conceived of as strategies which cut across all subjects in the curriculum. The terminology then suggests that all lessons should have such strategies as set induction, stimulus variation, planned repetition, and closure, for example. These are more generic teaching skills, and are presumably appropriate to any lesson, whatever the raw material or subject being taught. Whether the material is linguistic, mathematical, artistic, or literary, the elements of the lesson are the same, with only minor variations in emphasis.

What the above conceptions of classroom method lack is any generalized conception of knowing. While each of the two types has implicit assumptions about how learning best occurs, their defense is usually stated in terms of their respective motivational value or retention value. Psychology is taken to be the discipline which vindicates the methods, individually and severally. Little attempt is made to find an epistemological grounding for selection from among them, or a framework into which to fit them.

Secular philosophers of education have proposed a classroom methodology, a series of classroom events, whose flow is peculiar to their philosophical commitment to a way of knowing. It typically contains phases or elements in a sequence which will culminate in knowledge, not just information or discrete learnings. Plato, for example, both conceived such a methodology and exhibited it in his various dialogues, the *Republic* and others. It is called the Socratic method after his teacher Socrates. It contains a flow of question and dialogue that is not merely random discussion but knowledge seeking. When the dialogue is ended the pupil has knowledge, as platonic idealism conceives it.

Other philosophers of education have proposed a quite different methodology as a better way of acquiring knowledge, a better way of getting in touch with reality, as their philosophical allegiances dictate. John Dewey wrote voluminously on various aspects of education, including the proposal of a generic methodology, usually called problem solving. It has five phases or "constituent elements." While the phases could subsume under them various methods, such as the lecture method and the discussion method, they each fitted into the larger flow of movement from ignorance to knowledge. Called the "complete act of thought" it induced not only learning some content, but learning to think, as conceived from an instrumentalist philosophy of knowing.

What is a Christian educator, wishing to be true to Scripture, to make of such options? One conclusion, as the previous examples have shown, is that a teaching methodology is no more philosophically neutral than an epistemology. Also, individual strategies like the lecture method may find their place within several methodologies, although even these are accorded a different status in the various methodologies. While individual methods and strategies may be neutral, surely less so is a methodology, particularly if it is the classroom equivalent of the preferred epistemological method of knowing reality reliably.

The second thing Christian educators can learn from the presence of competing methodologies is that one can be adopted only if the epistemological counterpart of the classroom method is congruent with a biblical mode of knowing. The adoption of a classroom methodology proposed by others, whether it arises out of Platonic idealism, Deweyan pragmatism, or realism, is fraught with the danger of inviting the Trojan horse into the City of God. That is not to say that such philosophical parentage automatically discredits such teaching methodologies. Because of common grace, all thinkers have some vision of the created world and each has some possibility of proposing a methodology congruent with the biblical view of knowing and teaching. Elsewhere I have argued that the binding marriage of a given methodology with secular philosophy is often made in the heaven of academia but is not automatically binding on the earth of the classroom. Compatibility with a biblical vision, is the test of legitimacy of any methodology²⁴ and not its possible secular parentage.

What can be said with confidence is that acceptance or rejection of any overall classroom strategy for teaching children how to think and know Christianly must be congruent with the biblical view of knowing. One has been outlined in the previous section of this essay, and we shall shortly see what this classroom methodology might look like. To do less than to derive our own is to run the risk of behaving secularly. To adopt only methods, without framework of methodology, is to reduce teaching and learning to the level of psychological devices for retaining bits and pieces of subject matter. It is to ignore the potentiality in methodology for deliberately inculcating in the youth a process, a mode of thinking for lifelong acquiring of knowledge in biblical perspective.

Christian educators could then go beyond paying lip service to the claim that in Christian education we teach pupils how to think, and not merely indoctrinate in what to think. They could model in the classroom how a Christian comes to know God and His created world, and not just transmit answers. They could, in a word, redeem methodology from irrelevance to Christian thinking and redeem it from being merely imitative of secular philosophies.

Stemming from the description of the biblical model of knowing, classroom methodology is, I believe, characterized by an interactive flow between the learner and some raw material, a give and take between the knower and the to-be-known.

Before describing the phases or elements we should note that the outcome will be truth, but not final truth. It will always be a truth relative to and appropriate to the age level of the student, and will be a more general truth for the advanced learner in high school than for the elementary pupil, even though the phases will be the same. For example, a learner hopefully progresses through something like the following in a perception of the "truth" about Santa Claus:

- He is an actual person who lives at the North Pole, and who comes down my chimney with presents.
- He is a name for my parents and relatives who give me gifts.
- He is the spirit of goodwill that comes at Christmas in the form of gift giving.
- He is the secular substitute for the Christ child, who is the embodiment of good and God's giving of Himself.

All the above are successive approximations to the truth, and it is teachers who will decide at what grade level each would be most appropriate. The point is that classroom teachers deal always with truth and knowledge which is conditioned by the level of maturity of the learner, and usually do not deal, as epistemologists might, with final truth. In a biblical mode of knowing the truth about Santa Claus will be "complete" when the intellectual perception is joined with action appropriate to that age level.

Phases of Methodology

The methodology could be divided roughly into three phases, which will be called the consider, choose, and commit phases. While the sequence is not arbitrary, neither is it rigid and inflexible. Movement back and forth among them is permissible and desirable. Also, within each a variety of methods can be used. These could include lecture, discussion, field trip, or reading.

In the *consider* phase the learner is confronted with the new material. Exploratory definitions and distinctions are made, and attention is focused on the various dimensions of the material. Such initial

exposure must be selected so as to be related to the learner's life experience or previous learnings, so that it can truly be encountered and not perceived, spectator-like, as from a distance and without chance of more than belief that some such entities exist. Whether the raw material is a mathematical concept, like place value, or a phenomenon like dew on the grass on some mornings, the consider phase begins the interaction by having the teacher relate it to the learner.

The material may not even carry a science, art, or history label (except in the mind of the teacher) but will be labeled with an aspect of the life of the learner as the pupil has experienced it. This initial phase will more powerfully provoke the second phase if it carries with it some problematic, some unresolved elements which do not by themselves make sense, but which call for resolution. If the biblical model of believing in such material is to prevail, then the initial phase must introduce each cycle of reaming in a context which not only relates to present life, but stretches the learner beyond the now to both the past and the future. It must have the potential for differing responses, different value judgments about its worth, different ways to react to it, always assuming such different ways are not simply intellectual classification, such as that a cow is a four-footed animal with a split hoof. In a word this initial phase must have some dissonance in it, where perplexity is not merely intellectual incompleteness, but an unresolved tension that is felt.

Without the careful selection of the curricular raw material to meet the above criteria the movement to the second phase is difficult if not impossible.

The second phase is the *choose* phase. Here the options for response are clarified and their implications better understood. Here the moral tensions are sharpened and the principles which govern the options are studied in more detail. It is in this phase that biblical data and directives are most explicitly brought into play, again by any number of specific techniques.

If the first phase dramatizes what it is that the learner faces, the second phase highlights whatever ought are involved, these often but not always being biblical oughts. The movement from is to ought will enhance the likelihood that the interactive model of knowing will occur because now the biblical mandates are part of the learning situation and they call for obedient response. The biblical data function as perspective giving, and not just as more facts or pieces of information. Also in this phase not only moral considerations arise, but also aesthetic, legal, scientific, and other principles relevant to the subject matter. This phase of the methodology may occupy the longest time of the three phases, because deepening understanding, as well as exposing alternative points of view, is time consuming. It is here also that multiple methods of instruction can be subsumed. The lecture method, the discussion method, the explication of readings, the simulation method, and even field trips take their place in the flow of the three C phases. It is in this phase of the total methodology that acceptance or rejection takes place, and prepares for the final phase.

The third phase is the *commit* phase. It moves beyond intellectual understanding, beyond exposure of the moral and other considerations, and toward commitment to act on both the is and the ought. It highlights the response part of the total methodology, with response identified as both verbal and behavioral. While not all school situations allow actual action, the commitment to a form of action is the absolute minimum. Without this phase the knowing consists of knowing that many possibilities exist in the abstract, of head knowledge which is the beginning but not the end of knowing. This phase may be the briefest of the three in terms of classroom time if the preceding two phases have been thoroughly done. Should the action response be possible within the classroom or even outside the school setting, then the time involvement may be greater.

A brief example of how this methodology would handle a given piece of curriculum content may be helpful to the classroom teacher. Although examples run the risk of being criticized or rejected on various grounds, the following is offered as that which reflects the spirit, if not the letter, of the proposed holistic methodology of the three C's.

The raw material is the person of Abraham Lincoln as president, and it is imagined as part of a larger unit on "Authority: Its Power and Problems."

1. *Consider phase*

In this phase the student is presented with the facts of presidential action in the Civil War, with the focus on economic, political, and military aspects of that conflict. What is slowly brought to the fore for special scrutiny is the problem of slavery in the conflict between North and South. It ends with the reasons for issuing the Emancipation Proclamation. Lectures, readings, films, and pictures are used to bring to life whatever were the factors in the situation.

2. *Choose phase*

In this phase the discussion method is used prominently to sharpen the choices a president had, and the political and moral dimensions of each. Then the simulation method could be used to make the historical question a personal moral question: Should he have begun the effort to free the slaves? What norms for society does the biblical vision exhibit for both peace and justice in any society, then and now?

Here the new content added is whatever biblical episodes or passages are relevant to the racial question, and the debate method can be used to highlight the possible biblical positions.

3. *Commit phase*

In this phase each student is asked to apply the principles in the choose phase to his/her own position on social questions like equal opportunity among the races, intermarriage among the races, and racial integration in schools. Decisions on what action one would follow, individually or collectively, in each would end the lesson.

The lesson is by no means teachable as outlined, particularly because the crucial factor of the age or grade level is not specified. It is given to show only the flow of the holistic methodology. The flow is intended to reveal the necessary interaction of thought and action, thinking and doing, which were contained in the previous discussion of epistemology.

Method and Goals

The three phases are integrally related to goals of Christian education as they have been articulated in Reformed thinking about schooling. For example, Christian Schools International has identified three distinct but interacting goals: intellectual, decisional, and creative. Each is an identifiable dimension of the single aim of preparing the student to live the Christian life. They can in summary be distinguished as follows:

1. Intellectual dimension, focusing on achieving a grasp of states of affairs, what is.
2. Decisional dimension, focusing on achieving decisions where choice can be made based on relevant norms or standards, on what ought to be.²⁵
3. Creative dimension, focusing on achieving life responses to both what is and what ought to be.

Much thought by curriculum writers has gone into how these may be achieved in the various subjects in the curriculum. Sometimes these goals are perceived as achieved separately, in different areas of the curriculum, with math perhaps featuring the first in clearest form, religion the second, and physical education the third. Such perceptions wrench apart what should be kept whole, if the holistic nature of the learner and of knowing is to be honored. All subject matter, if taught Christianly, should achieve all three, if not simultaneously at least sequentially. And it is here that the proposed methodology of the three C's makes its contribution.

The proposed holistic methodology, if followed, would keep all three goals together, with each phase of the methodology making its unique contribution. The first phase, the consider phase, lends itself best to the intellectual dimension, the choose phase lends itself to the decisional dimension, while the culmination in the commit phase lends itself to the creative dimension of learning goals.

What holds together the various curricular materials, then, are the three goals and the three phases of the generic methodology. While clarifications of each of the three goal dimensions can and should go

on,²⁶ the holistic methodology would provide the practical expression of their relationship to each other. It holds together the two of the triad of goals, curriculum, and method which is a prerequisite of any well rounded conception of teaching.

CSI, in choosing its three interacting goals, drew heavily on a previous document. There the interconnections between what has here been called the consider, choose, and commit phases were already suggested in the following, with the emphasis editorially added:

Teachers should also ask how they can guide young persons by means of their growing *understanding of life* toward a deeper *commitment* to the way things ought to be, to the true and the good; . . . how, through the learner's expanding awareness of the moral options that life presents, they can guide him to *choose* Christian options, based on Christian commitment.²⁷

Goal talk in that document was never translated into a methodology that would be consistent with such rhetoric. That is what the holistic methodology here proposed does. It rescues such rhetoric from abstraction, puts methodological flesh on the distinctiveness of the goals. It still allows the classroom teacher considerable flexibility in the selection of specific techniques and strategies in each of the phases, while ensuring that the techniques fit into a larger flow of learning, of coming to know Christianly conceived.

What remains is to indicate briefly what the holistic view of man, the holistic view of knowing, and the holistic view of classroom method require about curriculum content and organization.

Holistic Curriculum

Curriculum materials can be and have been packaged in various ways. From the trivium and quadrivium of the Greeks and the Romans to the seven liberal arts of the Middle Ages, and down to the proliferation of disciplines and subjects of today's curriculum, revisionists have all tried to divide the encyclopedia of possible knowledge into a given number of packages or subjects for learning in schools.

The curriculum of today's school is by now a curious mixture of the old and the new, with contenders always jostling for a more prominent place in the school day. Those who seek "basic education" want to reduce the multiplicity of possibilities to a limited number of generative subjects. Those who seek "relevant education" seek to add to or alter these basics. What actually exists is the result of this cacophony of voices seeking to be heard for their view of both the number and kind of subjects which will best produce the educated citizen.

What is a Christian educator, who wishes to think Christianly, to make of such a discordant symphony? What can be used to sift out the faddish from the truly fruitful for Christian knowing? In the search for a curriculum that is distinctly Christian, the educator runs the risk again of being merely imitative, and in so doing inviting into the City of God the Trojan horse of secularism, idealism, or pragmatism. None of these will do.

What many attempts at making curriculum distinctly Christian suggest is that the Christian view of life is to be integrated into the curriculum. Both publicity brochures and serious essays speak of giving a Christian perspective on life and learning. All agree that some sort of fusion between Christian values and subject matter is to take place, and that in some sense the Bible is the center of integrated curriculum. However the meanings of integration as it bears on faith and learning differ, sometimes in the same publication.²⁸

Meanings Of Integration

In one meaning of integration the academic disciplines are left in place and the teacher, with the assistance of Christian textbook and other resources, adds a Christian interpretation or assessment to such subjects. Locating in God the order and beauty of mathematics and the intricacy and design of the physical world in science are given as the way that the integration takes place. So too in history and social

studies Christian assessment of cultural practices or forms of government can occur in teacher resource or textbook talk.²⁹

Thus the same academic subjects as in secular education are baptized by sprinkling with evaluations or interpretations, thus effecting an integration of Christian faith and subject matter. A committee of Christian scholars has indicated at least seven "ways in which the biblical revelation may give structure and direction to our work in "the disciplines."³⁰

Among these ways are that "the biblical revelation can inform the direction of our investigations, the em-phases we give and the theses we try to establish" and that "the biblical revelation speaks to what we do with our theoretical knowledge, for what purposes or ends we use it". All seven ways indicate both the extent and the complexity of this interpretation of integrating faith and learning, but they all assume the disciplines to be individually the framework within which such integration takes place.

A quite different view of integration is one in which the subject matter is chosen because it cuts across the academic disciplines.³¹ Integration of the various disciplines into a new curriculum topic or subject is achieved by selecting some organizing rubric which by its nature calls for interdisciplinary content. For example the subject would be ecology or environment, but its content would not be limited to biology or botany; it would include political, social, and economic matters, each selected for its relevance to the problem of man and environment. The integration of the Christian perspective would operate at two levels: one in the choice of the organizing topic, and the other in the inclusion of biblical materials as part of the content.

Both of the above meanings given to integration have their proponents and are well intentioned attempts to honor the principle that the Christian faith should be operative in curriculum building.

While this brief description of the two views of integration does not do full justice to either of them, our purpose here is to assess their major thrust in the light of the holistic theory of man, knowing, and classroom method outlined earlier.

To review briefly, such holistic conception would seek a curriculum content and organization that would most likely engage not just the intellect of the learner, but the whole learner. Such content and organization should also make it likely that the knowledge gained is the kind where action and doing are a constant and necessary ingredient. Finally, to honor the holistic methodology the curriculum content should encourage the full range of the phases of consider, choose, and commit to be incorporated again and again in each cycle of learning.

Curriculum of Concerns

The second meaning of integration, in which the focus of units or courses is a perennial human problem and which cuts across the disciplines, is a more likely candidate for fulfilling the demands of a holistic anthropology, epistemology, and methodology of instruction. When the organizing rubric under which content is chosen is a perennial human concern, adjusted to age level, then by its very nature it is value laden, and filled with ambiguities and alternative resolutions. Such resolution points always toward action and life style, even when the school situation does not allow actual life-style follow up. It points toward discipleship and obedience because the curriculum is so organized that the topic cannot be confronted only intellectually, and the learnings cannot be just beliefs that such and such are the facts or theories of the matter. Moreover the Christian perspective is a central and not tangential concern, or a footnote addition to an otherwise self-contained discipline. The material is not baptized by sprinkling but by immersion in a Christian concern.

A full description and defense, both pedagogically and psychologically, cannot be given here, as the case being made is that it comports best with a philosophical perspective, a Christian one. Such psychological evidence would point toward its greater motivation and retention possibilities, toward a more likely adoption of a Christian perspective on life by the learner. Such evidence would also point to the power of teacher modeling Christian concern as well as modeling how Christians come to know.

Before proceeding with a sketch of the preferred curriculum it should be pointed out that the case being made is for the required, common learnings in the curriculum and not the whole curriculum. Electives and enrichment curriculum, and specialized knowledges also are part of the total school day.

The academic disciplines have their place, particularly at upper levels of schooling, but their status is that of electives. Specialized knowledges, like algebra and foreign language, and specialized skills like music have a similar place, but not in the required, common learnings of elementary and secondary education. Within this model time in elementary school also can be devoted directly to word attack skills in reading and computational skills in mathematics. Whether these subjects are separated into a special period in the day or incorporated, as needed, into the major units in a curriculum of concerns, can be left to the discretion of a local teaching staff.

Whatever specific form the school day would take, the curriculum model here proposed would require that large segments of the common learnings in the required curriculum would be organized around a series of enduring (through the grade levels) and perennial (through the ages) human concerns rather than the disciplines.

To assist those who find the total argument convincing, but who need some examples in order to see its possibilities, the following are suggestive, but obviously not a complete set of subjects.

Human sexuality is one such enduring life concern, for any age level and common to all. Data and principles from biology, psychology, sociology, and theology or religion are the minimum essentials of the Christian conception of sex, sex roles, and sexual life styles, both inside and outside marriage and family.³² While the secular school can find no responsible way to handle this value-laden subject, the Christian view of the school here defended can, and can do so confidently and distinctively. Handling the same topic within any one discipline inevitably leads to reductionism and less than a responsible grasp of sexuality, Christianly conceived.

Career education, from kindergarten through high school, is another area of human concern, one which no academic subject by itself can address, except abstractly. When the Christian concept of calling is joined with social studies, economics, and others, we have the possibility that each learner will be confronted with and assisted in acting on this important choice facing every young person.

Hunger, in both its personal and social dimension, is everywhere present. It involves not only understanding and action on personal diet and nutrition, but understanding and action in political and social dimensions as well. While some attempts have been made to incorporate this human concern into curriculum materials,³³ much expansion and elaboration at several grade levels remain as a challenge to extend this kind of curriculum of concerns.

Finally, and even more briefly, Christian perceptions of and strategies for dealing with such issues as warfare, prisons, poverty, pollution, etc. are prime subjects for elaboration into full-fledged and properly graded materials, K-12. The possible list of Christian concerns that would or could be included is along one, and variations on all are conceivable for different grade levels.

Curriculum materials based on this model will be produced, however, if (and likely only if) a significant number of Christian educators both begin in small ways on their own and ask Christian publishing houses and service organizations to provide them with textbooks and other teaching resources which exemplify this conception of curriculum, and this meaning of integration of faith and learning.

This extended essay has had as its purpose the providing of a case for a holistic view of man and knowing, seen in biblical perspective. The curriculum and classroom method counterparts have been included to show that all aspects of schooling are affected by such a theory. It is given to encourage Christian educators who have made a professional commitment to making their teaching ever more distinctly and consistently rooted in Christian philosophical commitments.

Notes

¹ N.H. Beversluis. *Toward a Theology of Education*. Grand Rapids, Michigan; Calvin College Occasional Paper No. 1, February, 1981, pp. 20-27.

² See John Cooper "Dualism and the biblical view of human beings," *The Reformed Journal*, September and October, 1982. For earlier writings which argue rather explicitly for a form of dualism in human

nature see Henry Zylstra, "Modern Philosophy of Education," in *Testament of Vision* (Grand Rapids, Michigan: Eerdmans Publishing Co., 1961) in which he asserts, "Man is an horizon in which two worlds meet, the natural and the spiritual" and, "He lives in two orders," p. 84.

³ In addition to those cited as illustrative the following reflect a similar holistic view, with variations. Geraldine Steensma, "The First Key," in *To Those Who Teach* (Terre Haute, Indiana: Signal Publishing Co., 1971); G. C. Berkouwer, *Man, The Image of God* (Grand Rapids, Mich.: Eerdmans Publishing Co., 1962) pp. 194-207. Such a view is also evident in Paul Ramsey, *Basic Christian Ethics* (New York: Charles Scribners, 1952) pp. 249-259 where he rejects any definition of "image of God" as that which belongs to any given faculty and holds that image resides in the reflection (relationship with God).

⁴ . *Human Development, Learning and Teaching* (Grand Rapids, Michigan: Eerdmans Publishing Co., 1961), p. 43.

⁵ Arnold De Graaff and James Olthuis (eds.) *Toward a Biblical View of Man*. (Toronto, Ontario: Institute For Christian Studies, 1978), p. 1.

⁶ *Curriculum: By What Standard?* (Grand Rapids, Mich: National Union of Christian Schools, 1966), p.8.

⁷ *Ibid*, p.8.

⁸ . See for example Norman DeJong, *Education in the Truth* (Nutley, New Jersey: Presbyterian and Reformed Publishing Company, 1969), chapter 11 "The Organic Unity of Man." Also G. C. Berkouwer, *Man, The Image of God* (Grand Rapids, Mich.: Eerdmans Publishing Company, 1962), chapter on "The Whole Man," pp. 194-207.

⁹ See John Brubacher, *Modern Philosophies of Education* (New York: McGraw-Hill Book Company, 1962), pp. 74-86 and 89-95 for a discussion of disputes between coherence and correspondence theories.

¹⁰ See Philip Holtrop, "Toward a Biblical Conception of Truth and a New Mood for Doing Reformed Theology," *Theological Forum* (of the Reformed Ecumenical Synod) Vol. V, No. 2 (June, 1977). A condensed version appeared in *The Reformed Journal*, February, 1977, pp. 9-13.

¹¹ Nicholas Wolterstorff. *Reason Within the Bounds of Religion* (Grand Rapids, Michigan: Eerdmans Publishing Company, 1976). He has argued the case against what he calls "foundationalism", a form of what is in this essay called coherence theory. See especially chapter 4.

¹² For a general critique of foundationalism and its inadequacies from a Reformed perspective see Alvin Plantinga, "On Reformed Epistemology," in *The Reformed Journal*, January, 1982, pp. 13-16, see also his "The Reformed Objection to Natural Theology," in *Christian Scholar's Review*, Vol. XI, No. 3 (1982). See especially his "Is Belief in God Rational?" in *Religion and Rationality*, C. Delaney (ed.). (South Bend: University of Notre Dame Press, 1979). pp. 7-27. For latest reflection of such ferment in epistemology see *Rationality in the Calvinian Tradition*, H. Hart et al. (eds.). (Lanham, MD: University Press of America, 1983).

¹³ Jerry Gill. *The Possibility of Religious Knowledge* (Grand Rapids, Michigan: Eerdmans Publishing Company, 1971), p. 121. See also his *On Knowing God* (Philadelphia, Penn.: The Westminster Press, 1981) in which in a chapter called "Knowledge Through Participation" he argues that "it is necessary to view bodily activity as a form of cognitive judgment" (p. 95), and using Polanyi's concept of "indwelling" says that "indwelling is an important aspect of every cognitive situation. There is always a sense in which the process of coming to know anything, be it object or persons, is dependent upon empathetic indwelling" (p. 95).

¹⁴ See, for elaboration of this point Philip Holtrop, "A Strange Language: Toward a Biblical Conception of Truth," *The Reformed Journal*, February, 1977, pp. 9-13.

¹⁵ H. H. Price, "Belief 'In' and Belief 'that'," *Religious Studies*, October, 1965, pp. 5-27.

¹⁶ Nicholas Wolterstorff. *Curriculum By What Standard?* (Grand Rapids, Michigan: National Union of Christian Schools, 1966) p. 10.

¹⁷ See, for the best treatment of such a theologian, Steve Prediger, *Truth and Knowledge in G. C. Berkouwer: The Contours of His Epistemology* (Toronto, Ontario: Institute for Christian Studies, 1982).

¹⁸ Thomas H. Groome, *Christian Religious Education* (San Francisco, CA: Harper and Row, 1980). See especially Chapter Seven, "In Search of a 'way of knowing' for Christian Religious Education."

¹⁹ For a simplified summary of this doctrine see Louis Berkhof, *Manual of Reformed Doctrine* (Grand Rapids, Michigan: Eerdmans Publishing Company, 1933), pp. 23-26. For a more elaborate treatment of general revelation see G. C. Berkouwer, *General Revelation* (Grand Rapids, Michigan: Eerdmans Publishing Company, 1955).

²⁰ *Nature, Man, and God*, (New York: Macmillan, 1956) p. 314. In *The Self As Agent* by John Macmurray (London: Faber and Faber, 1957) a similar argument is given. See especially Chapter Four, "Agent and Subject."

²¹ Stuart Fowler in *No Icing on the Cake*, edited by Jack Mechielsen (Melbourne, Australia: Brookes-Hall Publishing Foundation, 1980) p. 29.

²² Douglas Blomberg, *ibid*, p. 51.

²³ G. Steensma and H. Van Brummelen (eds.) *Shaping School Curriculum: A Biblical View* (Terre Haute, Indiana: Signal Publishing Co., 1977) p. 5.

²⁴ "Are Classroom Practices and Philosophy Married?" *Christian Educators Journal*, April, 1983, p. 10 and 12.

²⁵ *Principles to Practice* (Grand Rapids, Michigan: Christian Schools International, 1979) p. 1.

²⁶ See Henry Triezenberg, "Up With Decisional Learning," *Christian Educators Journal*, November, 1976, pp. 23 ff. For further proposed clarification and revision of the taxonomy see Nicholas Wolterstorff, *Educating for Responsible Action* (Grand Rapids, Michigan: Eerdmans Publishing Company, 1982).

²⁷ N. H. Beversluis, *Christian Philosophy of Education* (Grand Rapids, Michigan: National Union of Christian Schools (now Christian Schools International), 1971) p. 39.

²⁸ See *Christian Home and School*, March 1982, p. 15ff. In this special issue the curriculum theory and its application to textbook production is outlined.

²⁹ For concrete application of this meaning of integration see the Christian Perspective on History series, published by Christian Schools International from 1973-76. For its application to the subject of civics see William Hendricks *Under God* (Grand Rapids, Michigan: CSI Publications, Fourth edition, 1981). In this latter text there is persistence assessment of social policy from a Christian perspective, usually in the form of raising questions.

³⁰ Calvin College Curriculum Study Committee, *Christian Liberal Arts Education* (Grand Rapids, Michigan: Calvin College, Eerdmans Publishing Company, 1970) p. 59-60.

³¹ G. Steensma and H. Van Brummelen, *Shaping School Curriculum A Biblical View* (Terre Haute, Indiana: Signal Publishing Company, 1977), especially chapter 6, "A Design for Elementary and Secondary Curriculum" See also Norman DeJong, *Education in the Truth* (Nutley, New Jersey: Presbyterian and Reformed Publishing Company, 1969), Chapter 11. For textbook application of this interdisciplinary approach see *Man in Society: A Study in Hope*. Ary De Moor et al. (Grand Rapids, Mich.: Christian Schools International, 1980.) It is designed for secondary schools.

³² See, for example, William Hendricks. *Toward Christian Maturity, K-6: Guide For Teaching Human Sexuality*, (Grand Rapids, Michigan: Christian Schools International, 1981;) See also, for middle school, by the same author, *God's Temples*, second edition, 1983, with accompanying Teacher's Edition.

³³ Yvonne VanEe, *5 Days of World Hunger Awareness* (Grand Rapids, Michigan: Christian Schools International, 1982), a one-week study for grades 4, 5, and 6.