# Alfred North Whitehead's Approach to Education:

# Implications for religious education

#### **Abstract**

This article examines Alfred North Whitehead's educational theories with an eye on what implications these theories might have for contemporary religious education. Two central themes in Whitehead's theory of education will be explored: 1) education as self-creation, and 2) education as a holistic experience.

Alfred North Whitehead once said that we cannot expect a scholar to be able to think about everything. This may be true, but as a matter of fact, Whitehead was able to think about quite a number of areas with amazing incisiveness. Whitehead was a distinguished mathematician at Cambridge University from 1885 to 1910, and at the University of London from 1911 to 1924. In 1924, while preparing to retire, he was rather surprised by an invitation to teach philosophy at Harvard University, and for the next decade developed his well-known "organismic" approach to philosophy, often described as a "process" philosophy. This was a unique approach to metaphysics which many have viewed as being in harmony with the contemporary evolutionary and scientific understanding of reality. Whitehead expounded a philosophical interpretation of the cosmic process that was characterized "by change, dynamism, inter-relationships or organic interpenetration, the presence of heights and depths of importance, and the quality of tenderness and love" (Pittenger, 1969). This unique approach to philosophy would have far-reaching effects, particularly in the area of theology, where it was most influential on the work of such scholars as Hartshorne, Ogden, Cobb, Williams, Meland, Pittenger, Wieman, and many others.

Whitehead has also made significant contributions to the field of education. Although he never composed a treatise on education or developed

a systematic philosophy of education, his addresses and essays in this area have been widely quoted, and have been the object of some significant studies on pedagogy (Brumbaugh, 1981; Dunkel, 1965; Meland, 1953). In the field of religious education Randolph Crump Miller, among others, has effectively applied Whitehead's process philosophy to this discipline (Miller, 1973, 1975).

My concern here is not primarily theological or philosophical; rather I have set out to examine Whitehead's educational theories, with an eye on what implications these theories might have for contemporary religious education. In looking at Whitehead's approach to education, I will be drawing mainly from his educational writing, although I will also refer to some of his philosophical positions. While it is true that Whitehead largely developed his philosophy after he wrote on educational theory, the two areas are of a piece, the one illuminating the other. The article will limit itself to the discussion of two central themes in Whitehead's educational thinking: (1) education as self-creation and (2) education as a holistic experience.

# **Education as Self-creation**

Whitehead viewed each individual person as a living organism that carries within the self the principle of creative change. Education, therefore, is a natural process of self-development, setting in motion what is "already stirring in the mind" (Whitehead, 1929, p. 24). For Whitehead, all things in nature, including learners, are not static substances to be shaped and formed, but living organisms in the process of becoming. He writes: "Consider how nature generally sets to work to educate the living organisms which teem the earth. You cannot begin to understand nature's method unless you grasp the fact that the essential spring of all growth is within you.... What is really essential in your development you must do for yourself" (1968, p. 171).

Whitehead conceived the whole of reality as being "a process and that process is the becoming of actual entities" (Whitehead, 1941, p. 33). This creative process is everywhere, in the inanimate as well as in the animate. All reality moves through transitions involving change and permanence, growth and perishing, as it moves through a process of self-formation (Price, 1954; Whitehead, 1938). The role of education, then, is to assist others in discovering the role they play in their own self-development. Education follows the same pattern that we observe in the process of nature; the external nurturing of the potential growth that exists within.

# Self-development in stages

Whitehead maintains that the on-going self creation of all organisms moves through various phases of change and permanence. The human organism enjoys the same process of growth, beginning with the dawn of the experience of self, and moving through the various stages of self-development. Human life, then, is essentially periodic and cyclic, with daily, yearly and seasonal periods of growth (Hartshorne & Peden, 1981; Whitehead, 1938).

Education must be attentive to these stages of growth, and Whitehead (1929) points out with characteristic bluntness that "lack of attention to the rhythm and character of mental growth is a main source of wooden futility in education" (p.27). Teachers must, therefore, be sensitive to the stage which each student is experiencing, as well as be attentive to the aptitudes which seem to appear at each given stage. Within this framework of awareness, "different subjects and modes of study should be undertaken by pupils at fitting times when they have reached the proper stage of mental development" (p. 21).

# The rhythmic stages of learning

One of Whitehead's most oft-quoted theories of education is that regarding the three-fold rhythm of education: romance, precision, and generalization. These stages occur throughout the chronology of one's life, as one moves through childhood and adolescence toward adulthood. Yet, there are also cycles within cycles in each period of life, and within each period of an educational experience. One cycle leads to another, as there is a craving for new adventures of thought. Whitehead (1929) describes the process in education as follows:

Education should consist in the continual repetition of such cycles. Each lesson in its minor way should form an eddy cycle issuing its own subordinate process. Longer periods should issue in definite attainments, which then form the starting grounds for fresh cycles." (p.30)

The stage of romance. The stage of romance in education is described by Whitehead (1929) as the period of "first apprehension," wherein the subject matter is perceived as having a vividness of novelty, as holding within itself unexplored connections and possibilities. Emotions are integral to this stage of learning; there is an excitement gained from moving from bare facts to relationships among the facts. There is the feeling of encouragement as one encounters fresh content, new interests and challenges. This is the stage of learning which is characterized by discovery, curiosity, and wonder.

Whitehead (1954) sees romance as essential to education, for "without the adventure of romance, at best you get inert knowledge without initiative, and at the worst you get contempt of ideas without knowledge" (p. 285).

The precision stage. The stage of precision focuses on the exactness of formulation. Here the possibilities that were discovered in the romantic period are explored systematically and with exactitude. This is the time for learning the subject clearly in all its salient features. At this stage, a careful selection of materials and good pacing are extremely important. If the facts are presented too broadly or quickly the initial interest on the part of the student can easily be killed. If the facts are presented too narrowly, the student can fail to grasp the meaning of the material.

There are a number of other challenges connected with this stage. The first is attempting to keep a balance between a sound discipline and the ease of pace needed to keep the student's romance with the material alive. Whitehead cautions here that students should not be forced to memorize irrelevant material, and yet they should be expected to know the central content in precise fashion. Another challenge is that of not giving the students more material than they can handle at their stage of interest and development.

Whitehead's (1929) realization of the difficulties within this stage come through in the following: "The responsibility of this period is immense. To speak the truth, except in the rare case of genius in the teacher, I do not think that it is possible to take a whole class very far along the road of precision without some dulling of interest" (p. 55). Of course the danger of such boredom is increased if the stage of romance is by-passed in favour of precision, or if there is no move on to the next stage.

The stage of generalization. Whitehead often laments the fact that in so many schools and universities a paralysis of thought is brought on by aimlessly gathering inert knowledge that is never applied, or "generalized." For Whitehead, this third stage is the time to move toward effectiveness and production. The student has been attracted to knowledge, understands it, has acquired certain aptitudes for its application, and can now move toward application and action. Whitehead (1958) compares this final stage to Hegel's final stage of synthesis. The student moves from one pole (romance) to another pole (precision), and then returns to a certain romance experienced in the application of the knowledge. Thus the students have achieved the very essence of scientific thought: they have seen the general in the particular, the permanent in the transitory, and they can now make general connections and applications (p. 3-4). Just as all nature gains a certain "satisfaction" through moving from wonder to dynamic activity, learners experience the same excitement in moving from understanding the creative process to actually contributing to it.

### The social context

One important aspect of self-creativity is that it does not occur in isolation, but in the context of connectedness. In his philosophy, Whitehead teaches a doctrine of internal relations, whereby all individual entities are related to the rest of the universe. Everything is actually a part of that to which it is related, and therefore, self-identity consists in a network of relations which stretch through the universe. The relations which make up all entities. Whitehead names prehension, and these make up "the most concrete elements of the nature of actual entities" (1941, p. 28). Prehensions are what constitute the process of unification and expansion of entities. All nature, in fact, is "a process of expansive development necessarily transitional from prehension to prehension" (1954, p. 106). All reality, therefore, is connected, interdependent. Whitehead speaks of a "togetherness of things," and points out that each happening is a "factor in the nature of every other happening" (1938, p. 225). Human development takes place, then, in "social space," the setting wherein self-creation takes place through exchange with others (Miller, 1985).

Whitehead (1929) maintains that education takes place through interaction with others. Teachers, of course, are of obvious importance, especially teachers who are able to guide and aid the natural process of self-growth. It is the teacher's task to "elicit enthusiasm by resonance with his own personality, and to create an atmosphere of a longer and firmer purpose" (p.62). To fulfill this role well, Whitehead maintains that teachers must have a unique genius of character, clear insight into the process of growth, and a sound intellectual grasp of the material at hand.

Interaction with other learners is also viewed by Whitehead (1933) as integral to effective education. He points out that the most effective education he gained at school came about in informal conversations and discussions with other students. He holds that there is a natural bond between people, and that in an atmosphere of mutual respect the natural capacity to reach out for ideals can be nurtured. Most certainly this was the kind of atmosphere which he himself attempted to create in his own lecture halls and tutorial sessions (p. 109).

We have so far discussed Whitehead's theme of education as self-creation, pointing out the following aspects of this thought: education is a process; the principle of growth is from within the person; there are stages and rhythms to such progress; and the process takes place through interaction with others. We will now consider some implications these insights might have on religious education, and then, we will consider Whitehead's views on holistic experience.

# Implications for religious education

The "process" view is compatible with contemporary life. Too often religion is seen as a separate compartment of life, set off from everyday secular life. Dichotomies are set between the secular and sacred, material and spiritual, natural and supernatural. Religion is often traditionally viewed as static, world-denying, and cut off from the world that is evolutionary and progressive. Religion can easily be presented as having little to do with real life as experienced, and as portrayed by the sciences.

Whitehead's perspective views all of reality as a unified process of becoming. Education is, therefore, a process which prepares individuals to experience and contribute to the creative process. Religion, in this context, takes on a new relevancy as the depth dimension of reality, and religious questions can be seen as relevant to everyday living. Religion becomes a reverence for the process of life, as well as a source of motivation for participating in all of life. Perhaps this is what Whitehead meant when he wrote that the very essence of education is "to be religious" (1929, p. 23). The root of the word religion means "tied into." Religious education, like all education, helps students to be tied into reality in all its dimensions. Obviously, religions and churches will go beyond Whitehead's broad observations on reality, and will teach more specific beliefs regarding the ultimate questions. Yet, each tradition can benefit from his "long-view" on the creative process, his unified perspective on reality, and his challenge to education to inculcate reverence for the creative process.

The self-creative approach provides a basis for recognizing personal religious experience. Whitehead's educational perspective reminds religious educators that they are indeed "drawing out" the religious insights and experiences of the learners. As Groome (1980) has reminded us, religious education is not a matter of "banking" religious content, but of fostering a process of reflection and sharing (p. 77). Learners have within them the capacity to grow in faith, to experience the mystery of God in their lives. Learners, as Rahner (cited in Hill, 1971) points out, are "questioners" that are open to the movements of God in their lives. They have their own valuable religious experiences to reflect upon and to share with others. Their insights are important to instructional content. Religious educators, then, are not properly "indoctrinators," who impose beliefs and manipulate religious commitment. Rather, they are facilitators of a religious process that comes from within each person. Recognizing the religious freedom which learners have as a human right, religious educators provide clarification and invitation. Intimidation or coercion of any kind would neither be compatible with Whitehead's views of education, or with any approach to religious education influenced by his perspective.

Stages and rhythms complement contemporary studies on human growth and faith development. In many ways the developmental work of Piaget in education, Erikson and others in psychology, Fowler in faith, and Kohlberg in moral values have gone beyond the views of Whitehead. Experimentalists have been able to give us a great deal of data and insights on human development, and have approached the subject from a much more personcentred point of view than Whitehead, Still, Whitehead's metaphysical and educational views on human development offer a broader context in which to understand the stages of personal development of participants in religious education. Where many contemporary developmental studies are limited to a Western, middle-class, and male point of view. Whitehead's analysis seems to be much more universal in its approach (Dykstra & Parks, 1986; Stokes, 1982). Perhaps his broader process views can serve as a corrective to narrowness in developmental studies. Used in conjunction with contemporary studies. Whitehead can assist religious educators in becoming more aware of the complexity of personal faith needs on all levels, whether it be children, young adults, adults, or the elderly. His observations about the rhythm of romance, precision, and generalization most certainly have to be studied more carefully in terms of learners' needs and capacities at various stages of development. His organismic approach to self-development and his descriptions of the periods and cycles of human development, might well be integrated into the more contemporary studies on faith development.

Value of social connectedness: useful framework for approaches to religious education. Whitehead reminds educators that persons, and therefore learners, are not passive beings sitting next to each other waiting to receive knowledge. Human development, and indeed education, takes place through interdependence, interaction, and exchange. In religious education the task is not to indoctrinate passive students, but to create learning communities where there is a dynamic sharing of experiences and views. Both Westerhoff (1976) and Nelson (1971) have reminded us of the power of the community in passing on tradition. Marthaler (1978) has described religious education as the process of socialization. Whitehead offers us an educational and philosophical framework for such a process of sharing faith in religious communities, both formally and informally.

# Education as a Holistic Experience

Whitehead insists that authentic education is ultimately a discipline for living. Knowledge must be connected with life, just as actual entities are connected with the universe. All life is a unity, a totality, and thus all human reflection should begin and end in the experience of this totality. All individual things are constituted by the interplay of the objective and the subjective, and are made up of individual occasions of experience. For Whitehead, "all knowledge is conscious discrimination of objects

experienced" (1933, p. 228). Humans are part of a universe in which all actual entities are in the process of becoming through experience. All growth, including human growth, demands an experiential participation in this universal process of becoming. Whitehead writes:

I have termed each individual act of immediate selfenjoyment an "occasion of experience." I hold that these unities of experience, these occasions of experience, are the really real thing which in their collective unity compose the evolving universe, ever plunging into the creative advance. (1961, p. 12)

In a very real sense, we are our experiences, and our experiences are one of the components of the world itself. There is an organic unity in Whitehead's universe, a kind of organic life and experience in all of reality. Humans best link themselves to reality by participating as fully as possible in reality. Educational institutions, then, are "homes" where young and old can participate in the adventure of reflecting on and experiencing life in all its manifestations. Education is a holistic experience, an experience that is physical, intellectual, emotional, aesthetic, and volitional.

# The physical dimension

Whitehead reminds educators that learners also are physical in their nature. He writes: "I lay it down as an educational axiom that in teaching you will come to grief as soon as you forget that your pupils have bodies" (1929, p. 78). He firmly believed in the connection between the physical and the intellectual in life and in education. We are not only minds, but we are also bodies, and are driven by the experiences of our bodies. "Mankind is an animal at the head of the primates, and cannot escape habits of mind which cling closely to habits of body" (1933, p. 58). The body is an organism, which regulates our cognizance of the world. In a sense, the spatio-temporal world is mirrored in our bodily life, so that the unity of our perception is dependent on the functioning of the body. We "feel" with the body and, therefore, the witness of the body is an ever-present element in our perception of reality. Whitehead, therefore, had little tolerance for what he considered to be the disastrous antitheses between mind and body, and thought and action that often exist in traditional education.

#### The intellectual dimension

Education for Whitehead is best described as the activity of thought. He writes: "What education has to impart is an intimate sense of the power of ideas, for the beauty of ideas" (1929, p. 18). He vehemently opposed education that merely sets out to impose scraps of information, or what he

called "inert ideas." He once commented sharply: "A merely well-informed man is the most useless bore on God's earth" (1929, p. 1). Inert ideas are ideas that are merely taken into the mind without ever being used, tested, or placed into fresh combinations with other ideas. Those who view education in terms of imparting such information wrongly see the mind as a mere passive instrument that needs to be sharpened with facts. In contrast, Whitehead viewed the mind as a living organism that is in perpetual activity; delicate, receptive, responsive to stimuli. It responds best when nature is authentically presented as full-blooded and happening with dynamic immediacy. Thus Whitehead recommends that teachers be "alive with living thoughts," and that these thoughts be carefully selected, put into all kinds of interesting combinations, and applied to the circumstances of life. Such living knowledge is not so much a "content," as it is a "process of exploration," wherein the past is applied to the present, the abstract to the concrete, and theory to action (1929, p. v).

Understanding is a key word in Whitehead's approach to grasping reality in education. It was his conviction that the expansion of understanding is of prime importance for the very survival of civilization. Such understanding is internal, in that it involves the comprehension of the composition of entities, seeing how all the factors interweave to form a totality. Understanding is external when it comprehends that each total unity is related to, and thus affects, the whole process of development (1938, p. 63). Education is aimed at both internal and external understanding in order to gain an "understanding of that stream of events which pours through life," especially through life as experienced by the learner (1929, p. 3).

Importance is another key term for Whitehead. It refers to a characteristic of knowledge as applied not only to parochial situations, but also linked to the whole cosmological process. Importance thus implies that the learner has the intellectual freedom to make selections and applications. It is the importance of entities which generates interest, and retains the value of things through time. The awareness of importance, for Whitehead, is the ultimate power in education. Such importance "takes the various forms of wonder, of curiosity, of reverence, of worship, of tumultuous desire for merging personality in something beyond itself" (1929, pp. 62-63).

Ultimately it is wisdom that is the goal of understanding knowledge. Whitehead points out that, although wisdom is the vaguer ingredient in intellectual formation, it is of greater importance than mere knowledge. We can easily acquire much knowledge, and yet remain bare of wisdom. It is only when knowledge culminates in wisdom that we have genuine education. Wisdom is the way knowledge is held; the way it is employed to add value to our experience. It goes beyond intellectual acuteness to include

reverence for, and sympathy toward, reality. Wisdom indeed indicates the kind of balanced development which Whitehead sees as the very aim of education (1954, p. 284).

# Emotion, imagination, and the aesthetic dimension

Whitehead, in his holistic approach to education, also gives attention to the importance of affectivity in human formation. He maintains that "besides conceptual experience, life also includes the enjoyment of emotion" (1938, p. 229). Mere knowledge is an abstraction of little value, whereas genuine knowledge is "always accompanied with accessories of emotion and purpose." The true learning experience does not consist, therefore, in merely learning facts or verbal phrases, but in the "clashes of emotion and unspoken revelations of the nature of things" (1968, p. 216). The teacher's role is thus extended to moving the learners, and not merely instructing them.

Imagination is also given attention in Whitehead's consideration of progress in culture and education. Progress in civilization happens when imagination causes thought to run ahead of realization; when it brings recognition of dreams of things to come, of possibilities still unrealized. In education, it has been imagination which has given freshness and vitality to ideas. As Whitehead humorously put it: "Knowledge does not keep any better than fish. You might be dealing with an old species, but somehow or other it must come to the student just drawn out of the sea and with the freshness of its immediate importance" (1929, p. 147). Education is an "imaginative consideration of learning," wherein imagination illumines the facts and enables learners to envision new worlds and new possibilities. Thus Whitehead calls for teachers who are "lighted up with imagination," and asks them to be open to learn from the young, because the young are experiencing the most imaginative period of their lives (1929, p. 146).

In Whitehead's educational scheme there is also a place for aesthetic experience, for it is here that one is able to value that which is beyond mere knowledge. He writes: "When you understand all about the sun and all about the atmosphere and all about the rotations of the earth, you may still miss the radiance of the sunset. There is no substitute for the direct perception of the concrete achievement of a thing in its actuality" (1954, p. 286). The aesthetic experience is a needed source of stimulation and discipline in learning, a necessity for the deepening of one's individuality. It was Whitehead's conviction that "once young people are grasped by the beauty within knowledge, a certain self-surrender occurs" (1933, p. 370).

Finally, freely chosen action is a necessary element in Whitehead's holistic approach to education. It is in activity that all entities, including

the human self, are produced. It is in activity where we realize that we are part of the creative process; that we are "the potter and not the pot" (1929, p. 58). Action moves us beyond thought, and even beyond self, and thus enables us to be linked with transcendence. Therefore passive contemplation is not an adequate means of meeting the facts of reality. Only action brings direct knowledge of reality, and therefore the very aim of education is "the marriage of thought and action" (1968, p. 127).

We have seen that for Whitehead education is preparation for living, a holistic experience that heightens the participants' awareness of their link with, and their participation in, the process of reality. The educational experience involves all the dimensions of the person: the physical, intellectual, emotional, imaginative, aesthetic, and volitional. This perspective is especially useful as a framework for contemporary religious education. We will proceed to look at some of the more important implications.

# Implications for religious education

View religious experience as the centrepiece of religious educators' work with learners. For Whitehead, human growth entails experiential participation in reality. Most certainly this principle applies to growth in faith. Westerhoff (1984) points out: "We cannot know God by objective reflection, but we can know God through subjective experience" (p. 64). Religious education is concerned with much more than intellectual instruction; it is aimed at providing the "green spaces," where learners can experience their faith. It provides an experience of a caring and supportive community where learners can experience the creative power of love. Whitehead extends the boundaries of this experience for us, and offers us new horizons of participation with all of reality. He leads us to a deeper reflection on our experiences of the beauty and creativity in the world. Moreover, Whitehead gives us a sense of unity with those around us, as well as with the entire process of becoming.

Contrast between inert ideas and living thoughts useful when applied to religious traditions passed on by religious educators. In the past, there often has been a certain objectification of the religious tradition, which has been viewed as a static body of doctrine, a "deposit of faith," passed down from generation to generation in an unchanged fashion. The "catechism" and "Sunday school" approach to religious education was often satisfied if the teachings were merely memorized, even if there was little understanding. The doctrines somehow were presented as ahistorical, with little awareness that much of the content was actually late medieval or perhaps nineteenth century versions of Christian beliefs. As one of the great pioneers in modern religious education, Josef Jungmann (1983), has pointed out, the

faithful were often given "a string of dogmas and moral principles," and not the person of Jesus Christ and his living message (p. 213).

Whitehead reminds us that the only knowledge that will move the living organism of the mind, and indeed the organism as person, is knowledge that is alive, dynamic, and challenging. The Christian tradition, therefore, is not to be seen as a "box of doctrines" but as a living, evolving tradition that has fresh and novel things to say to the pressing questions of today. If this tradition is to touch the learner and become part of life, it must be presented as "alive." Moreover it must be presented by teachers who in fact are themselves living the tradition.

The role of affectivity in learning is a reminder that the goal of religious education is not limited to cognitional growth. Whitehead stresses the excitement of learning, the wonder of discovery, the enjoyment of understanding, and the satisfaction in being able to apply knowledge to live. Similarly, the emotions play an important part in effective religious education. Too often this aspect of religious conversion is not given its due. Without the emotional and passionate elements, religious meaning systems are sterile, unable to bond people to each other in community, and unable to move people to unselfish service (Lang, 1983). Therefore, the religious educator is not only a resource, but one who can touch learners in the depth of their feelings. As Palmer (1983) puts it: "Teachers must also create emotional space in the classroom, space which allows feelings to arise and be dealt with" (p. 83).

The accent on imaginative learning provides religious education with an incentive to retrieve this aspect of personal growth. For Whitehead the imagination is the very "light" that illumines knowledge and gives freshness to the content of education. Much of what he has to say in this regard has application in religious education. Indeed, most of revelation is contained in imaginative literature, and is only accessible to one whose imagination is properly attuned. Fischer (1983) says:

Far from endangering the faith, the imagination evokes and nurtures it: revelation occurs first on the level of imagination and so does the initial response of faith to revelation. The imagination, properly understood, provides access to the deepest levels of truth .... (p. 6)

It is our fantasies and our dreams which so often reveal our deepest longings, our most profound questions regarding Mystery. Moreover, it is through symbols and imaginative rituals that we are able to communicate with the divine. Paul Ricoeur (1965) reminds us that people are not moved by direct appeals to their will, but by experiencing their imagination

touched by someone or something that excites them into hoping and acting (p. 127). Religious education which creatively stimulates the imagination is often more effective than that which merely instructs or gives preachments. This explains the increased interest in approaches to religious education that are more oriented to the right hemisphere of the brain than to the left.

The aesthetic dimension of education pays tribute to beauty that is connected with coming to the truth. Whitehead was a profound thinker who gave a vision of a world in process, a world teeming with creativity. To read his writing is often to be taken to the heights and depths of reality, and to experience a sense of awe in the sweep of his vision. In a sense, religious education must attempt to provide learners with similar experiences of the beauty of the Christian vision. In many ways, those who teach the tradition invite learners to an aesthetic experience of God and creation, an encounter with ultimacy that is both transcendent and immanent. It is through such experiences that learners are given a "sacramental" outlook on reality, a sensitivity to both the natural and supernatural marvels which surround them. As Anthony Padovano (1979) puts it: "Aesthetic experience and sacramental experience deal with the physical world directly but beneath the surface appearance. They transform the vision of the world which engages us.... We encounter the familiar as charged with mystery" (p. 3).

Emphasis on action as the culmination of education is consonant with religious education's current stress on active faith. Application, action, and creative productivity are the culmination of sound education, according to Whitehead. His approach gives incentive to religious education to continue to insist that the life of faith goes beyond belief and trust to "lived faith" and action. Although Whitehead did not have as radical an edge to his notion of action as we might find in those who speak of education as "conscientization" and "liberation," he did advocate the same sense of reverence for life and our duty to preserve it. His writings do offer a philosophical and educational framework within which religious educators can continue to carry out their commitment to involving others in preserving the sacredness of life and resisting oppression and injustice.

#### Conclusion

I have singled out two of the themes in Whitehead's educational thought: self-creation and holistic experience. In this perspective, learners are seen as living organisms, in process from within, and moving through stages of development; a process which is both social and holistic in its movement. The implications of this educational perspective for contemporary religious education are, as we have seen, indeed manifold.

# REFERENCES

- Brumbaugh, Robert. (1981). Whitehead: Process philosophy and education.

  Albany: State University of New York.
- Dykstra, C. & Parks, S. (Eds.). (1986). Faith development and Fowler. Birmingham: Religious Education Press.
- Dunkel, H.B. (1965). Whitehead on education. Columbus: Ohio State University Press.
- Fischer, Kathleen R. (1983). The inner rainbow. New York: Paulist Press.
- Groome, Thomas H. (1980). Christian religious education. San Francisco: Harper and Row.
- Hartshorne, Charles & Peden, Creighton. (1981). Whitehead's view of reality. New York: The Pilgrim Press.
- Hill, Brennan R. (Fall, 1971). Karl Rahner's transcendental method. Carmelus, pp. 27ff.
- Jungmann, Josef. (1983). Theology and kerygmatic theology. In Michael Warren, (Ed)., Source book for modern catechetics. Winona: St. Mary's Press.
- Lang, Martin A. (1983). Acquiring our image of God: The emotional basis of religious education. New York: Paulist Press.
- Marthaler, Bernard. (1978). Socialization as a model for catechetics. In Padraic O'Hare, (Ed.), Foundations of religious education. New York: Paulist Press.
- Meland, Bernard E. (1953). Higher education and the human spirit. Chicago: University of Chicago Press.
- Miller, Randolph Crump. (May, June, 1973). Whitehead and religious education. Religious Education, pp. 315-322.
- Miller, Randolph Crump. (July, 1975). Process thinking and religious education. Anglican Theological Review, pp. 277-288.
- Miller, Randolph Crump. (October, 1985). Dewey, Whitehead, and Christian Education. Living Light, p. 4.
- Nelson, Ellis. (1971). Where faith begins. Richmond: John Knox Press.
- Palmer, Parker. (1983). To know as we are known: A spirituality of education. San Francisco: Harper and Row.
- Padovano, Anthony. (1979). Aesthetic experience and redemptive grace. In Gloria Durka and Joanmarie Smith, (Eds.), Aesthetic dimensions of religious education. New York: Paulist Press.
- Pittenger, Norman. (1969). Alfred North Whitehead. Richmond: John Knox Press.
- Price, Lucien. (1954). Dialogues of Alfred North Whitehead. Boston: Little, Brown and Co.
- Ricoeur, Paul. (1965). History and truth. Evanston: Northwestern University Press.
- Stokes, Kenneth (Ed.). (1982). Faith development in the adult life cycle. New York: Sadlier.
- Westerhoff, John H. (1976). Will our children have faith? New York: Seabury Press.
- Westerhoff, John. (1984). On knowing the bicameral mind. In Norbert Greinacher and Virgil Elizondo, (Eds.), The transmission of the faith to the next generation, concilium. Edinburgh: T. and T. Clark Ltd.

- Whitehead, Alfred North. (1929). Aims of education and other essays. New York: The Macmillan Co.
- Whitehead, Alfred North. (1929). Function of reason. Princeton: Princeton University Press.
- Whitehead, Alfred North. (1933). Adventures of ideas. London: Cambridge University Press.
- Whitehead, Alfred North. (1938). Modes of thought. New York: The Macmillan Co.
- Whitehead, Alfred North. (1941). Process and reality. New York: The Macmillan Co.
- Whitehead, Alfred North. (1954). Science and the modern world. New York: The Macmillan Co.
- Whitehead, Alfred North. (1958). Introduction to mathematics. New York: Oxford University Press.
- Whitehead, Alfred North. (1961). Nature. In Ruth N. Anshen, (Ed.), Alfred North Whitehead: His reflections on men and nature. New York: Harper Bros.
- Whitehead, Alfred North. (1968). Essays in science and philosophy. New York: Greenwood Press.