Title: THE INFLUENCE OF COGNITIVE CONFLICT ON RELIGIOUS THINKING IN FIFTH AND SIXTH GRADE CHILDREN

Abstract approved: Macy M. Cramer

The purpose of this study was to test the effectiveness of two religious education curricula in facilitating measurable concrete-to-abstract movement in children's religious thinking. Subjects for the study were 47 fifth and sixth grade children enrolled in the Sunday School classes of four Oregon United Methodist Churches. Twenty-four children who served as experimental subjects were exposed to the Cognitive Conflict Curriculum. Twenty-three subjects who served as control subjects were exposed to the Christian Studies curriculum. The curricula were taught in Sunday School sessions of the target churches over a period of eight weeks. Pre- and post- measures of religious thinking were obtained on the two summed scales, RTTC and RTTA, of John H. Peatling's Thinking About the Bible instrument. One central null hypothesis was formulated to focus the comparisons of the experimental and control groups with respect to changes in concrete
to abstract religious thinking.

A 2(program) X 2(grade) X 2(sex) analysis of covariance using regression was employed to analyze the data. The pre-test was designed as a covariate in the analysis to statistically equate any variation present in the scores of the subjects prior to treatment. The analysis of covariance, applied separately to the two scales, produced strikingly similar results. For both scales, the main effects of program, grade, and sex were not significant, and for both scales there was a significant interaction effect between program and grade.

Since the analysis revealed no significant difference for the main effect of program, the null hypothesis could not be rejected. However, since the analysis did reveal a significant interaction effect of program X grade, further analysis in the form of t-tests was undertaken to assess the degree of significance between mean adjusted posttest scores of experimental and control group fifth and sixth graders. For fifth graders, no significant differences were revealed on either scale; for sixth graders, significant differences were revealed on both scales.

The original analysis of covariance also revealed that the main effect of sex was not significant, and that the interaction of program and sex was not significant. These findings were sufficient to conclude that, as a group, neither females nor males exposed to the experimental curriculum were more
likely to advance in religious thinking (decrease in concrete thinking, increase in abstract thinking) than females or males exposed to the control curriculum. However, based on the finding that grade level was closely tied to advancement in religious thinking, the data were further analyzed to assess the effects of the curriculum on scores of females and males within grade level groupings. In these analyses, t-tests were again employed. A significant difference was revealed between sixth grade experimental group females and sixth grade control group females, and a difference approaching significance was revealed between sixth grade experimental group males and sixth grade control group males. There was no significant difference for any of the fifth grade comparisons tested.

These findings suggest that cognitive conflict may have some benefit as a teaching method for facilitating both decreased concrete religious thinking and increased abstract religious thinking in sixth grade students. Further, the more specific analysis by grade suggests that the effects of the cognitive conflict-based teaching methodology may be more effective for sixth grade females than for sixth grade males.
The Influence of Cognitive Conflict on Religious Thinking
In Fifth and Sixth Grade Children

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CHAPTER I

INTRODUCTION

The learning model postulated by Jean Piaget describes intellectual development as occurring in a series of sequential and invariant stages in which individuals progress from prelogical through concrete to abstract forms of thought. Such progress is achieved as changes in what Piaget has termed intellectual "structures" occur through an equilibration process at ever higher levels of "functioning." Judging from recent investigations (Elkind, 1961, 1962, 1963; Long, Elkind, and Spilka, 1967; Goldman, 1964, 1965a, 1965b; Peatling, 1974; Peatling and Laabs, 1975) the development of understanding of religious concepts appears to follow a stage-based progression which closely parallels Piaget's model, and which appears to progress, as Piaget had suggested of general cognitive growth, through a series of equilibration periods that become increasingly more stable.

Yet while religious thinking appears to take place according to the same process, and in the same stages as thinking in general, it appears to occur at a slower rate. Whereas
Piaget had cited the giving way of concrete patterns of thinking at about the age of 11, investigators in religious development (Goldman, 1964; Peatling, 1974; Peatling and Laabs, 1975; Hoge and Petrillo, 1978) have recently demonstrated that concrete patterns in religious thinking persist until much later. Goldman has hypothesized that it is religious language itself, a secondary language employing metaphor, simile, analogy, and parable as its dominant forms, which is largely responsible for structuring this lag in religious thinking. Such language, exemplified by the Bible, reinforces the concretism which profoundly limits logical thinking in early and middle childhood.

Religious educators in recent years have been faced with the task of developing instructional materials aimed at diminishing lag in religious thinking. Goldman and his proponents have argued that such materials, at least for children younger than 12, should avoid the direct use of the Bible, since children at this age have not yet reached the capacity for abstract or propositional thinking. However, a number of other Christian educators (Haystead, 1974; Richards, 1970; Wakefield, 1975) have strongly disagreed with this approach, arguing that curricular materials must remain Bible-centered even in teaching young children with limited cognitive abilities. Nevertheless, these educators have suggested the use of specific methods for Biblical instruction, for example using dramatic play or
puppet play to reinforce the child's cognitive understanding of Bible stories, which they believe may be more effective than former methods, and which may help to diminish the overall problem of lag in religious thinking.

It may be argued that both approaches are consistent with sound educational applications of Piaget's theory with reference to content-appropriateness (the matching of appropriate content matter to the cognitive capacities of children being instructed) and method-appropriateness (the use of instructional materials which maximize learning by assisting the inner functioning of organization, adaptation, and equilibration.) Such an argument would be based on the observation that Goldman is advocating the removal of content matter which he believes to be inappropriate to the cognitive capacities of children who have not reached the stage of abstract thinking, and that Haystead, Richards, and Wakefield are advocating the use of methods of presentation of the Bible which they believe will provide assistance to the child's cognitive mechanisms and ensure learning in spite of difficult content.

Yet neither approach seems adequate to the problem posed by lag in religious cognition. Goldman's approach is unacceptable to most religious educators because it purports to remove content from religious education which is uniquely religious content. And the approach of Goldman's opponents is superficial at best. A third approach, to date unexplored, may
provide a more fruitful avenue of investigation. This approach is consistent with educational applications of Piaget's theory suggested by neo-Piagetian researchers, and involves the focusing of attention on the specific research-based means by which children are assisted in operational progress; that is, the transition from one mode of thought to another.

Neo-Piagetian researchers have, in fact, made significant strides in isolating specific strategies which they believe solidify or accelerate such transitions. To date, the majority of such studies have concerned themselves with the acceleration of concrete operational progress via the investigation of training techniques which might induce conservation of Piaget's first-order cognitive invariants (those associated with concrete thought), such as number, weight, substance, length, and area. One of the effective training procedures demonstrated by such studies is the procedure of exposing subjects to a state of cognitive conflict between two competing cognitive systems or structures. This conflict is hypothesized to induce a reorganization of the subjects' intellectual actions, leading ultimately to higher level (less concrete, more abstract) thinking.

Assuming that the strategies which have been found to accelerate some aspects of concrete operational progress are the same factors which may have the potential for accelerating some aspects of formal operational progress, including rela-
gious understandings, then the findings of the neo-Piagetian training studies appear to suggest important implications for curricular design in religious education. Specifically, this researcher suggests that the potential of a curriculum to induce a religion-related state of cognitive conflict may be influential in accelerating formal operational religious thinking in children; that is, in facilitating decreasing concrete patterns in religious thinking, and in facilitating increasing abstract patterns in religious thinking. Ultimately, such acceleration should provide the most promising means of diminishing what previous researchers have termed lag in religious thinking. The researcher believes that the potential of a curriculum to structure or influence such acceleration should be optimal in children aged 10-11 who, according to Piaget, have an emerging capacity to think hypothetically and deductively.

Purpose of the Study

The purpose of this study is to test the effectiveness of an experimental religious education curriculum that is designed to induce a religion-related state of cognitive conflict, in facilitating measureable concrete-to-abstract movement in level of religious thinking of fifth and sixth grade subjects. The curriculum will be tested against the effectiveness of a religious education curriculum employing parallel
content, but not designed to induce a state of cognitive conflict.

Rationale

Religious educators have received significant impetus from the research-based findings that religious understandings follow a course described by general principles of intellectual growth, and that such understandings proceed sequentially through dimensions of pre-logical and concrete, toward abstract thought. They have neglected, however, to utilize such findings in the design and subsequent verification of religious education curricula which effectively solidify or accelerate the growth of such understandings. This neglect has resulted in part because they have not focused attention on neo-Piagetian-derived criteria for methodology as a variable in the design of curricula.

The current study has been designed to investigate the relative effectiveness of the use of one neo-Piagetian research-based teaching strategy incorporated in an experimental religious education curriculum. The conclusions emerging from such a study should contribute significant information toward the design and use of instructional systems in religious education which maximally facilitate the growth of religious understandings in children.
Hypothesis

The following null hypothesis was tested:

Hypothesis: There will be no significant difference between fifth and sixth grade children exposed to the experimental curriculum and fifth and sixth grade children exposed to the control curriculum with respect to change in religious thinking as measured by the Peatling Scales.

Definition of Terms

The following terms were specifically defined for this study:

(1) Cognitive Conflict: refers in this study to a state of vacillation between competing cognitive systems or structures, the creation of which induces cognitive reorganization;

(2) Religion-related Cognitive Conflict: refers in this study to a state of vacillation between competing cognitive systems about the nature of reality; that is, between a Biblically-oriented view of reality, and a scientifically-oriented view of reality;

(3) Biblically-oriented View of Reality: refers in this study to an understanding of reality based on the belief that life has been set in motion and is under the control of God;
(4) Scientifically-oriented View of Reality: refers in this study to an understanding of reality based on the belief that life has been set in motion and is under the control of the laws of nature.

Operational Definition

The following term was operationally defined for this study:

Religious thinking: operationally defined as the numerical measure of the child's thinking along two scales, Religious Thinking Total Concrete (RTTC) and Religious Thinking Total Abstract (RTTA) as assessed by the Thinking About the Bible instrument (1978).

Assumptions

This study makes the following assumptions:

(1) The factors which have been found to accelerate the acquisition of first-order cognitive invariants are the same factors which have the potential for accelerating the acquisition of religious understandings, and one of these factors is the induction of religion-related states of cognitive conflict;

(2) A religious education curriculum can be designed to provide this factor;

(3) Religion-related states of cognitive conflict may be induced in learners by stimulating vacillation between
competing systems of the nature of reality;

(4) The Biblical and scientific views of reality, as defined by this study, constitute competing cognitive systems.
CHAPTER II

THEORETICAL FRAMEWORK

The theoretical framework underlying this study is the cognitive-developmental theory of Jean Piaget (Piaget & Inhelder, 1969; Piaget, 1975; Flavell, 1963; Baldwin, 1967).

Piaget distinguished two related aspects of intellectual development: the functional and the structural. Function refers to the manner in which cognitive progress occurs; structure refers to the inferred organizations, created through functioning, which account for the nature of the content emerging at given periods of development.

Intellectual functioning is characterized by two defining attributes which are invariant over the developmental span. These attributes are organization, the tendency to systematize, and adaptation, the tendency to adjust to the environment. Along with assimilation and accommodation, the two important complementary components of adaptation, these functional invariants form what Piaget has called the intellectual core. They make possible the emergence and subsequent development of cognitive structures (Piaget & Inhelder, 1969, p.6).

Cognitive structures are those "organized systems of propensities and capacities for responding to or construing the milieu which have been built up in the course of past encounters and which are operative at any particular moment of a developmental history" (Ballard and Fleck, 1975, p. 164).
In any cognitive encounters with the environment, relevant environmental events are assimilated to the existing cognitive structures, and concurrently, the structures accommodate themselves to encompass the novel realities of those events. In repeated assimilative and accomodative encounters, cognitive structures are created, developed, and changed into new structures. The achievement of equilibrium between the assimilatory and accomodatory actions in the structure-environment interaction is the goal of intellectual progress (Piaget, 1975, p.3).

A series of four stages of thought, labeled the Sensory-Motor Period (0-2), the Preoperational Period (2-7), the Concrete Operational Period (7-11), and the Formal Operational Period (11 and after), describe this progress. At the onset of each period, the structures defining the stage are in process of formation and organization and, therefore, tend to lack tight organization and stability. At the culmination of each period the structures form a tightly knit, organized and stable whole and characteristically show a high degree of interdependence. Each period, while defined by its own structures, also integrates or incorporates the structures of earlier stages. Piaget and Inhelder note that each period "extends the preceding period, reconstructs it on a new level, and later surpasses it to an even greater degree" (Piaget & Inhelder, 1969, p.152).

In the Sensory-Motor Period, such structures are primarily described as schemas. Schemas are cognitive structures that are
"organized behavior totalities," (Flavell, 1963, p.55) named by the behavior sequences to which they refer. The presence of schemas implies that a change in overall cognitive organization has occurred such that a new behavioral totality has become part of the child's intellectual repertoire. Schemas have three basic functional characteristics: repetition, generalization, and differentiation. Repetition consolidates and stabilizes the schema, as well as providing the necessary condition for change. Generalization enlarges the schema by extending its domain of application. Differentiation divides the originally global schema into several new schemas, each with a sharper, more discriminating focus on reality. It is characteristic of schemas not only to undergo such individual changes, but also to form ever more complex and interlocking relationships with other schemas. As various schemas are attained, the infant progresses from a neonatal, reflex level of complete undifferentiation, to a relatively coherent organization of sensory-motor actions with reference to his immediate environment. Such organization is limited, however, to nonsymbolic actions.

In the Preoperational Period, schemas gradually become internal and conceptual. The eventual organization of these conceptual schemas into interrelated systems, called operations, will not be accomplished until the third and fourth stages, but the preoperational period serves as an important transition period between the two. It is a period in which there is little stable equilibrium between assimilation and accommodation. The
cognitive structures characteristic of this period, such as egocentrism, syncretism, transductive reasoning, and centration, illustrate this instability. Egocentrism, for example, indicates that the preoperational child makes judgments about objects and events from the way things look to him, and consequently, is unable to take the point of view of other people. Syncretism indicates that he links items and events together that do not belong together. Transductive reasoning is evident in that he cannot group ideas together and draw a central principle. Centration is evident in that he focuses on one aspect of an objects or event to the exclusion of other aspects. In effect, the child is unable to accommodate to novel realities by assimilating them to the old in a coherent, rational way. Flavell maintains that "it is a useful and only slightly misleading generalization about the preoperational child that he has no stable, enduring, and internally consistent cognitive organization, no system in equilibrium, with which to order, relate, and make coherent the world around him" (Flavell, 1963, p.158).

Thought in the Concrete Operational Period is more flexible and mobile. The child's conceptual organization of the surrounding environment slowly takes on stability and coherence by virtue of the formation of a series of cognitive structures called groupings, which enable him to use certain principles to see relationships between things and ideas (Piaget & Inhelder, 1969, p.100). The operations involved in these structures consist of reversible transformations; hence, the attainment of the
grouping structures is dependent on the emergence of another cognitive structuring: reversibility. Reversibility refers to the understanding that all cognitive actions can return to their point of departure. In addition, the concrete operational child has attained conservation structures relative to first-order cognitive invariants, such as number and substance, and understands that changing or altering the appearance of the invariant does not change the invariant itself. Even though the "concrete operational child behaves in a wide variety of tasks as though a rich and integrated assimilatory organization were functioning in equilibrium or balance with a finely tuned, discriminative, accommodatory mechanism" (Flavell, 1963, p. 165), the mental actions in which he is involved are still restricted to events and objects that he has experienced directly or concretely. Although the concrete operational child is beginning to extend his thought away from the actual towards the potential, his starting point is always the actual.

It is not until the final period described by Piaget, the Formal Operational Period, that a fundamental and final reorganization of cognitive structures takes place, which reverses the role between the actual and the possible. The individual's thinking no longer is bound by concrete objects and events, but is structured by abstract symbols. Thinking at this stage is hypothetico-deductive and propositional, in the sense that the individual can entertain concepts with which he has had no real experience.
The review of literature is organized into three sections. The first section traces the relationship between Piagetian theory and studies of religious thinking. The second section describes the emerging patterns in religious education curricula. The third section delineates the neo-Piagetian cognitive conflict investigations aimed at solidifying or accelerating concrete operational progress in children.

Piaget and Religious Thinking

As early as 1944, Earnest Harms had provided evidence for a stage-based developmental progression in the child's understanding of God. Harms asked his subjects, who ranged in age from 3-18 years, to draw pictures of God. His analysis of the drawings revealed three broad groupings which reflected what Harms assumed to be universal stages of religious development: a Fairy Tale Stage (3-6 years) in which God was expressed as a King, as the "daddy of all children," or as someone living in a golden house above the clouds; a Realistic Stage (6-11 years) in which God was expressed in terms of the concrete teachings and conceptions of institutional religion, such as the Crucifix or the Star of David; and an Individualistic Stage (12-18 years) in which God was expressed with great diversity in either highly conventional scenes, such as the madonna;
highly unconventional scenes, such as light breaking through a dark sky; or in highly imaginative scenes, such as religious or cult motifs.

It was not immediately clear, however, that the three groupings identified by Harms corresponded closely to the stages of thought described by Piaget. This correspondence was recognized only some years later after other researchers had consciously sought to provide empirical evidence that such a correspondence existed. David Elkind's research in the early sixties provided much of this evidence.

Elkind's research investigated the growth of religious identity among Jewish, Catholic, and Congregational Protestant children. Religious identity referred specifically to the spontaneous meanings children attach to their religious denomination. Elkind wished to demonstrate that such expressed meanings would follow a predictable stage-based developmental progression closely paralleling the progression of stages in intellectual development as described by Piaget. Accordingly, he adapted Piaget's semi-clinical interview technique as an instrument for eliciting spontaneous meanings about religious identity.

A total of 700 Jewish, Catholic, and Protestant children were interviewed, and the results of these interviews were published in three separate articles (Elkind, 1961, 1962, 1963). Analysis of the data in all three of these studies indicated the presence of three distinct stages in the attainment of
religious identity: a global stage (5-7 years) in which the child has only a global, undifferentiated conception of his denomination as a kind of proper name; a concrete stage (7-9 years) in which the child has a concretely differentiated conception of his denomination in the sense that he uses observable features or actions to define his denomination and to distinguish among persons belonging to different denominations; and an abstract stage (10-12 years) in which the child demonstrates an abstract, differentiated conception of his denomination, defining it by mentioning nonobservable mental attributes such as belief and understanding.

Apart from the slight variation in chronological age suggested by Elkind's analysis, the stages themselves provided clear-cut evidence for the closeness of fit between stages of understanding of religious concepts and Piaget's preoperational, concrete operational, and formal operational stages.

Further evidence for this closeness of fit was provided by the investigation of the developmental changes in the form of the prayer concept conducted by Long, Elkind, and Spilka (1967). Following the design of Elkind's earlier studies, an adaptation of the semi-clinical interview technique was employed. One hundred and sixty boys and girls aged 5-12 were interviewed. Analysis of the data generated by this study revealed the presence of three major developmental stages strikingly similar to those reported by Elkind. These were:
a global, undifferentiated stage (5-7 years) in which the child has only a vague and indistinct understanding of the meaning of prayer; a concrete differentiated stage (7-9 years) in which prayer is conceived in terms of particular and appropriate activities, and in which prayer is seen as an external activity; and an abstract, differentiated stage (10-12 years) in which prayer is regarded as an internal activity deriving from personal conviction and belief.

Ronald Goldman's 1964 study employing the construct Religious Thinking to describe the use of Piagetian intellectual operations upon the subject matter of religion in Protestant children in England also established evidence for this stage-based parallel.

Goldman's sample of 200 children consisted of ten boys and ten girls at every age level from 6-16. Each child was individually administered the Picture and Story Religious Test. This test, constructed by Goldman, consisted of three pictures and three stories which, based on pilot testing, appeared to invoke the most widely used religious concepts in children's thinking. Following the presentation of each picture or story, the child was asked a standardized set of questions about the material. The responses to these questions were evaluated on a 7-point (0-6) operational scoring scale, representing the structure of Piaget's criteria of preoperational, and operational thinking. Analysis of the total scores revealed that progress in the grasp of the material, or in levels of understanding,
was structured by three stages of thought: a preoperational, intuitive thought period (up to 7 or 8 years Mental Age) characterized by unsystematic fragmentary religious thinking; a concrete operational thought period (8-13 years Mental Age) in which logical religious thinking was possible, but only within a restricted field limited to thinking about visible and tangible objects, and a formal operational thought period (12 or 13 years Mental Age and after) in which the child had the capacity to think hypothetically and deductively about religion without the impediment of concrete elements. Only at this latter stage, Goldman maintains, is the nature of the Biblical narrative understood as symbolic, parabolic, and metaphorical, so that a fully logical cognitive discussion of religious concepts is possible.

Such stages validate Piaget's structure as applied to the realm of religious thinking. Further, correlations between the scoring of the same five operational items on psychological and theological criteria, are sufficiently high to assume that normal logical and rational processes occur in theological judgements, and that religious thinking can be developed by children only as far as their current levels of operational thought will allow.

John H. Peatling's more recent investigation (1974), emerging from the work of Goldman, has not only provided additional evidence for the close parallel between Piaget's concrete and formal intellectual operations and the constructs Concrete
and Abstract Religious Thinking, but also by virtue of its utilization of an objective, criterion-referenced paper-and-pencil test, has demonstrated this phenomenon in larger samples than had hitherto been possible.

This study, which explored the effect of cognitive development upon the interpretation of legendary, symbolic stories in fourth through twelfth grade children, was aimed specifically at the relation of chronological age, mental age, and school grade to the observed incidence of Concrete and Abstract Religious Thinking. A 7% random sample of the total membership of the National Association of Episcopalian Schools, including 1994 subjects, comprised the sample. All subjects were administered Peatling's Thinking About the Bible instrument which was designed to generate scores on six scales of Religious Thinking. Two of the scales represent developmentally sequential levels of Concrete Religious Thinking, two of the scales represent developmentally sequential levels of Abstract Religious Thinking, and two of the scales are summed scales that represent a general, overall level of either Concrete or Abstract Religious Thinking. Cognitive development in the study was measured in terms of the summed scale representing a general overall level of Abstract Religious Thinking.

After scale means for groups defined by the subjects' chronological age, mental age, and school grade were calculated, it was possible to construct empirical "developmental" curves for each of the six scales of Religious Thinking. These empir-
ical curves were then testable against a hypothesized, developmental curve marked by a homogeneous progressive increase in mean scale scores. For school grade, the scale score means progressed through four plateau periods of apparent equilibrium and three periods of apparent transition. For chronological age, the scale score means progressed through three plateau periods of apparent equilibrium and two periods of apparent transition. For mental age, the scale score means progressed through four plateau periods of apparent equilibrium and three periods of apparent transition. Such evidence was interpreted as a finding that was compatible with Piaget's theory that cognitive development proceeds through a successive series of periods of temporary equilibrium. In addition, the periods of equilibrium tend to become successively more stable.

The data also indicate that the curves for the two scales representing Concrete Religious Thinking tend to exhibit decreasing means regardless of the variable, and that the two scales representing Abstract Religious Thinking tend to exhibit increasing means regardless of the variable. Yet a definite "back-and-forth" pattern of the scale means is evident in the decreasing and increasing tendencies, such that movement in at most two of the scale means appears to take place, while the other two remain in a period of relative stability. Peatling has interpreted this complex movement of growth and decay that never results in the complete obliteration of concrete thinking, as congruent with Piaget's observation of earlier forms of thinking
being conserved, and often, being employed well beyond the time when they are an individual's dominant, preferred mode of thinking.

Peatling and Laabs' comparison study (1975) of pupils in two church-related educational systems that were presumed to be different utilized the data Peatling had collected on Episcopalian students, plus data Laabs collected on 988 Lutheran students in a 25-county area of Northern Illinois. Since data on chronological age, IQ, and Mental Age were not available to Laabs, scale score means on Peatling's scales were calculated for grade level groupings only. The easily discernible progression of means for the general Abstract scale, similar in both samples, strongly suggested a common phenomenon in two different educational systems.

Judging from these studies, the relationship between the stage-related aspects of Piaget's theory of cognitive development in general, and religious cognition in particular appears well grounded. The construct Religious Thinking, in Peatling's words, "appears to be developmental in an almost classically Piagetian fashion" (Peatling, 1978, p.74).

Yet while religious thinking appears to take place in the same stages and according to the same process, it appears to occur at a slower rate. Harms had concluded after his 1944 study, cited earlier, that "the entire religious development of the child has a much slower tempo than the development of any other field of experience" (Harms, 1944, p.120). Goldman's
research (1964) provided empirical support for this conclusion in its finding that the change from concrete operational religious thinking to formal or abstract operational religious thinking does not occur in British children until somewhere between 13 and 14\frac{1}{2} years of age. Piaget, conversely, had cited the giving way of concrete patterns of thinking at about the age of 11. Peatling's study (1974) of Episcopalian children in American schools reinforced Goldman's findings. Peatling reported no group mean to be within the range of abstract religious thinking until Grade Level 8; he further maintained that not until Grade Level 10 would one expect there to be a consistent, truly dominant preference for abstract religious thinking. Hoge and Petrillo's study (1978) of religious thinking in adolescence, in which religious thinking was correlated with overall cognitive capacity by using Peatling's Religious Thinking Total Abstract measure and the Burney Logical Reasoning Test, provided evidence that this relationship is actually quite low: .23 for Catholics, .02 for Southern Baptists, and .18 for Methodists.

Such findings have raised important questions about the nature of religious instruction for young children and the role of this instruction in structuring a lag in religious thinking. While Peatling and Laabs (1975) found a similarity in pattern of scale score means in their assessment of religious thinking in Episcopalian and Lutheran children, they also found that the period of relative equilibrium came at different
grade levels for the two samples. This study has provided the clearest evidence, to date, that type of religious instruction may have a crucial bearing on the overall rate of growth in religious thinking.

Summary

The literature cites strong empirical support for the relationship between Piagetian theory of cognitive development in general, and religious cognition in particular. However, whereas the development of understanding of religious concepts appears to take place in the same stages as thinking in general; that is, following a developmental progression which ranges from prelogical to concrete to formal modes; and to take place according to the same process as thinking in general; that is, through a series of temporary equilibrium periods that tend to become increasingly more stable; it nevertheless appears to occur at a slower rate. There is some evidence that type of religious education may have a crucial influence on this rate of development.

Emerging Patterns in Religious Education

Goldman's early research findings, demonstrating that children pass through religious conceptual stages analogous to Piaget's preoperational, concrete operational, and formal thought stages, tend to support a generalized theory of religious thinking as opposed to the concept of a religious
faculty or instinct. This thinking appears to take place in the same stages and according to the same processes and methods as thinking applied to other fields of experience. But since religion is essentially an interpretation of experience, children must have lived long enough, have had sufficient mental stimulation and perceptual activity, and have developed some capacity for propositional thought before it can be understood at an insightful level.

Religious language, according to Goldman, complicates and distorts the development of this understanding since it is a secondary language employing metaphor, simile, analogy, and parable as its dominant forms. Such language reinforces the concretism which limits logical thinking in early and middle childhood, influencing the child to interpret the descriptive and metaphorical words literally. God is perceived, accordingly, as a man having a physical voice and living in the sky. Even when the cruder anthropomorphic ideas of God are giving way to a Supernatural, rather than a Superhuman, view of the deity at approximately 10, the child's natural concrete form of thinking makes it difficult for him to conceive of God as a spirit, not bound by physical limitations and capable of being everywhere, as opposed to being at one place at one particular time. Concrete limitations do not begin to disappear in religious thinking, Goldman maintains, until the child is approximately 13. Whereas biblical literalism may then still persist, there is nonetheless a move towards
a non-literal interpretation and a recognition of metaphorical truth (Goldman, 1965b, p. 132).

Such findings have prompted the contention on Goldman's part that Bible-centered religious education curricula contain content that is strongly inappropriate to the cognitive capacities of pre-abstract thinkers. Child-centered religious education curricula, in terms of meeting the child's religious characteristics and developmental needs at all stages, as opposed to Bible-centered curricula, are conversely most appropriate. Such child-centered curricula, organized around life themes such as Homes, Friends, People Who Help Us, according to Goldman, are congruent with the child's naturally occurring interests and experiences. Goldman contends:

"We should follow and extend children's interests so that they come to see their experiences in depth. In such a setting religious truth as an interpretation of all experience is known, not artificially, but at a truly personal level. In this way, religion and life are experienced as inseparable."

(Goldman, 1965b, p. 66)

Goldman's life-theme-based model has had a growing impact on the design of religious education curricula both in England and in the United States. In the United States, many Catholic educators have been experimenting with programs utilizing the life theme ideas. The designers of such programs, according to Ryan (1968) have been responding to the revelation theology. The
basic insight of this theology, that God reveals himself to us in the events of daily life, seems best presented educationally through the life-theme or experiential approach.

Whereas Goldman's child-centered curriculum has, thus, received favorable attention, his argument in favor of introducing the Bible in a systematic manner later in the child's development than has previously been practiced has received rather unfavorable attention. A number of Christian educators (Haystead, 1974; Richards, 1970; Wakefield, 1975) have disagreed with Goldman, arguing that religious education curricula should remain Bible-centered. In awareness of the child's total developmental needs and limitations at different stages, however, such educators have suggested the use of specific methods for Biblical instruction of children at various cognitive levels. At the Preoperational level, for example, they have suggested: (1) that Biblical information given to children be broken down to the preoperational child's level of comprehension; (2) that teaching be related to the first-hand experiences of the child, rather than relying solely on verbal explanations; (3) that memorization of specific scriptural content be related to the everyday experiences of the child; and (4) that activities which reinforce the child's cognitive understanding of Bible stories, such as dramatic play or puppet play, be employed. At the concrete operational level they have suggested: (1) that teaching content be concerned with concrete people, actions, and situations; and (2) that in teaching such concepts, the
emphasis be upon the children doing things, finding out, experimenting, and thinking creatively (Ballard & Fleck, 1975, pp. 168-170).

It may be argued that both approaches are consistent with sound educational applications of Piaget's theory with reference to content-appropriateness (the matching of appropriate content matter to the cognitive capacities of children being instructed) and to method-appropriateness (the use of instructional methods which maximize learning by assisting the inner functioning of organization, adaptation, and equilibration). Such an argument would be based on the observation that Goldman is advocating the removal of content matter which he believes to be inappropriate to the cognitive capacities of children who have not reached the stage of abstract thinking, and that Haystead, Richards, and Wakefield are advocating the use of methods of presentation of the Bible which they believe will provide assistance to the child's cognitive mechanisms, and ensure learning in spite of the difficult content.

Yet neither approach seems entirely adequate to the problem posed by lag in religious cognition. A third approach, to date unexplored, may provide a more fruitful avenue of investigation. This approach is consistent with educational applications of Piaget's theory suggested by neo-Piagetians, and involves the focusing of attention on the specific instructional means by which children are assisted in operational progress.
Neo-Piagetian Research and Cognitive Conflict

Neo-Piagetian research studies investigating the progress of thought across the developmental stages described by Piaget have, to date, focused attention primarily on one aspect of that progress: the child's acquisition of cognitive invariants, or the reliable features of objects.

Piaget holds that subjects acquire one or more of the cognitive invariants during each of the four hypothesized stages of intellectual development. Qualitative invariants, including those properties of objects that are of an "all-or-none" or "yes-no" variety, for example the property of objects to exist when they are perceptually absent, are acquired during the first two stages of cognitive development. Quantitative invariants, including first-order cognitive invariants such as number, weight, substance, length, height, and area, and second-order cognitive invariants such as volume, are acquired at the level of concrete and formal operations respectively.

Researchers, accordingly, have sought to discover the conditions under which the acquisition of cognitive invariants may be maximized or accelerated. Such discovery would appear to simultaneously furnish evidence as to the means by which operational progress as a whole may be measurably maximized or accelerated.

The design of studies investigating these conditions has typically involved three steps: (1) the establishment of a set
of subject groups matched on pretest performance relative to some Piagetian thought form, (2) the subjection of different groups to different training procedures, with one group assigned as a no-training control, and (3) the assessment of training effects through posttesting. Many of the earlier studies, as reported by Brainerd and Allen, unfortunately reflected disappointingly negative outcomes (Wohlwill and Lowe, 1962; Smedslund, 1961a, 1961c; Beilin and Franklin, 1961). However, the majority of the early researchers employed training procedures designed only to furnish specific practice with the relevant experience, for example counting experiences to induce number conservation or weighing experiences to induce weight conservation. Later researchers hypothesized that training procedures designed to go beyond the provision of specific practice experiences should be far more successful in inducing the acquisition of particular cognitive invariants.

Two avenues of extension as reported by studies in the literature appear to be successful. One avenue has focused on training procedures aimed at facilitating the development of cognitive structures that appear to be relevant to the acquisition of the particular invariants. For example, procedures designed to facilitate the development of the reversibility structure, a cognitive structure emerging at the third stage of the development of thought, and underlying the child's capacity to acquire the first-order cognitive invariants, have been frequently, and successfully reported. A
second avenue of investigation has focused on training pro-
cedures aimed at inducing the acquisition of the cognitive in-
vants by creating a state of cognitive conflict, or com-
peting cognitive systems.

Cognitive Conflict

Cognitive conflict was first described by Jan Smedslund,
a researcher at the University of Oslo, who was focusing inten-
sive attention on the equilibration aspect of the Piagetian
learning model. The equilibration position asserts that
logical structure is not originally present in the child's
thinking, but that it develops as a function of an internal
process, equilibration, which is heavily dependent on activity
and experience. Logical inferences are not derived from any
properties of the external world, but from the placing into
relationship of the subject's own activities. The process
of equilibration is highly influenced by practice which brings
out latent contradictions and gaps in mental structure, and
thereby initiates a process of inner reorganization (Smedslund,
1961a, p.13). Smedslund hypothesized that the procedure of
creating states of cognitive conflict in subjects might, in
fact, accelerate operational thinking by inducing such reorgan-
izations of the subjects' intellectual actions.

Smedslund's first cognitive conflict experiment (1961e)
emerged from observations he had made in an earlier experiment.
In this former experiment, the first three items in a test of
conservation of weight were simple deformation items in which subjects were questioned about the relative weight of two equally heavy objects after one of them had been deformed. The fourth item in this test was a combined addition/subtraction and deformation item. For example, a small piece of plasticine was taken away from one of two equally heavy balls and placed in a clearly visible position on the table; then the other ball was changed into a sausage and the subjects were asked: Do you think the ball weighs more, do you think they weigh the same, or do you think the sausage weighs more? This item provided a situation in which the two schemata of deformation and addition/subtraction came into contact and perhaps conflicted. It was observed that sometimes one schemata and sometimes the other schemata dominated. Subjects who believed that weight changed when the ball was transformed into a sausage had to combine their perception of this change in weight with the observation that a piece was taken away from the other ball. Smedslund reasoned that if subjects thought that the deformation into a sausage made the first ball heavier, there would be little conflict, since this belief is in agreement with the knowledge that the other ball has become lighter (a piece has been taken away). On the other hand, if subjects thought that the deformation into a sausage made the first ball lighter, there would be great conflict, since the other ball has also become lighter. Accordingly, the subjects have to reach a decision as to the relative size of the two changes.
"The state of inner conflict and uncertainty preceding this decision," Smedslund reasoned, "may well have the effect of inducing pronounced cognitive changes." (Smedslund, 1961e, p. 157).

Such observations led Smedslund to a tentative hypothesis concerning the effect of cognitive conflict on the acquisition of conservation of substance. This hypothesis suggested that in situations in which both the addition/subtraction and deformation schemata are activated with approximately the same strength, a cognitive conflict will occur, necessitating some type of cognitive reorganization. Smedslund suggested that such reorganization would result in the gradual domination of the addition/subtraction schema, with its greater clarity, simplicity, and consistency, as opposed to the deformation schema with its high degree of ambiguity, complexity, and internal contradiction. An experiment (1961e) was designed to test this hypothesis by exposing subjects to a number of situations in which the conflict between the two schemata would be maximal, and the subjects consequently forced to some form of cognitive reorganization.

Subjects for the study were 13 5 1/2-6 1/2-year-old children whose pretest performance on tests of conservation of substance and weight yielded no correct answers. Objects of colored plasticine were used. The two objects in each item were always identical in color, form, and volume, and the children were informed that they contained the same amount.
Every item consisted of one deformation and one addition or subtraction, followed by the standard question (Do you think there is more, or the same amount, or less plasticine in this one than in that one?), and then of the reverse transformation of either the addition/subtraction or the deformation, also followed by the standard question. The deformations were either very small and barely perceptible, medium sized (change of a thick sausage to a thin sausage), or large (change of ball to snake). The pieces that were added or taken away were always small relative to the size of the objects. A piece that was taken away was always placed nearby on the table, and a piece that was added was always stuck lightly on top of the objects. If a piece was added prior to a transformation of form, it was taken off during the transformation and then immediately replaced.

The behavior of the subjects during the training sessions was carefully observed and recorded. Five of the 13 subjects consistently adhered to the addition/subtraction schema and ignored the deformations, while the remaining eight were consistently dominated by their perceptual schema of change of weight through deformations. Little change was observed from session #1 to session #3. The initial signs of conflict, Smedslund reports, soon disappeared, and each subject consistently followed one of the schemata and ignored the other. Nevertheless, four of the five subjects who followed the addition/subtraction schema changed from no traces of conser-
vation in the pretest to several correct answers accompanied by logical rationale in the posttest. None of the subjects who followed the perceptual schema of deformations showed any change from pre- to posttest. Smedslund maintains that shifts from no conservation at all to conservation accompanied by a coherently stated logical justification have been rare in his experience; consequently he is inclined to interpret these four cases as tentative support for his cognitive conflict hypothesis.

The promising outcome of the experimental technique led Smedslund to continue to study the effects of practice in conflict situations on the child's acquisition of conservation of substance. One study (1961f) introduced a factor of continuity/discontinuity of material in order to study its effect on the process of acquisition. The results of the experiment indicated that the group trained on discontinuous material (small pieces of linoleum) had the most frequent acquisitions of conservation, followed by the group trained on continuous material (plasticine). Only two subjects in the control group improved. Smedslund suggests that the procedure is too complex to permit an exact delimitation of the effective factors in the practice sessions. "At the moment," he maintains, "one may only presume that the variable and complex problems presented to the child start some kind of active internal reorganization, resulting in sudden 'insights,' and that practice on discontinuous material is more stimulating
in this respect than practice on continuous material" (Smedslund, 1961f, p. 210).

Another study (1963) was designed to test the effect of five procedures involving different sources of uncertainty on the child's acquisition of conservation of length. Results indicated that differences between the groups of pre-schoolers trained on different procedures were quite small. The control group had the smallest number of acquisitions (one), while the experimental groups had 5, 4, 3, 7, and 5 acquisitions respectively. Although confident interpretation was precluded, Smedslund suggests that at least a plausible hypothesis in view of the fact that some subjects succeeded with each procedure, is that the repeated arousal of uncertainty, regardless of content, is the only factor involved.

Summary

The literature cites support for the contention that cognitive conflict, a state of vacillation between competing cognitive systems, has some validity as a training procedure aimed at inducing the acquisition of first-order cognitive invariants (those associated with concrete thought). Smedslund has most extensively used the procedure with studies of acquisition of substance, weight, and length conservation.
CHAPTER IV

METHOD

Subjects

The sample for this study consisted of 47 children enrolled in the fifth and sixth grade Sunday School classes of four United Methodist Churches in the state of Oregon. A total of 24 children, 14 fifth graders and 10 sixth graders, served as experimental subjects; of these 14 were females and 10 were males. A total of 23 children, nine fifth graders and 14 sixth graders, served as control subjects; of these 13 were females and 10 were males. The experimental group consisted of 19 children enrolled at First United Methodist Church, Corvallis, and five children enrolled at Rose City Park United Methodist Church, Portland. The control group consisted of nine children enrolled at Trinity United Methodist Church, Salem, and 14 children enrolled at Morningside United Methodist Church, Salem.

Demographic characteristics of the sample are contained in Appendix E. Perusal of this appendix indicates that 91% of the subjects came from intact families, while 9% came from single-parent families. Almost one-half of the subjects came from families with two children, another fourth came from families with three children, and an additional 17% came from families with four children. One subject was an only child. The mean age of mothers was 39.07, while the mean age of fathers was 41.69; hence, mothers of subjects tended to be slightly younger
than the fathers of subjects.

Level of education of subjects' parents varied widely. In general, fathers had completed slightly more formal education than had mothers. The largest educational grouping (Hollingshead, 1957) for mothers was standard college or university degree, while for fathers the largest grouping was for graduate or professional training.

Occupational status (Hollingshead, 1957) also varied widely, with fathers most often holding major professional status, and mothers who were employed most often holding administrative personnel or minor professional status. It should be noted that 46% of all mothers were not employed outside the home. None of the subjects' parents were employed in semi-skilled or unskilled occupations.

Religious preference of families was overwhelmingly Protestant. Such preference was expected in view of the fact that subjects were drawn from Methodist churches. Only four parents expressed preferences other than Protestant; two of these preferences were listed as Catholic, one as agnostic, and one as eclectic.

The subjects were at various levels with respect to their inquisitiveness about religion, but 90% only seldom or occasionally asked spontaneous questions of a religious nature. Parents were divided in terms of describing types of answers provided to these questions. While many parents checked a combination of the three responses, in general, more responses were checked
for "symbolic" and "other" than for "literal." With reference to frequency of description of Sunday School lessons, 90% of subjects did so only seldom or occasionally.

Procedure

Following approval of the study by the Committee for Protection of Human Subjects, Oregon State University, letters explaining the study were mailed to the parents of 90 prospective subjects whose names appeared on the current fifth and sixth grade rosters of the four target churches. Parents receiving letters were asked to sign an enclosed form granting permission for their child to participate in the study. They were also asked to complete an enclosed Background Data Sheet which would assist the researcher in describing the sample. The Data Sheets had previously been coded to insure subjects' anonymity and to facilitate the matching of pretests, posttests, and Background Data Sheets prior to analysis of data. Parents were asked to return the Data Sheets and Permission Forms to the researcher in an enclosed self-addressed envelope. Parents of prospective subjects who failed to respond to these requests within two weeks also received a postcard reminding them of the approaching pretest date, urging their participation in the study, and again requesting return of the Permission Form and the Background Data Sheet to the researcher. Seventy Permission Forms were subsequently returned.

On January 7, 1979, John H. Peatling's Thinking About the
Bible test, designed to assess level of religious thinking along four basic and two general summed scales, was administered to subjects in the four churches. The researcher tested 25 subjects at First United Methodist Church, Corvallis; a colleague of the researcher in the Family Life Department at Oregon State University tested eight subjects at Rose City Park United Methodist Church, Portland; a doctoral student in the Family Life Department at Oregon State University tested 15 children at Trinity United Methodist Church, Salem; and another colleague of the researcher at Oregon State University tested 14 children at Morningside United Methodist Church, Salem. The researcher, in addition, pretested five children who were unable to attend Sunday School on the January 7 pretest date, but who, nevertheless, wished to participate in the study. Two of these children were enrolled at First United Methodist Church, Corvallis, and three of the children were enrolled at Morningside United Methodist Church, Salem. These pretests were administered in the week following January 7, and preceding the first Sunday School session on January 14. Accordingly, a total of 68 subjects, 36 experimental subjects and 32 control subjects, were pretested. Postcards were mailed to the parents of these 68 subjects thanking them for their participation in the study thus far, and requesting their continued support through facilitation of regular attendance on the part of their child at Sunday School in the coming weeks.

On the eight Sundays following January 7 (January 14 through
March 4) Sunday School lessons were taught in the four groups. The Winter 1979 Christian Studies Curriculum, a publication of the United Methodist Publishing House, was used as the basis for instruction in the control groups. The teachers for these groups were volunteers solicited by the local churches to teach Sunday School. The teacher in the Morningside group had had prior experience as a Sunday School teacher, and had previously worked with the group of fifth and sixth graders. Two teachers were involved with the Trinity group since fifth and sixth graders had separate classes in this church. One of these teachers had had prior experience as a Sunday School teacher and was familiar with the group; the other had had no previous experience as a Sunday School teacher. The Cognitive Conflict Curriculum, designed by the researcher to parallel the content of the Christian Studies curriculum, but to feature variant methodology in the form of induction of cognitive conflict, was used as the basis for instruction in the experimental groups. The researcher and one of her colleagues in the Family Life Department at Oregon State University taught the curriculum in these groups (Corvallis and Portland respectively). The researcher had had previous experience as a Sunday School teacher, but not with fifth and sixth graders. The teacher of the Portland group had had no prior experience with either Sunday School teaching or fifth and sixth grade children. Each participating church provided an adequate sized room within which Sunday School sessions occurred. Each room was equipped with tables and indi-
vidual chairs.

On completion of the eight-week treatment period, 17 children of the 68 who had been pretested were eliminated from the sample based on the fact that they had failed to attend Sunday School five times out of the eight sessions. Six subjects were eliminated from the group at First United Methodist Church, Corvallis, three subjects were eliminated from the group at Rose City Park United Methodist Church, Portland, five subjects were eliminated from the group at Trinity United Methodist Church, Salem, and three subjects were eliminated from the group at Morningside United Methodist Church, Salem. Postcards were mailed to the parents of the 51 children who remained in the sample after this elimination, reminding them of the date of the posttest session.

On March 11, 1979, Thinking About the Bible was again administered by the researcher and her colleagues as a postmeasure of level of religious thinking. Forty-three of the 51 children remaining in the sample were tested: 19 children at First United Methodist Church, Corvallis, four children at Rose City Park United Methodist Church, Portland, nine children at Trinity United Methodist Church, Salem, and 11 children at Morningside United Methodist Church, Salem. Four other children who were unable to attend the posttest session, but who wished to complete the study, were posttested by the researcher in the week following March 11. Three of these children were enrolled in the Morningside group, and one was enrolled in the
Corvallis group. The researcher was unable to schedule a later posttest for one child in the Corvallis group, for one child in the Trinity group, and for one child in the Portland group. Accordingly, 47 subjects, 24 experimental and 23 control, who were pretested, who attended Sunday School at least five sessions, and who were posttested, were ultimately retained in the sample.

Experimental Curriculum

The experimental curriculum (Appendix D) utilized in a series of eight Sunday School sessions with the experimental subjects of this study was designed by the researcher following ideas promulgated by Jan Smedslund. The specific intent of the curriculum was to create a religion-related state of cognitive conflict in subjects. This state was defined by the researcher to be a state of vacillation between two competing cognitive systems defining the nature of reality which were assumed to be actively present in the subjects' repertoires. These competing systems were defined by the researcher to be the Biblical view of reality, familiar to subjects through Biblical language, and the scientific view of reality, familiar to subjects through their own experience in the modern world.

Cognitive conflict in the lessons of the curriculum was induced by a format which included presenting an example of Biblical language relevant to the topic of the lesson and then contrasting the ideas expressed by this language through probing, argumentative questions addressed to the subjects at large, and
expressive of modern or scientific reality. A group discussion format was viewed as being essential to the conflict process in light of Piaget's emphasis on the importance of interactions with peers as the primary means by which children are liberated from egocentrism and enabled to acquire rationality and objectivity by pitting their thoughts against those of others. However, the role of the teacher in initiating and facilitating such discussion via a direct and probing repartee with children was viewed as being most essential. Whereas the curriculum lessons were designed to suggest the initial conflict possibilities, it was projected as crucial that the teacher anticipate and be prepared to react spontaneously to responses and comments made by subjects with additional conflict possibilities.

The researcher hypothesized that subjects would be forced to undergo some type of cognitive reorganization which would permit them to deal with such contrasts. It was projected that such reorganization would take various observable forms: A) a tendency on the part of some subjects to adhere to one of the competing systems, and to ignore the other, and B) a tendency on the part of some subjects to seek ways of blending or synthesizing the competing systems. Subjects who might undergo the latter form of cognitive reorganization were anticipated to perhaps require some assistance in the process of synthesizing the conflict engendered. A third "de-briefing" routine was consequently designed to follow conflict discussions in the experimental curriculum lessons, and to ferret options for synthesizing
conflict.

Accordingly, three major routines constituted the cognitive conflict portion of the experimental curriculum lessons. These routines were: the presenting of Biblical language, the elucidation of competing cognitive systems about the nature of reality, and a de-briefing period in which options for synthesizing conflict were discussed. These routines were labeled (respectively) "Discovering in the Bible," "Induction of Cognitive Conflict," and "The Bible's Message for Us." Lessons also included time for such regular routines as learning activities and closing worship experiences. These latter activities were not designed to incorporate any aspects of the cognitive conflict experiences.

The specific content of the lessons of the experimental curriculum was prescribed by the content of the Winter 1979 unit of study in Christian Studies, a quarterly publication of the Methodist Publishing House. This unit of study was the basis for instruction in the two control groups of this study. The researcher desired to employ parallel content in the experimental lessons so that possible pre- to posttest changes in subjects' religious thinking as the result of the experimental curriculum might be more clearly tied to differences in methodology alone, as opposed to both methodology and content.

The use of this parallel content dictated, however, a deviation in the pattern of three of the experimental lessons, #3, #5, and #6. The content, as well as the Biblical material, prescribed for these three sessions by the Christian Studies curri-
riculum was not conducive to the induction of cognitive conflict in the same way as were the other five sessions. Accordingly, while the major routines of these three sessions remained the same, the conflict induced was relative to religion-related concepts other than Biblical language, for example children's beliefs about the value of worship experiences. Religion-related conflict in this sense, that is, a state of vacillation between any existing pattern of religious thought and new or different patterns, found opportunity for expression in a variety of ways throughout the curriculum. For example, in the first lesson, revelation of the fact that the Catholic Church has seven sacraments, whereas the Methodist Church has only two, carried the strong possibility of raising conflict in children's thinking as to the meaning of sacrament as a rite ordained by Jesus. However, in view of the fact that time in the hourly sessions did not permit the raising of all conflict possibilities, only conflict specifically directed by the lesson was induced unless children spontaneously raised and pursued other opportunities for conflict themselves.

The experimental curriculum was subjected to three types of evaluation prior to usage in the study: (1) it was evaluated by the Pastor of the First United Methodist Church, Corvallis, for the acceptability of its theological content; (2) it was evaluated by a panel of three Piagetian-versed Oregon State University professors for its ability to effectively induce cognitive conflict; (3) it was evaluated for facility of presentation through the pilot testing of one lesson from the curriculum with the fifth
grade Sunday School class of Wesley United Methodist Church, Eugene.

Control Curriculum

The curriculum employed as the basis for instruction in the control groups of this study was the Winter 1979 unit of study in Christian Studies, a quarterly publication of the United Methodist Church. This unit of study, an exploration of worship-related ideas, entitled "Let All the Peoples Praise Thee," was written by Nancy T. Foltz. Of the 13 lessons in the unit, only the latter eight were utilized as a part of this study.

Each lesson of the Christian Studies curriculum is organized around a main idea, specific learning goals, and particular scripture references. Each includes suggestions and guides for two different approaches to teaching the material: a teacher-directed approach and an "exploring-centers" approach. A worship activity is also written for each session.

Teachers of subjects in the control groups of this study were instructed to adhere closely to the prescribed content and teaching suggestions of the Christian Studies lesson plans, varying activity only where choice was allowed by the plan. An overview of the curriculum may be found in Appendix E. A perusal of this overview indicates that lessons are not designed to induce a religion-related state of cognitive conflict.
Comparison of Curricula

A comparison of the Christian Studies Curriculum and the Cognitive Conflict Curriculum with reference to similarity of content is provided for Lesson #2 in Appendix F.

Instruments

Thinking About the Bible (Short Form)

John H. Peatling's Thinking About the Bible instrument was used as a pre- and posttest measure of children's religious thinking. The instrument was designed to assess levels of Religious Thinking through the generation of scores on six scales: two developmentally sequential levels of concrete thinking entitled Religious Thinking Very Concrete (RTVC) and Religious Thinking Concrete (RTC), two developmentally sequential levels of abstract thinking entitled Religious Thinking Abstract (RTA) and Religious Thinking Very Abstract (RTVA), and two summed scales entitled Religious Thinking Total Concrete (RTTC) and Religious Thinking Total Abstract (RTTA). The summed scales represent overall levels of either concrete or abstract religious thinking; only scores on these scales were analyzed as data in this study.

Test Construction. Thinking About the Bible was constructed by identifying examples of both concrete and abstract religious thinking in the interpretation of three Biblical stories which Goldman's earlier research in England had demonstrated were useful in assessing the development of religious thinking. These stories were: Moses and the Burning Bush, the Crossing of the
Red Sea, and the Temptations of Jesus. The responses of participants to questions asked about each story were categorized into examples of concrete religious thinking or abstract religious thinking by means of established criteria, and those 108 responses most frequently given were selected for inclusion in the first draft text of the test.

After submission of this test to a field test employing a population of 403 students in Grades 4, 7, and 10, an item analysis was conducted to identify those items characteristic of concrete religious thinking or abstract religious thinking that elicited a theoretically expected pattern of responses; that is, concrete items that showed a decreased preference on the part of tenth graders, and abstract items that showed an increased preference on the part of tenth graders. These items, when identified, were combined anew and resubmitted to a second field test, employing 401 different subjects in Grades 4 and 10. The results from this test were submitted to another item analysis for the purpose of identifying that item per question characteristic of concrete religious thinking and that item per question characteristic of abstract religious thinking that most clearly discriminated the younger group of fourth graders from the older group of tenth graders. This analysis led to the identification of a set of 24 items: two items per question for 12 questions. In addition, two items per question were added. One of these two items was termed a Very Concrete item, while the other was termed a Very Abstract item. These two extra items per question were chosen and added
to the set of 24 items in order to make allowance for persons whose religious thinking actually was at either an "early" concrete religious thinking level or was at a "later" or "advanced" abstract religious thinking level. With the addition of these two extra items per question, the draft of the test (now containing 48 items) was believed to be capable of discriminating clearly between persons from the fourth grade through the post-high school level.

Test Contents and Administration. Thinking About the Bible is a paper-and-pencil instrument in which children respond to questions concerning three stimulus Bible stories. These stories appear in print in the body of the text and also are recorded on tape to facilitate use of the test with children in the elementary school grades. Each of the three stories is followed by a series of seven questions. The first four of these questions are followed by four criterion-referenced (concrete to abstract) responses. The respondent is instructed to record an "M" beside the response which is most agreeable to him, and to record an "L" beside the response which is least agreeable to him, leaving two responses blank. As the respondent indicates a preference for four possible responses per story for three stories, he creates a 12-part pattern of preference for a type of religious thinking. The fifth and sixth questions are designed to assess the degree of prior exposure to the story; that is, whether the respondent has heard the story before, or whether the respondent has seen the story enacted in a film or on television. The
seventh question is designed to assess the degree of literalness with which the story is interpreted; that is, Do you think this story really happened? Only data from responses to the first four questions after each story were utilized in this study.

The procedure for test administration permits an untimed test within a structured and standardized format, in that subjects periodically start together to receive the same standardized story stimulus, but have the freedom to make their own unhurried responses to each question. On the basis of information from 82 of the 91 schools in Peatling's third field test, the mean time taken for the administration of Thinking About the Bible was 49 minutes.

Scoring. Responses to the first four questions following each story are scored by the following rule:

- M is scored as 3
- L is scored as 1
- A blank is scored as 2

Once scores are assigned to a respondent's preferences, scale scores on the four basic scales can be determined. Each of these four basic scales can theoretically vary from a low of 12 to a high of 36. The mean of each of the scales is a score of 24. Thus, when an individual's responses have been recorded, and four scale scores determined, the sum of all four scale scores should equal 96. The two basic scales RTVC and RTC can be summed to create the general scale Religious Thinking Total Concrete, RTTC, and the two basic scales RTA and RTVA can be summed to create the general scale Religious Thinking Total.
Abstract, RTTA. Each of these summed scales can vary from a low of 36 to a high of 60.

Estimates of Reliability. The reliability estimates for the second field test of Thinking About the Bible were calculated using a full-length form of the instrument that included 48 items. First, a split-half estimate was calculated upon an odd-even split of the 48 items. This split created two sets of 24 items each which were then correlated with one another. The Spearman-Brown Prophecy Formula was then used to secure an estimate of reliability of the full set of 48 items. This procedure yielded the following estimates of reliability:

- for all boys $r_{11} = .96$
- for all girls $r_{11} = .96$
- combined $r_{11} = .96$

Since the split-half estimates of reliability seemed quite high, a second estimate of reliability was calculated using a special form of the Kuder-Richardson Formula 20 to secure a figure for coefficient alpha. That calculation yielded a figure for coefficient alpha of .80. Since Nunnaly had suggested that reliabilities between .60 and .80 were satisfactory for the purposes of basic research, the figure .80 for coefficient alpha was regarded as an acceptable estimate of the reliability of the 48-item form of Thinking About the Bible used in the second field test.

Between the administration of Thinking About the Bible in the second field test and the administration of the instrument
during the third field test, there was a revision of the instrument's several scales. As a result of this revision, estimates of reliability had to be recalculated. Since the hypotheses for Peatling's study had consistently been stated in terms of predicted movement of the mean of the general Scale across Grade, Age, and Mental Age, estimates of reliability were calculated only for the two general scales. The calculation of a split-half estimate involved splitting each of the two constituent basic scales of each of the two summed scales on an odd-even basis and then combining the odds and the evens. This provided an odd-even split for each of the two general scales. These odd-even half-scales were correlated and then corrected via the Spearman-Brown Prophecy Formula into an estimate of reliability for the complete 24 items of each of these general scales. Separate reliability estimates for sex-segregated groups were not calculated. This procedure yielded the following estimates of reliability:

\[
\begin{align*}
\text{combined (RTTC)} & \quad r_{11} = .74 \\
\text{combined (RTTA)} & \quad r_{11} = .73
\end{align*}
\]

While these estimates are lower than those reported after the second field test, it should be noted they are estimates for scales exactly one-half as long as that used in the second field test. The simple decrease in the number of items accounts for a fair proportion of the decrease in the absolute size of the estimate of reliability. Peatling concludes that almost all of the 'lowered' or 'lost' reliability estimate is attribu-
table to a shortening of the scales and, so, is largely an artifact of sheer number. The forms of Thinking About the Bible seem to be reasonably equivalent in spite of revision, and therefore, to deserve a user's confidence." (Peatling, 1978, p. 32) It should be noted that no test-retest reliability estimate for Thinking About the Bible has been secured.

Validity. Hoge and Thompson's test of conceptual validity (1977) of Thinking About the Bible established that for most purposes the RTTA is the most useful and reliable measure of overall level of religious thinking. Twelve professors of psychology or religious education were asked to fill out two copies of the test, one as if they were maximally abstract thinkers, and one as if they were maximally concrete thinkers, following Peatling's definitions. The scores of the professors must be examined from the perspective of total possible scores. The test is constructed so that a perfect RTVA score for a pure concrete thinker is 12, and for a pure abstract thinker, 36. A perfect RTTA score for a pure concrete thinker is 36, and for a pure abstract thinker is 60. The professors scored a mean of 16.0 (S.D. = 2.56) on RTVA for concrete thinkers and a mean of 30.8 (S.D. = 2.93) for abstract thinkers. They scored a mean of 37.3 (S.D. = 1.22) on RTTA for concrete thinkers and a mean of 58.8 (S.D. = 1.53) for abstract thinkers. Both of these differences are significant beyond the .001 level.

When test results were correlated with the conceptual criteria (concrete thinking = 1; abstract thinking = 2) the correla-
tion with RTVA was .94 and with RTTA was .99. Both correlations were significant beyond .001. The researchers' attention was directed to the RTVA and RTTA scores as opposed to the concrete scores due to their broader interest in adolescents rather than young children.

Hoge and Thompson report that this test was strongly successful. "The professors were able to score the test forms in a way almost exactly matching the concepts on which the test was constructed" (Hoge and Thompson, 1977, p.2). The RTTA score appeared slightly more valid than the RTVA.

A second test of predictive validity was carried out by Hoge and Thompson using high school students. Eleven teachers of religion in Catholic high schools and Confraternity of Christian Doctrine (C.C.D.) programs were asked to nominate up to six students they knew who were maximally clear cases of concrete religious thinkers or abstract religious thinkers as defined by Peatling. All the teachers had had some training in cognitive-developmental theory. A total of 42 students took the test, 20 nominated as concrete thinkers and 22 as abstract thinkers.

This validation test was not successful. The mean RTVA score for the students designated as concrete thinkers was 25.75 (S.D. = 1.55) and the mean for the students designated as abstract thinkers was 25.32 (S.D. =2.15). The mean RTTA score for the concrete thinkers was 51.80 (S.D. = 2.86) and the mean for the abstract thinkers was 52.96 (S.D. =2.19), significant
at the .08 level.

The authors suggest four possible reasons for the lack of success of this study: (1) the definition of concrete and abstract religious thinking given to teachers may have been too vague, especially in not distinguishing religious thinking from other areas of cognitive activity, (2) the teachers may not have had sufficient information to select students truly different in level of religious thinking, (3) the test may not have discriminating power for Catholic students of this age, and (4) the test may have limited discriminating power in its upper range, or in its entire range. Whatever the explanation for the second validation study results, however, the first study with professors suggests that Thinking About the Bible instrument has a degree of conceptual validity.

Background Data Sheet

Background information from parents was collected by means of a Background Data Sheet which solicited responses on factors of age, education, occupation, religious preference, marital status, and number, age, and sex of children. These factors were used for descriptive purposes in the study. Three questions on the Background Data Sheet also sought to elicit information about the type and frequency of children’s spontaneous religious questions and statements about Sunday School lessons, as well as the type of parental answers given to these questions.
Analysis

Analysis of covariance using regression was employed to analyze the data of this study. The pretest of each Religious Thinking Scale was designated as a covariate in the analysis to statistically equate any variation present in the religious thinking scores of the subjects prior to treatment. Adjusted mean posttest scores were computed, and t-tests were used to compare the significance of difference between these scores in various groupings.
CHAPTER V

RESULTS

This study was designed to compare the effectiveness of two religious education curricula in facilitating measureable concrete-to-abstract movement in children's religious thinking. Subjects for the study were 47 fifth and sixth grade children enrolled in the Sunday School classes of four Oregon United Methodist Churches. A total of 24 children served as experimental subjects; 19 of these were enrolled at First United Methodist Church, Corvallis, and five were enrolled at Rose City Park United Methodist Church, Portland. These subjects were exposed to the Cognitive Conflict Curriculum. A total of 23 children served as control subjects; nine of these were enrolled at Trinity United Methodist Church, Salem, and 14 were enrolled at Morningside United Methodist Church, Salem. These children were exposed to the Christian Studies Curriculum. The curricula were taught in Sunday School sessions of the target churches over a period of eight weeks. Pre- and post-measures of religious thinking were obtained by scores on the two summed scales (RTTC and RTTA) of John H. Peatling's Thinking About the Bible instrument. These scales represent an overall measure of the child's concrete religious thinking and of the child's abstract religious thinking.
A 2(program) X 2(grade) X 2(sex) analysis of covariance using regression was employed to analyze the data. The pre-test of each scale was designated as a covariate in the analysis to statistically equate any variation present in the religious thinking scores of the subjects prior to treatment. Such variation had been demonstrated by the considerable heterogeneity evident in scattergrams of pretest scores on the two scales. The inclusion of the pretest provided the most expedient means of assessing the significance of this variation, and at the same time procuring a numerical coefficient which could be attributed to the pretest variation when adjusted posttest scores were computed. The mean adjusted posttest scores were subsequently used to compare the effect of the experimental curriculum in various groupings. The pre-test means, posttest means, and adjusted posttest means are reported in Table 1 for RTTC and in Table 2 for RTTA.

**Hypothesis**

There will be no significant difference between fifth and sixth grade children exposed to the experimental curriculum and fifth and sixth grade children exposed to the control curriculum with respect to change in religious thinking as measured by the Peatling Scales.

This hypothesis was investigated by use of analysis of covariance, and included tests for the main effects of program,
Table 1
Mean RTTC Scores of Subjects Grouped by Grade, Sex, and Grade X Sex

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Adjusted Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fifth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>14</td>
<td>47.71</td>
<td>47.79</td>
<td>47.73</td>
</tr>
<tr>
<td>Control</td>
<td>9</td>
<td>49.67</td>
<td>47.56</td>
<td>47.63</td>
</tr>
<tr>
<td>Sixth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>10</td>
<td>47.20</td>
<td>45.40</td>
<td>45.51</td>
</tr>
<tr>
<td>Control</td>
<td>14</td>
<td>49.21</td>
<td>49.57</td>
<td>49.58</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>14</td>
<td>47.43</td>
<td>46.79</td>
<td>46.59</td>
</tr>
<tr>
<td>Control</td>
<td>13</td>
<td>50.23</td>
<td>48.62</td>
<td>48.56</td>
</tr>
<tr>
<td>Males</td>
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</tr>
<tr>
<td>Experimental</td>
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<td>48.00</td>
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<td>49.83</td>
<td>47.50</td>
<td>47.51</td>
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<td>45.17</td>
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<td>49.57</td>
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<td>Fifth Male</td>
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<td>47.51</td>
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<tr>
<td>Sixth Male</td>
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<td>45.75</td>
<td>45.76</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>47.86</td>
<td>49.57</td>
<td>48.86</td>
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Table 2
Mean RTTA Scores of Subjects Grouped by Grade, Sex, and Grade X Sex

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
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</tr>
<tr>
<td>Fifth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Experimental</td>
<td>14</td>
<td>48.29</td>
<td>48.14</td>
<td>48.17</td>
</tr>
<tr>
<td>Control</td>
<td>9</td>
<td>46.44</td>
<td>48.44</td>
<td>48.39</td>
</tr>
<tr>
<td>Sixth</td>
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<td>48.80</td>
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<td>50.40</td>
</tr>
<tr>
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<td>46.79</td>
<td>46.43</td>
<td>46.43</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>14</td>
<td>48.57</td>
<td>49.21</td>
<td>49.42</td>
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<tr>
<td>Control</td>
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<td>45.85</td>
<td>47.39</td>
<td>47.44</td>
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<tr>
<td>Males</td>
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<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>10</td>
<td>48.40</td>
<td>49.00</td>
<td>48.88</td>
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<tr>
<td>Control</td>
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<td>48.63</td>
<td>48.00</td>
<td>48.00</td>
</tr>
<tr>
<td>Control</td>
<td>6</td>
<td>46.33</td>
<td>48.50</td>
<td>48.49</td>
</tr>
<tr>
<td>Sixth Female</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Experimental</td>
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<td>48.50</td>
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<td>50.83</td>
</tr>
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<td>7</td>
<td>45.43</td>
<td>46.43</td>
<td>46.42</td>
</tr>
<tr>
<td>Fifth Male</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>6</td>
<td>47.83</td>
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<td>3</td>
<td>46.67</td>
<td>48.33</td>
<td>48.33</td>
</tr>
<tr>
<td>Sixth Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>4</td>
<td>49.25</td>
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<td>50.00</td>
</tr>
<tr>
<td>Control</td>
<td>7</td>
<td>48.14</td>
<td>46.43</td>
<td>46.43</td>
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</table>
grade, and sex, as well as tests for interaction effects. The complete analysis of covariance is reported in Table 3 for RTTC and in Table 4 for RTTA.

The significance level of the main effect of program was most crucially related to the test of this hypothesis. Since the analysis revealed no significant difference for this main effect, the null hypothesis could not be rejected. The experimental curriculum appears to have been no more significant in advancing religious thinking scores among combined fifth and sixth grade subjects than the control curriculum. The analysis of covariance also revealed that for both scales, the main effects of sex and grade were not significant. However, the analysis did reveal a significant interaction effect of program X grade. Consequently, further analysis of the data was necessary to assess the effects of the experimental curriculum by grade level.

In these analyses, t-tests were employed to assess the degree of significance between experimental and control subjects in both the fifth and sixth grades on adjusted mean posttest scores of RTTC and RTTA. For fifth graders, no significant differences were revealed on either scale (RTTC: \( t = .09 \); RTTA: \( t = .19 \)). Conversely, for sixth graders, significant differences were revealed on both scales (RTTC: \( t = 4.05, p < .01 \); RTTA: \( t = 3.64, p < .01 \)). Thus, fifth graders exposed to the experimental curriculum were neither more likely to decrease in concrete scores nor to increase
Table 3

A Summary of the Analysis of Covariance as Applied to the Combined Fifth and Sixth Grade Scores for RTTC

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>89.87</td>
<td>1</td>
<td>89.87</td>
<td>13.40</td>
</tr>
<tr>
<td>Program</td>
<td>8.98</td>
<td>1</td>
<td>8.98</td>
<td>1.34</td>
</tr>
<tr>
<td>Sex</td>
<td>2.38</td>
<td>1</td>
<td>2.38</td>
<td>.35</td>
</tr>
<tr>
<td>Grade</td>
<td>.13</td>
<td>1</td>
<td>.13</td>
<td>.02</td>
</tr>
<tr>
<td>Program X Sex</td>
<td>2.08</td>
<td>1</td>
<td>2.08</td>
<td>.31</td>
</tr>
<tr>
<td>Program X Grade</td>
<td>45.77</td>
<td>1</td>
<td>45.77</td>
<td>6.82**</td>
</tr>
<tr>
<td>Sex X Grade</td>
<td>5.39</td>
<td>1</td>
<td>5.39</td>
<td>.80</td>
</tr>
<tr>
<td>Program X Sex X Grade</td>
<td>.54</td>
<td>1</td>
<td>.54</td>
<td>.08</td>
</tr>
<tr>
<td>Pretest</td>
<td>113.78</td>
<td>1</td>
<td>113.78</td>
<td>16.96</td>
</tr>
<tr>
<td>Error</td>
<td>254.90</td>
<td>38</td>
<td>6.71</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>107707.00</td>
<td>47</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < .01**
Table 4
A Summary of the Analysis of Covariance as Applied to the Combined Fifth and Sixth Grade Scores for RTTA

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
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</tr>
</thead>
<tbody>
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<td>9.90</td>
<td>14.35</td>
</tr>
<tr>
<td>Program</td>
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<td>1</td>
<td>7.40</td>
<td>1.06</td>
</tr>
<tr>
<td>Sex</td>
<td>3.31</td>
<td>1</td>
<td>3.31</td>
<td>.48</td>
</tr>
<tr>
<td>Grade</td>
<td>.14</td>
<td>1</td>
<td>.14</td>
<td>.02</td>
</tr>
<tr>
<td>Program X Sex</td>
<td>1.09</td>
<td>1</td>
<td>1.09</td>
<td>.16</td>
</tr>
<tr>
<td>Program X Grade</td>
<td>43.87</td>
<td>1</td>
<td>43.87</td>
<td>6.30**</td>
</tr>
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<td>Sex X Grade</td>
<td>6.09</td>
<td>1</td>
<td>6.09</td>
<td>.88</td>
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<tr>
<td>Program X Sex X Grade</td>
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<td>1</td>
<td>.53</td>
<td>.08</td>
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<td>113.30</td>
<td>16.28</td>
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<tr>
<td>Error</td>
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<td>109631.00</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < .01
in abstract scores than fifth graders exposed to the control curriculum. However, sixth graders exposed to the experimental curriculum were more likely both to decrease in concrete scores and to increase in abstract scores than sixth graders exposed to the control curriculum. These findings indicate that the significant interaction effect between program and grade demonstrated by the original analysis of covariance was influenced by advancement of sixth grade experimental group subjects.

The original analysis of covariance had also revealed that the main effect of sex was not significant, and that the interaction of program and sex was not significant. These findings were sufficient to conclude that neither females nor males exposed to the experimental curriculum were more likely to advance in religious thinking than females or males exposed to the control curriculum. However, based on the findings of the study to this point, particularly those demonstrating the significance of grade level for advancement in religious thinking, it appeared important to analyze the data further to determine if more specific effects of the experimental curriculum would be revealed by scores of females and males within grade level groupings. Accordingly, t-tests were employed to assess the degree of significance between mean adjusted posttest scores for fifth grade experimental and control female and male subjects, and for sixth grade experimental and control female and male subjects on
RTTC and RTTA. The results of these tests are reported in Table 5. A significant difference was revealed between sixth grade experimental group females and sixth grade control group females, and a difference approaching significance was revealed between sixth grade experimental group males and sixth grade control group males. There was no significant difference between fifth grade experimental group and control group females, and fifth grade experimental group and control group males. These findings were sufficient to conclude that the significant gains demonstrated by the sixth grade experimental group subjects of this study were influenced by both females and males, but statistically more so by females.
Table 5
Mean Adjusted Posttest Scores on RTTC and RTTA
For Grade X Sex Groupings

<table>
<thead>
<tr>
<th>Grouping</th>
<th>Experimental</th>
<th>Control</th>
<th>t-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RTTC</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Fifth Grade Females</td>
<td>48.01</td>
<td>47.51</td>
<td>.36</td>
</tr>
<tr>
<td>Fifth Grade Males</td>
<td>47.51</td>
<td>47.67</td>
<td>.09</td>
</tr>
<tr>
<td>Sixth Grade Females</td>
<td>45.18</td>
<td>50.29</td>
<td>3.55*</td>
</tr>
<tr>
<td>Sixth Grade Males</td>
<td>45.76</td>
<td>48.86</td>
<td>1.91</td>
</tr>
<tr>
<td><strong>RTTA</strong></td>
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</tr>
<tr>
<td>Fifth Grade Females</td>
<td>48.00</td>
<td>48.49</td>
<td>.35</td>
</tr>
<tr>
<td>Fifth Grade Males</td>
<td>48.33</td>
<td>48.33</td>
<td>.00</td>
</tr>
<tr>
<td>Sixth Grade Females</td>
<td>50.83</td>
<td>46.42</td>
<td>3.00*</td>
</tr>
<tr>
<td>Sixth Grade Males</td>
<td>50.00</td>
<td>46.43</td>
<td>2.16</td>
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</table>

*P < .05
CHAPTER VI

SUMMARY AND DISCUSSION

Summary

The purpose of this study was to assess the impact of an experimental religious education program on older elementary children in Sunday School classes of four Oregon United Methodist Churches. The test of a single null hypothesis demanded a comparison of both fifth and sixth grade children, some exposed to the experimental program, the Cognitive Conflict Curriculum, and some exposed to a control program, the Christian Studies Curriculum. Following deductions from the neo-Piagetian model, the research question became essentially whether or not the systematic inducement of cognitive conflict into an educational program could accelerate concrete-to-abstract movement in children's religious thinking. The criterion measures were provided by scores on the two summed scales (RTTC and RTTA) of Peatling's Thinking About the Bible instrument. These scales represent an overall measure of the child's concrete and abstract religious thinking.

Pre- and posttest measures were used in a 2(program) X 2(grade) X 2(sex) analysis of covariance including regression analysis. The pretest was designated as a covariate in the analysis to statistically equate any variation present in the scores of the subjects prior to treatment. The analysis of
covariance was applied separately to the two scales of concrete and abstract thinking and produced strikingly similar results. For both scales, the main effects of program, grade, and sex were not significant, yet for both scales there was a significant interaction effect between program and grade.

Since the analysis revealed no significant difference for the main effect of program, the null hypothesis could not be rejected. However, the analysis did reveal a significant interaction effect of program X grade; therefore, further analysis in the form of t-tests was undertaken to assess the degree of significance between experimental and control group fifth and sixth graders. For fifth graders, no significant differences were revealed on either scale; for sixth graders, significant differences were revealed on both scales. The original analysis of covariance also revealed that the main effect of sex was not significant, and that the interaction of program and sex was not significant. These findings were sufficient to conclude that neither females nor males exposed to the experimental curriculum were more likely to advance in religious thinking than females or males exposed to the control curriculum. However, based on the finding that grade level was closely tied to advancement in religious thinking, the data were further analyzed to assess the effects of the curriculum on scores of females and males within grade level groupings. In these analyses, t-tests were again employed.
A significant difference was revealed between sixth grade experimental females and sixth grade control females, and a difference approaching significance was revealed between sixth grade experimental males and sixth grade control males. There was no significant difference for any of the fifth grade comparisons tested.

**Discussion**

The importance of grade level in assessing the effects of the Cognitive Conflict Curriculum is not surprising in light of the Piagetian cognitive-developmental theory. This theory suggests that a major transition in mode of thought occurs in children at about the age of 11, which apparently invests the child with a newly emerging capacity for abstract thought. Yet prior to the transition, the thinking of the 10-year-old is still characterized by strongly entrenched concrete patterns. Such information has greater relevance to this discussion when it is noted that, in general, the ages of 10 and 11 correspond respectively to Grade Levels 5 and 6 in American schools.

Piaget has suggested that the giving way of concrete patterns of thought is not subject to acceleration via planned techniques. This suggestion was explicitly supported by the finding of this study that there was no significant change in fifth graders exposed to a curriculum specifically designed to facilitate abstract thought. The fifth grade level appears
to demarcate a period before and including which training methods are not successful as accelerative techniques. The ten-year-old does not move beyond rigid concretism until his experience of the world is sufficient to allow such a move. Smedslund, it may be recalled, has found that subjects exposed to a state of vacillation between competing cognitive systems tended to react by adhering to one or the other of the systems, or by undergoing a cognitive reorganization capable of incorporating both systems. The failure of fifth grade experimental group subjects to significantly advance in religious thinking; i.e., to decrease in concrete thinking and to increase in abstract thinking, may be a function of their adhering to the more Biblically-oriented view of reality and failing to undergo a cognitive reorganization capable of incorporating both Biblical and scientific views of reality. One might go so far as to suggest that the induction of cognitive conflict at this level may have a negative effect on children; i.e., a decelerative as opposed to an accelerative effect. This suggestion is supported by visual comparison of the mean pre- and adjusted posttest scores of experimental group fifth graders as opposed to the mean pre- and adjusted posttest scores of control group fifth graders. While the difference between these two groups was not significant, it is obvious that experimental group fifth graders made virtually no movement in religious thinking, either in the decreasing of concrete scores or in the increasing of abstract scores, whereas the control group
fifth graders did advance in religious thinking. It would appear that the control curriculum was actually more successful in moving control fifth graders away from concrete and toward abstract thinking than the experimental curriculum. Control group fifth graders, moreover, may have declined concretely in religious thinking and increased abstractly in religious thinking as part of a cognitive-developmental process which would have taken place in fifth graders either with or without the effect of a religious education curriculum. However, experimental group fifth graders, exposed to conflict at a point in their cognitive development before which cognitive reorganization could be effectively facilitated, may have been hampered in this natural cognitive process. Such findings would appear to suggest caution in the use of religion-related cognitive conflict with fifth graders.

Conversely, the finding that sixth graders exposed to the experimental curriculum advanced significantly in religious thinking appears to suggest that at an optimally conducive period of intellectual growth; i.e., the transition from concrete to abstract modes of thought, the induction of cognitive conflict may be highly effective as a stimulant to increased abstract religious thinking. Moreover, visual comparison of sixth grade control group subjects' mean pre- and adjusted posttest scores on RTTC and RTTA indicates that these subjects actually increased in concrete religious thinking and decreased in abstract religious thinking. Such findings
appear to suggest that failing to receive such stimulation in religious cognition at an optimally conducive period, children may be stagnated in religious concretism. If it may be assumed that such religious stagnation occurs on a widespread basis due to the failure of educators to provide adequate religion-related stimulation at a crucial period of childrens' intellectual development, then it is not surprising that previous researchers undertaking the task of measuring religious thinking, have reported that religious thinking develops at a slower rate than thinking in general. What has been reported as "lag," however, may perhaps be more accurately described as stagnation. The finding of this study that experimental group sixth graders advanced significantly more than control group sixth graders challenges the contention that religious "lag" need be a reality, and provides clear, though limited, support for Peatling and Laabs' (1975) speculation that the overall rate of growth in religious thinking is highly influenced by type of religious instruction. At least one type of religious instruction which effectively stimulates decreased concrete and increased abstract religious thinking at this particular grade level is the induction of a religion-related state of cognitive conflict. Further, such methodology, adapted from neo-Piagetian research investigations, lends crucial support to the contention that operational progress can in fact be facilitated by training methods designed to assist the child's learning mechanisms. This find-
ing in itself bears important implications for the design of additional methods which may serve the purpose of advancing religious thinking in children.

Quite apart from the Piagetian-based interpretation of the findings of the study with reference to grade distinction, another interpretation is offered. It should be noted that the majority of the sixth grade experimental group subjects were located in the Corvallis area. In Corvallis, the public schools are organized in such a way that sixth graders, along with seventh and eighth graders, attend Middle Schools, and in this way are distinguished geographically, as well as intellectually, from fifth graders. Fifth graders in Corvallis attend Elementary Schools. By comparison, sixth graders in the control groups were located in the Salem area, where the Middle School concept was not a part of the public school system, and where sixth graders attend Elementary Schools. The researcher is inclined to wonder if experimental group sixth grade subjects were not more intellectually mature at the onset of the study as a result of higher intellectual expectations placed upon them by teachers as well as peers in the public school setting. If grouping patterns indeed structure intellectual expectations, one wonders if the widespread grouping of fifth and sixth graders in combined Sunday School classes constitutes sound practice. The findings of this study appear to suggest that fifth and sixth graders require diverse instructional patterns for maximum facilita-
tion of learning. In the experimental groups of this study, the fifth graders appeared to be decelerated by an instructional pattern which was facilitative for sixth graders, while in the control groups of this study, the sixth graders appeared to be stagnated by an instructional pattern which was generally facilitative for fifth graders.

The finding that the main effect of sex was not significant is also understandable in view of Piaget's theoretical framework. This framework suggests that since cognitive development proceeds in the same manner for males and females, no sex differences should be evident as a result of learning environment. Visual comparison of the mean pre- and adjusted posttest scores between males and females in the experimental group and between males and females in the control group supports this contention unequivocably.

The researcher had hoped to demonstrate, however, that both females and males in the experimental group would advance more significantly than females and males in the control group with respect to change in religious thinking. The fact that no such advancement occurred; i.e., there was no significant interaction between program and sex, was difficult to explain until it was recalled that the experimental treatment had had a differential effect on fifth and sixth graders, and that advancement of female and male experimental subjects might not be discriminated apart from grade level. In subsequent analysis, a significant difference was in fact revealed
between sixth grade experimental group females and sixth grade control group females, and a difference approaching significance was revealed between sixth grade experimental group males and sixth grade control group males. These findings lend additional support to the effectiveness of the experimental curriculum in accelerating religious thinking. Specifically, they suggest that this instructional method facilitates the cognitive-developmental process in both boys and girls. It is interesting, nonetheless, to speculate on reasons why the sixth grade experimental group girls advanced significantly more in religious thinking than the sixth grade control group girls, while the advancement of the sixth grade experimental group boys over the sixth grade control group boys only approached significance. One interpretation is that sixth grade females appear to be more intellectually mature with reference to their willingness to entertain new ideas. While no empirical evidence can be cited to verify such an interpretation, observational data suggest that it may be accurate. Another interpretation is that the females in this grouping were able to deal with the conflict engendered in religious thinking somewhat more easily than the males in this grouping. It is probably reasonable to assume that females as a whole in the American culture are more strongly reinforced for conflict resolution behavior than are males. If this assumption is true, and if behavioral "conflict-resolution patterns" generalize to learning style,
then the sixth grade experimental group females may have been absorbing conflict induced by the curriculum via differential skills. Still another interpretation is that females in this grouping were influenced differentially by the fact that the teacher was also female.

Limitations to the Study

Measurement of Religious Thinking

The serious study of religious thinking began in the early sixties with the adaptation of Piaget's semi-clinical interview technique. While this method was sound with reference to reliability of findings, it was cumbersome to use with large samples. John H. Peatling's development of a paper-and-pencil test designed to measure in large groups what the Piagetian interview could measure in small groups was therefore a major accomplishment. The test was designed specifically for the purpose of assessing religious thinking in children and bears some claims to validity and reliability where this task is concerned. Nevertheless, there appear to be some factors associated with the test which may reduce its ability to assess religious thinking effectively. These factors are discussed below.

Reading Level. The test manual indicates that a tape of the Bible stories is to be played prior to the time responses to questions about the story are marked, so that children who are unable to read the printed story will not be jeopardized
in hearing the content of the story. It was apparent to this researcher, however, that some of the questions and possible responses were also difficult to read, and yet no assistance was provided the child in hearing them. Some responses also contained abbreviations, such as "i.e.," which would not be comprehensible to younger children.

**Suitability of Responses.** While the four responses following each story were criterion-referenced to the four levels of religious thinking (RTVC, RTC, RTA, RTVA), they did not in many cases provide an answer which children could comfortably "most agree with." The fact that some children expressed frustration by this inability to "agree with" the responses--for example, one Corvallis sixth grade boy wrote in an end-of-term evaluation statement that "the tests were worded badly. Ideas were contradicted"--may indicate that the test does not adequately discriminate some levels of religious thinking which could be discriminated by the interview approach.

**Use of Test as a Measure of Change.** Perhaps the greatest limitation to this study with reference to measurement, however, was the fact that the test had never before been used as a pre- and post- measure to assess change in religious thinking. It was evident from the decreasing amount of time necessary for children to take the test over the duration of the study that the pretest had alerted subjects to the task and served as a training experience in the task which demanded
less thought and concentration with each subsequent test. Subjects who took the test a third time completed the task in one-third the time as the pretest session. Motivation level for retaking the test, even the second time, was evident in copious expressed concerns, both written and spoken, about "having to do the same thing over again." Under these circumstances, it is difficult to tell whether change in scores from pre- to posttest were a result of real change or a variety of other factors such as: trying to remember what response they marked the first time, trying to figure out what response the teacher would like them to agree with, and trying to hurry and get through. In future, it might be useful to employ equivalent tests as pre- and post-measures in an attempt to avert or reduce these problems.

**Time and Intensity Frame**

A second limitation to this study involved the time and intensity frame for the selection of measurement of change in religious thinking as a result of cognitive conflict. It was desirable to select a period of time which was long enough to ensure that the experimental curriculum had an opportunity to make an impact on childrens' religious thinking, but short enough so that one might reasonably be sure that changes occurring were the result of the curriculum, and not of naturally occurring developmental and maturational factors.
On the basis that the researcher herself taught the experimental curriculum in the Corvallis group, she was able to observe overt changes in children over the eight-week period. It seemed fairly apparent that some children were at a "peak" period of change after four weeks of the curriculum, a peak which appeared to have subsided somewhat by the end of the eight weeks. This observation seems consistent with Smedslund's findings that conflict was absorbed rather rapidly. At any rate, the question of time frame for measurement of change in religious thinking remains open to question.

The intensity of cognitive conflict to which children were exposed at each session presented similar problems. The researcher had planned that the cognitive conflict discussions would take up approximately one-fourth of each session. Nevertheless, in the Corvallis groups children initially became so involved in the discussions that cognitive conflict was sometimes being engendered for one-half of the sessions. The length of these early discussions may explain why some children were at a "peak" period of change after four weeks. On the contrary, subjects in the Portland group were not as involved in the cognitive conflict discussions; hence, the time spent in discussion was shorter, and the intensity of the curriculum over the eight weeks was probably lessened. In future tests of the effects of cognitive conflict, it would be useful to plan controls for the intensity of induction.
Attendance. A third limitation to this study concerned the use of training and control groups under conditions in which attendance is sporadic. The researcher felt that it would be difficult to assess change in religious thinking as the result of the experimental curriculum if children were not regularly exposed to the curriculum; hence, the guideline that children who failed to attend Sunday School five out of eight times would be dropped from the sample.

The researcher feels that it was helpful to underscore in the initial letter to parents of subjects the importance of regular attendance to the design of the study. It was also helpful to send postcards at two points early in the study thanking parents for the participation of their child in the study and asking for continued support in the remainder of the term. Accordingly, only 17 children of the 68 who were pretested had to be dropped from the sample. Nevertheless, of the remaining subjects, it is interesting to note that only nine children attended all eight times.

Sporadic attendance in Sunday Schools is not only a limiting factor to studies of this type, but to religious education as a whole. It is difficult to build a core of content matter when no assurance can be made of that to which the child has previously been exposed. It is a limitation which appears to have no solution. Sporadic attendance is built into the patterns and styles of modern living, as expressed at least partially by this end-of-term evaluation.
statement from a sixth grade girl in the Corvallis group:
"I wish I could of come for all the Sunday School lessons but we went skiing alot." It would be interesting, however, to test the effect of the cognitive conflict curriculum in a setting where regular attendance is the rule rather than the exception. Some possibilities might include parochial or church-related schools.

Class Size

A fourth limitation to this study concerned the variation in class size of the participating groups. The combination of the fifth and sixth grade classes of the Corvallis church, necessary to ensure a large enough sample size on completion of the treatment, resulted in an enrollment of 37 children. Of these 37, 26 were pretested and 19 completed the study. An average of 22 children attended the weekly sessions. While the physical facilities were sufficiently adequate to house the group, the size of the group was too large to allow complete discussion and sharing of ideas. It is at least a possibility that the failure of experimental group fifth graders (11 of 14 experimental fifth graders were in the Corvallis group) to demonstrate significant gains over control group fifth graders is explained by the fact that they felt intimidated by the large size of the class, and/or by the presence of sixth graders, and consequently failed to receive the full impact of the experimental
On the contrary, the Portland group had the smallest number of enrolled participants; the average weekly attendance was approximately 5. The researcher feels that the effectiveness of the cognitive conflict curriculum may have been experienced differentially in classes of such different size.

Teacher Variation

A fifth limitation to this study concerned teacher variation in the participating groups. The teachers for the control groups were volunteers solicited by the local churches to teach Sunday School. The teacher in the Morningside group had had prior experience as a Sunday School teacher, and had previously worked with the group of fifth and sixth graders. Of the two teachers involved with the Trinity group (the group of fifth and sixth graders had separate classes in this church), one had had prior experience as a Sunday School teacher and was familiar with the group, and the other had had no previous experience as a Sunday School teacher. The researcher and one of her colleagues in the Family Life Department at Oregon State University were teachers in the experimental groups, Corvallis and Portland respectively. The researcher had had prior experience as a Sunday School teacher, but not with fifth and sixth graders. The teacher of the Portland group had had no prior experience with either Sunday School teaching or with fifth and sixth grade children. How-
ever, both teachers of the experimental groups were instructors of Child Development at the college level. These factors are assumed to have accounted for variation in the presentation of content in the groups. In addition, it is assumed that the teachers varied in personality, attitude, and motivation. The researcher feels that the more adequate control of this variation would enhance the effectiveness of the study. In particular, it would be helpful to isolate the researcher herself from the teaching process to avoid additional bias.

Content

A final limitation to this study concerned the specific content matter to which the researcher was bound in the development of the experimental curriculum. While this content—worship-related ideas—is appropriate Sunday School material for children at this age, it was not particularly conducive to the broadest use of cognitive conflict. The researcher feels that most religious content can be adapted for use with the cognitive conflict method, but that some religious content may be more conducive than others in allowing the fullest range of conflict, both verbally and experientially. The "worship-related" content on which the Cognitive Conflict Curriculum was modeled in this study was restricted rather closely to verbal stimulation of conflict.

Implications for Future Research

The factors discussed in the limitations of the study all
provide implications for future research. Among these are use of a larger sample, employing of a longer time frame, and employing of varying grade levels. With reference to the latter, it would be useful to assess the upper limits of effectiveness in grade levels higher than sixth. Two implications need particular stress: one is the development of equivalent tests to more adequately measure pre- and posttest changes in religious thinking; the other is the development, with more conducive content, of the specific ways of inducing conflict conflict.


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APPENDICES
Dear

I am an Instructor in the Family Life Department at Oregon State University, and am currently pursuing a doctorate in Child Development with an emphasis in Religious Studies. As part of my doctoral dissertation, I am conducting a study designed to test the effectiveness of an experimental religious education curriculum in facilitating measurable concrete-to-abstract movement in level of religious thinking of fifth and sixth grade children.

The purpose of this letter is to request permission to use your child in this study. The following information about the design of the study may be helpful to you in making this decision.

The children enrolled in the fifth and sixth grade Sunday School classes of the First United Methodist Church, Corvallis, will be combined during Winter Term (January-March) and will serve as one experimental group. The children enrolled in the fifth and sixth grade Sunday School class of Rose City Park United Methodist Church, Portland, will serve as a second experimental group. The curriculum to be used in teaching these classes will be a curriculum that I have written based on the content of the current Methodist material, Christian Studies, but designed to incorporate methods derived from the work of Jean Piaget and neo-Piagetian researchers. I plan to teach the curriculum in the Corvallis group, and Mary Cramer, one of my colleagues in the Family Life Department, will teach the curriculum in the Portland group. Bob Burtner, pastor of the First United Methodist Church, Corvallis, will review the curriculum for its theological appropriateness prior to its presentation.

The children enrolled in the fifth and sixth grade Sunday School classes of Trinity United Methodist Church, Salem, and Morningside United Methodist Church, Salem, will serve as control groups. The curriculum used in teaching these classes will be the current Methodist material.

As a pre- and post- measure of level of religious thinking, I will be testing the children with the Thinking About the Bible test. This test is a paper-and-pencil instrument
in which children respond to multiple choice questions concerning three recorded Bible stories.

The study as a whole has been approved by the Education Directors of each of the participating churches. I anticipate no risks of any type for children involved in this study. Conversely, the conclusions emerging from such a study should contribute significant information toward the design and use of instructional systems in religious education which maximally facilitate the growth of religious understandings in children.

Participation in the study on the part of children will involve attendance at the regular Sunday School sessions of their local church during the period covering January 7-March 11. Parents of children who participate will be asked to complete a short questionnaire (enclosed). All responses will be confidential and used only as group data in my research report.

If you give permission for your child to participate in the study, will you please sign the enclosed form and return it, as well as the Background Questionnaire, to me in the envelope provided. You are, of course, free to withdraw your consent and to discontinue participation in the study at any time. I will be happy to answer any questions you may have about the procedures of the study (Home phone: 753-0912; Address: 1912 NW Forest Green Avenue, Corvallis, Oregon 97330).

Thank you very much for your cooperation.

Sincerely,

Kitty G. Abraham
THINKING ABOUT THE BIBLE

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TO THE STUDENT:

You are being asked to listen to, and to react to three stories. All of the stories are from the bible. The details of these stories may be well known to you, or they may not. However, before hearing the three stories it will help if you will first answer the questions below:

Name of school: ____________________________ (1:1-4)

Name of city or town: ____________________________

Name of state (province): ____________________________

Your name: ____________________________ (1:5-6)

(First Name) (Initial) (Last Name)

Your grade or class in school: ____________________________ (1:7-8)

Your age (in years & months): ____________________________ (1:9-13)

(years) + (months since birthday)

Your sex (please check which): Boy ( ); Girl ( ) (1:14)

NOTE:

On some of the pages that follow there are numbers in parentheses, like this: (1:16). They are there to help in tabulating your answers, and you do not need to bother about them. They are not scores or points. They refer only to cards and to columns on punch cards.

AFTER FINISHING THESE QUESTIONS, YOU MAY TURN THE PAGE.
TO THE STUDENT:

In this study you will be asked to listen to and (if you wish) to read along with the reader as you listen to three stories. Following each story there are seven (7) questions that will help you indicate how you think about such stories. In most instances you will be asked to indicate which of a set of possible responses you most agree with (or find most acceptable to your way of thinking) and which you least agree with (or find least acceptable to your way of thinking).

You are asked to choose from the four possible responses the one (1) response you most agree with, and the one (1) response you least agree with. Thus, in a set of four possible responses two are to be chosen and marked to indicate your agreement (most or least) while the remaining possible responses are to be left blank.

To indicate that you most agree with a possible response you will write an M in the space to the right of the response that has been marked off by underlining (e.g., __M__).

To indicate that you least agree with a possible response you will write an L in the space to the right of the response that has been marked off by underlining (e.g., __L__).

FOR EXAMPLE, in the question below the person who answered it most agreed (M) with the second response and least agreed (L) with the fourth response.

QUESTION: What color is your favorite color?

a. Red is the prettiest color
   b. Blue is the prettiest color
   c. Yellow is the prettiest color
   d. Gray is the prettiest color

WHEN YOU FINISH READING THIS PAGE, TURN TO THE NEXT PAGE.
TO THE STUDENT:

STOP

and

READ

In a moment you will hear a tape recorded story.

When you are ready to hear the story,

............. hold your pencil up.

WAIT UNTIL YOU ARE TOLD TO DO SO, AND THEN TURN TO THE NEXT PAGE, IF YOU WISH TO READ ALONG WITH THE TAPE RECORDER.
A man called Moses was one day looking after a flock of sheep in a rather lonely place, close to a mountain.

Suddenly an angel appeared to Moses in a flame of fire, out of the middle of a bush. The curious thing was that the fire was burning away, but the bush itself wasn't burnt.

Moses said to himself: "I must go and look at it closer, to see why the bush isn't burned." Now when God saw Moses come nearer to the bush, God called out from the middle of the bush: "Moses! Moses!" And Moses, not knowing who it was calling, said, "Here I am."

And God said: "Come no closer and take off your shoes. You are standing on holy ground." Then God spoke again and said: "I am your father's God, and the God of great men like Abraham and Isaac and Jacob."

Then Moses hid his face, for he was afraid to look at God.
Before you continue, let's review the instructions once more:

1. After each question, you will find four (4) responses.
2. To the right of each response you will see a space that is marked off by an underlining (e.g., ____). 
3. Indicate the response you like most by writing an M in the space marked off by the underlining to the right of that response.
4. Indicate the response you like least by writing an L in the space marked off by the underlining to the right of that response.
5. In each set of four responses leave two spaces blank.
6. In each set of four responses be sure you ...
   a. mark only one response M, and...
   b. mark only one response L.

NOW TURN THE PAGE.
STORY A -- Moses and the Burning Bush:

1. How would you explain the bush burning, and yet not being burnt?
   a. God was protecting the bush .......................... (1:15)
   b. The fire was in front of the bush, which was not being touched by it .......................... (1:16)
   c. Perhaps the sun shining on the bush made it seem like fire to Moses .......................... (1:17)
   d. This is the kind of story that does not need to be 100% correct to give it meaning .......................... (1:18)

2. Why do you think the ground upon which Moses stood was called holy?
   a. Perhaps everywhere man meets God should be considered a holy place .......................... (1:19)
   b. If a person believes in God, things connected with him are supposedly holy .......................... (1:20)
   c. God made it that way .......................... (1:21)
   d. The ground was holy because this was the spot where God chose to speak to Moses .......................... (1:22)

3. If Moses had been deaf, do you think he would have heard God calling to him?
   a. God could have restored his hearing, as Jesus did when he healed the deaf .......................... (1:23)
   b. Maybe when God calls everyone can hear, even if they are deaf .......................... (1:24)
   c. Perhaps this story is about Moses' trying to find some meaning while on the mountain, and he called his discovery "God" .......................... (1:25)
   d. Yes: God was very close to Moses .......................... (1:26)

NOW TURN TO THE NEXT PAGE AND QUESTION 4.
4. Why do you think Moses was afraid to look at God?

a. Being confronted with a power that supposedly made man, rules the world, and governs men would frighten anyone ............ (1:27)

b. God made Moses afraid to look at him ........ (1:28)

c. Moses felt unworthy; he was a sheep herder, and not a great man, like Abraham ........ (1:29)

d. Perhaps Moses realized he was not perfect and, thus, a sinner, like all men. So, when he thought God called him, he was afraid ......................... (1:30)

TO THE STUDENT:

ST O P

and

READ

On the next page are three somewhat different questions.

After each question are several responses.

Choose only one of them.

Indicate your choice by putting a check mark in the space to the right of the one (1) response you have chosen.

NOW TURN THE PAGE.
5. **Have you heard this story before?**
   a. Yes... I have heard this story before ........ (1:31)
   b. I don't know if I have heard this story before or not .......... (1:32)
   c. No... I have not heard this story before .... (1:33)

6. **Have you seen this story in a film or on television?**
   a. Yes... I have seen this story on film or TV before ............ (1:34)
   b. I don't know if I have seen this story before or not .......... (1:35)
   c. No... I have not seen this story before .... (1:36)

7. **Do you think this story really happened?**
   a. Yes... all of it happened ................. (1:37)
   b. Yes... probably something like it did happen ................. (1:38)
   c. Maybe... probably only part of it happened .. (1:39)
   d. No... but something probably did happen to cause the story ............ (1:40)
   e. No... none of it really happened ............. (1:41)

WHEN YOU FINISH THIS PAGE, TURN TO THE NEXT PAGE.
TO THE STUDENT:

STOP

and

READ

In a moment you will hear a tape recorded story.

When you are ready to hear the story,

............. hold your pencil up.

WAIT UNTIL YOU ARE TOLD TO DO SO, AND THEN TURN TO THE NEXT PAGE, IF YOU WISH TO READ ALONG WITH THE TAPE RECORDER.
Once, long ago, there lived in Egypt a people who were called Israelites, and they were made to work as slaves by the Egyptians. The Israelites were treated very cruelly, until their leader, Moses, persuaded the Egyptian king to let the slaves go free.

Then Moses led the Israelites out of Egypt, across the Desert for many miles until at last they camped on the shore of the Red Sea.

Meanwhile, the king of Egypt had changed his mind, and was very angry that he had let the slaves go free. So he came after them with his army of six hundred chariots. Now when the Israelites saw the army coming after them, they were afraid, but Moses said that God would save them.

Then God told Moses to stretch his hand over the sea. When Moses did so, God drove the sea back by a strong east wind. The waters were divided, and the Israelites went into the sea on dry ground with water on both sides.

When they were safely across, the Egyptian chariots started to come after them, but God told Moses to stretch his hand over the sea again. When Moses did so, the waters came together, and the entire Egyptian army was drowned. And when the Israelites saw that they were saved, they feared God, and believed in him and in Moses his servant.

TO THE STUDENT:

WHEN THE STORY IS FINISHED, TURN TO THE NEXT PAGE OR, IF YOU WISH TO, YOU MAY READ THE STORY AGAIN.
Before you continue, let's review the instructions once more:

1. After each question you will find four (4) responses.

2. To the right of each response you will see a space that is marked off by underlining (e.g., _____).

3. Indicate the response you like most by writing an M in the space marked off by underlining to the right of that response.

4. Indicate the response you like least by writing an L in the space marked off by underlining to the right of that response.

5. In each set of four responses leave two spaces blank.

6. In each set of responses be sure you ...
   a. mark only one response M, and...
   b. mark only one response L.

Now turn the page.
STORY B -- Crossing the Red Sea:

8. How would you explain the dividing of the Red Sea?

a. God can make a thing like this happen with the help of a strong east wind ........ (1:42)

b. It might have been due to a natural force, like the tide going out, and then coming in quickly ................. (1:43)

c. Through his strength and wisdom God shows many of his children the path out of hardship and sorrow; he is the one who leads them out of peril and danger ........ (1:44)

d. When Moses put his arm over the sea, the force divided the waters ................ (1:45)

9. Why did God want to save the Israelites?

a. This short story tells us simply that God wants to save his children ........ (1:46)

b. Because the Israelites were good people ...... (1:47)

c. Because they had been kept as slaves, and God was against slavery ........ (1:48)

d. Perhaps so that they could continue to believe in him and spread his religion ... (1:49)

10. Why was it that the men in the Egyptian army were drowned?

a. God wanted to show the Israelites that he was on their side ................ (1:50)

b. Why some people live and others die is a mystery, even today ............... (1:51)

c. The Egyptians were bad people ................ (1:52)

d. Because the Egyptians had treated the Israelites so badly ................ (1:53)

NOW TURN TO THE NEXT PAGE AND QUESTION 11.
11. Does this mean that God did not love the men in the Egyptian army?

a. No: but he was angry with them

b. He loved them, but they had done something wrong and had to be punished

c. It may have been that the Egyptians had to die, so that God's power and hatred of slavery could be shown

d. Since the story was written from the Hebrew point of view, to some extent it would be biased in favor of the Israelites

TO THE STUDENT:

STOP

and

READ

On the next page are three somewhat different questions.

After each question are several responses.

Choose only one of them.

Indicate your choice by putting a check mark in the space to the right of the one (1) response you have chosen.

NOW TURN THE PAGE.
12. Have you heard this story before?
   a. Yes... I have heard this story before ........ ....................... (1:58)
   b. I don't know if I have heard this story
       before or not ................................................................. (1:59)
   c. No... I have not heard this story before ....... ....................... (1:60)

13. Have you seen this story in a film or on television?
   a. Yes... I have seen this story
       on film or TV before ............................................................. (1:61)
   b. I don't know if I have seen this story
       before or not ................................................................. (1:62)
   c. No... I have not seen this story before ....... ....................... (1:63)

14. Do you think this story really happened?
   a. Yes... all of it happened ................ ........................................... (1:64)
   b. Yes... probably something like it
       did happen ................................................................. (1:65)
   c. Maybe... probably only part of it happened .. ....................... (1:66)
   d. No... but something probably did happen
       to cause the story ............................................................. (1:67)
   e. No... none of it really happened ................ ....................... (1:68)

WHEN YOU FINISH THIS PAGE, TURN TO THE NEXT PAGE.
TO THE STUDENT:

STOP

and

READ

In a moment you will hear a tape recorded story.

When you are ready to hear the story,

............. hold your pencil up.

WAIT UNTIL YOU ARE TOLD TO DO SO, AND THEN TURN TO THE NEXT PAGE, IF YOU WISH TO READ ALONG WITH THE TAPE RECORDER.
When he was thirty years old, Jesus was led by the Spirit into the desert to spend forty days, where he was tempted by the devil. He ate nothing during that time and felt very faint and hungry.

Then the devil came to him and said, "If you really are the Son of God, tell this stone to turn into a loaf of bread." Jesus answered, "The scriptures say, 'Man shall not live by bread alone.'"

Then the devil took him up and showed him all the kingdoms of the world, and said to Jesus, "I will give you all this power and wealth that you see, if you will only fall down and worship me." Jesus replied, "It is written in scripture, 'You shall worship the Lord your God, and him only shall you serve.'"

Finally, the devil took him to Jerusalem, right to the top of the highest tower of the temple, and said, "If you really are the Son of God, throw yourself down from here, for it says in scripture that angels will take care of you." To this Jesus replied, "It is also written in scripture, 'You shall not tempt the Lord your God.'"

And when he had tried every kind of temptation on Jesus, the devil went away for a time.

TO THE STUDENT:

WHEN THE STORY IS FINISHED, TURN TO THE NEXT PAGE OR, IF YOU WISH TO, YOU MAY READ THE STORY AGAIN BEFORE YOU TURN TO THE NEXT PAGE.
TO THE STUDENT:

Before you continue, let's review the instructions once more:

1. After each question you will find four (4) responses.

2. To the right of each response you will see a space that is marked off by underlining (e.g., _______).

3. Indicate the response you like most by writing an M in the space marked off by underlining to the right of that response.

4. Indicate the response you like least by writing an L in the space marked off by underlining to the right of that response.

5. In each set of four responses leave two spaces blank.

6. In each set of four responses be sure you...
   a. mark only one response M, and...
   b. mark only one response L.

NOW TURN THE PAGE.
STORY C -- The Temptations of Jesus:

15. If Jesus was hungry, why didn't he turn the stone into bread?
   a. This story is perhaps written to show that it is possible to place love for God, or for an idea, above personal hunger ....... (2:15)
   b. This short story is about the triumph of the needs of a mind over the needs of a body ... (2:16)
   c. Because God made it so that Jesus didn't feel hungry ............... (2:17)
   d. Because Jesus was supposed to resist temptation, and he wanted to show the devil that he could ................ (2:18)

16. How could Jesus tell it was the devil speaking to him?
   a. The devil is always easy to recognize .......... (2:19)
   b. Only the devil would have asked Jesus to worship him, instead of God ............... (2:20)
   c. Perhaps Jesus used the word devil to describe the power of evil that was tempting him .... (2:21)
   d. This story simply suggests that Jesus rejected the temptation of personal ambition early in his ministry ................ (2:22)

17. Why didn't God stop the devil tempting Jesus?
   a. This whole story of temptation simply suggests the various paths Jesus could have taken, and the choices he made for himself ....... (2:23)
   b. God wanted to see what the devil would suggest next ................ (2:24)
   c. God knew that Jesus would not give in to the devil ................ (2:25)
   d. Perhaps temptation is a part of man's learning; it cannot be stopped .......... (2:26)

NOW TURN TO THE NEXT PAGE AND QUESTION 18.
18. Is the devil still about today, telling people to do wrong?

a. If you do not do at least one bad thing, you wouldn't be human, and this is the devil in you. 

b. Perhaps it is possible to think of the devil as a force in man's mind, but not as a person.

c. If you let the "devil" represent such things as laziness, greed, and evil, and if you believe that human nature doesn't change, then the "devil" might be said to be still around.

d. Yes: he wants to get people in trouble.

TO THE STUDENT

STOP

and

READ

On the next page are three somewhat different questions.

After each question are several responses.

Choose only one of them.

Indicate your choice by putting a check mark in the space to the right of the one (1) response you have chosen.

NOW TURN THE PAGE.
19. Have you heard this story before?
   a. Yes... I have heard this story before ....... (2:31)
   b. I don't know if I have heard this story before or not ................. (2:32)
   c. No... I have not heard this story before ....... (2:33)

20. Have you seen this story in a film or on television?
   a. Yes... I have seen this story on film or TV before ................. (2:34)
   b. I don't know if I have seen this story before or not ................. (2:35)
   c. No... I have not seen this story before ....... (2:36)

21. Do you think this story really happened?
   a. Yes... all of it happened ............... (2:37)
   b. Yes... probably something like it did happen ................. (2:38)
   c. Maybe... probably only part of it happened .. (2:39)
   d. No... but something probably did happen to cause the story ............... (2:40)
   e. No... none of it really happened ............... (2:41)

WHEN YOU FINISH THIS PAGE, HOLD YOUR PENCIL UP.
THEN YOU MAY TURN TO THE NEXT AND FINAL PAGE.
TO THE STUDENT:

If there is any time left, and if you wish to make any comments on the experience of thinking about these three stories and answering these questions, write your comments in the space provided below.

COMMENTS:

WHEN YOU HAVE FINISHED, HOLD YOUR HAND UP. SOMEONE WILL COME TO YOU AND PICK UP YOUR QUESTIONNAIRE.

(Do not write below this line)
APPENDIX C

code

RELIGIOUS EDUCATION RESEARCH STUDY
BACKGROUND QUESTIONNAIRE

The purpose of this questionnaire is to assist the researcher in describing the sample involved in this study.

1. How old is the child's mother? ________________

2. How old is the child's father? ________________

3. What is the level of education of the mother? ____________

4. What is the level of education of the father? ______________

5. What is the occupation of the mother? ________________

6. What is the occupation of the father? ________________

7. What is the religious preference of the mother? __________

8. What is the religious preference of the father? __________

9. How old are the children in the family?

   Girls: ______ ______ ______ ______ (years)

   Boys: ______ ______ ______ ______ (years)

10. What is the current marital status of the child's parents?

    Married _____ Separated _____ Divorced _____

11. How often does the child spontaneously ask questions of a religious nature?

    Frequently _____ Occasionally _____ Seldom _____ Never _____

12. What type of answers are generally given to these questions?

    Literal _____ Symbolic _____ Other _____

13. How often does the child spontaneously describe or tell about his Sunday School lesson?

    Frequently _____ Occasionally _____ Seldom _____ Never ____
LESSON 1

A Sacrament: Baptism
For the Week of January 14, 1979

Main Idea: Moments of special worship can happen in the life of any person at any time. However, to many Christians, the high points in life are marked by sacraments such as baptism, one of the two sacraments in the United Methodist Church.

Learning Goals: To acquaint students with one of the two sacraments: baptism.
To learn how such "holy moments" can touch our lives.

The Bible in this Session: Matthew 28: 19-20
Mark 1: 4-14
Matthew 3: 13-17
Acts 16: 25-34

Friendship Ritual and Introduction (5 minutes)

Greet the children, and if possible arrange the group in a circular fashion to facilitate conversation. Spend a few minutes getting to know the children. Have nametags ready for both children and teachers.

"Today we will begin a two-week study of the sacraments of the United Methodist Church. Who can tell me what a sacrament is?"

Entertain suggestions and ideas, and then have one of the children read the definition from a dictionary. Discussion or elaboration may be necessary, but the children's attention should ultimately be directed to the idea of sacrament as "a practice ordained by Jesus."

"How many sacraments do we have in the United Methodist Church?" (There are two: Baptism and Holy Communion. Some children may suggest Marriage or Confirmation, but these along with Penance, Holy Orders, and Extreme Unction, are sacraments of the Catholic Church.)

"This week our focus is Baptism."

Discovering in the Bible (15 minutes)

"The Bible tells us many things about baptism. When
Jesus was talking with his disciples he told them to make disciples of all nations, going out and baptizing them. (Refer to chart with verse written on it. It may be necessary to discuss the meaning of the word disciple.) In Acts, we read about a family that Paul baptized in a moment of special worship. Let's read about that experience." (Refer to chart with verses written on it.)

"But what I would really like to focus on is Jesus' own baptism. I want you to listen while I read the story and think about what you are hearing, then take a few minutes to draw a picture of that story."

Read Mark 1: 4-11. As the children draw, you might ask some questions which would help them to remember details of the story: Who were the people involved? Where was this event located? What happened? Have the children talk about their pictures, and then lead them into the cognitive conflict discussion.

Induction of Cognitive Conflict (8 minutes)

How would you explain the heavens opening?

Did Jesus hear God's voice?

Did the people hear God's voice?

If Jesus had been deaf, do you think he would have heard God calling to him?

What is the Holy Spirit?

Where does it come from?

What is it like when the Holy Spirit descends?

How is it possible to think of water as doing anything other than washing the dirt off them?

The Bible's Message for Us (12 minutes)

"So what would you say this story is about? Tell me in your own words." Encourage each child to make some contribution to the summary. Try to bring into focus that: This is a story that tells us that Jesus' baptism was a moment of special importance in his life; one in which he felt God speaking to him in a particular way; one in which he sensed or "heard" God's purpose for his life; one in which he felt changed by God's presence in his life.
"Now I want you to think about something else. What would a baptism look like today?" Discuss briefly at this time different ways to be baptized if this comes up. Focus on the elements common to Jesus' baptism and the baptism they describe: the use of water; the significance of the event as a special experience of God.

"What do we as Christians believe is happening to this person? Why? What makes it happen?"

"Let's talk about water. Water here is used as a symbol. What is a symbol? (something that stands for something else) The writers of the Bible used many symbols to tell about their experiences of God. Can you think of some? (bread, wine, the Vine, the Shepherd, etc.) Place a bowl of water in the middle of the table. "Tell me all the things you know about water."

Focus: Water is vital to growing things (show a live plant, a dead plant).

Water cleanses, purifies things (show something dirty, something clean).

Water shapes and molds. (show rough stones, smooth stones)

"Mark seems to be suggesting in this story about Jesus' baptism that God's entrance into a person's life can change that life in all the ways that water changes things. This is what makes baptism a special moment in our lives. When we believe in the symbol of water, we believe that God is vital to our lives, that he cleanses or purifies us, that he shapes and molds us."

Learning Activity (15 minutes)

"I want us to make a mural for our room that tells how water is the symbol for the Holy Spirit or God."

"Let's have Group #1 draw some pictures showing how water affects growing things, and how God might affect growing things. Let's have Group #2 draw some pictures showing how water affects unclean things, and how God might affect unclean things. Let's have Group #3 draw some pictures showing how water shapes things, and how God might shape things or people."

Group the children, or let them choose groups. Provide assistance in the form of suggestions or organization as necessary. When finished, display charts in the room.

Worship (5 minutes)

Come together for the last minutes of the class. Take up offering. Sit in a circle if possible. Encourage the children's
participation in reviewing "what things we have discovered today."

Lead in prayer.

Prayer: Thank you, God, for the chance to be together to talk about the Bible, to think about the meaning of the words in the Bible, and to try to find out what these words may mean for us in our lives today. Amen.

As the Children leave: Remind them that we will focus our attention on Holy Communion next week. Ask them to begin to think about the symbols of bread and wine.

Resource Materials:

Bible verses written on chart
Markers, drawing paper
Bowl of water and water objects
Paper for Mural
LESSON 2
A Sacrament: Holy Communion
For the Week of January 21, 1979

Main Idea: The sacrament of Holy Communion reminds us of the meal Jesus and his disciples shared during Holy Week.

Learning Goals: To assist students in learning more about the sacrament of Holy Communion and why this sacrament is an important celebration in the life of the Church.

The Bible in this Session: Matthew 26: 17-30
1 Corinthians 11: 23-26
Ephesians 5: 2
Romans 5: 6-11
1 John 3: 1-2

Friendship Ritual and Introduction (5 minutes)
Greet the children, and if possible arrange them in a circular fashion, as in the preceding week. Visit with them, and have them share some important things that have happened to them this past week.

"Who can tell me what we talked about last week?" Review key concepts on baptism; i.e., water as a symbol in baptism, Jesus' baptism, the significance of baptism.

"We said baptism is a sacrament. What does that mean?" (a practice ordained by Jesus.) Today we are going to talk about the other sacrament of the United Methodist Church: Holy Communion."

Discovering in the Bible (12 minutes)
"Let's read what the Bible tells us about communion." Read Matthew 26: 17-29. Lead into the cognitive conflict discussion, after clarifying any points of concern about the passage itself.

Induction of Cognitive Conflict (6 minutes)
Why do you think the man in the city was willing to give up his house to strangers just because some men walked up to him and said, 'The Teacher says My time is at hand; I will keep the Passover at your house with my disciples.'
How did Jesus know that one of his disciples would betray him?

Why didn't God stop Judas from betraying Jesus?

How is it possible to think of the bread as Christ's body, and the wine as his blood? Isn't that cannibalistic?

What did Jesus mean about being in his father's Kingdom? Where is it? How do you get there? Who is in it?

The Bible's Message for Us (10 minutes)

"So what is this story about? Tell me in your own words."
Encourage each child to make some contribution to the summary.
Focus: This is a story that tells us that Jesus somehow believed he was meant to die to save us from sinning. He wanted us to remember that we are involved in his living and dying. We remember especially when we take communion. This can happen when we believe in the symbols of bread and wine.

"What did we say about symbols last week?" (a symbol is something that stands for something else.) Why do you think Jesus used these symbols?

Learning Activity (20 minutes)

"Now let's pretend we are participants at the Last Supper."
Set the "stage;" some kind of table area. In preparation, ask: Who is there? Take or assign parts. Use chalkboard to list names of disciples one at a time as they are discussed briefly. Encourage the children to discuss how the actor should act his particular role. Prompt with questions: Are you proud that you are Jesus' beloved disciple? How does that sound when you talk? Are you feeling nervous that Jesus may discover what you have done, Judas? How does that look when you move?

Act out the scene. Encourage the children to be spontaneous. Reinforce "additions" to the lines of the "original" scene. For example, Peter might ask: Why do you say this is your body, Jesus? Let Jesus respond out of his own understanding.

Worship (5 minutes)

Come together for the last minutes of the class. Take up offering. Share some bread and cider. Ask: Do we have to use wine? Talk about communion as being sharing together with friends who believe in the same things and who let the same symbols represent those things in their lives.
Prayer: Thank you, God, for the chance to be together to talk about the Bible, to think about the meaning of the words in the Bible, and to find out what those words may mean for us in our modern lives.

As the Children Leave: Tell the children that next week we will be talking about worship among the earliest Christians. Ask them to begin to think about persecution in worship. What does that mean?

Resource Materials:

Costumes, props
Summaries of disciples
Bread, cider
LESSON 3

Christians Forced Underground
For the Week of January 28, 1979

Main Idea: Early Christians risked their lives to worship and follow Jesus; that is our heritage and our challenge.

Learning Goals: To help students learn about the dangers faced by the early Christians, and feel proud of their example of courage.

The Bible in this Session:
- John 16: 1-4
- Colossians 3: 16-17
- 1 Corinthians 16: 1-2
- 1 Corinthians 11: 23-26

Friendship Ritual and Introduction (5 minutes)

Greet the children as they arrive. Visit with them about the things of interest and significance that have occurred in their lives over the last week. Review briefly ideas from the past two weeks, especially the idea of symbols in Baptism and Holy Communion.

Discovering in the Bible (10 minutes)

"When Jesus spoke to his disciples about what might happen when he was gone, he warned them that they would be persecuted." Read John 16: 1-4. (Have this verse written on chart paper so they can read along.)

"What does persecuted mean?" (Elicit responses) "The early Christians were persecuted. Tell me what you know about that." (Review facts about early persecution, welcoming children's comments as they contribute information.)

Have the children act out the story of "A Young Christian Faces Death." Or, have the children read along with the script as the play is presented on tape.

Induction of Cognitive Conflict (10 minutes)

How do you feel about that story?

How do you feel about Perpetua and Felicitas? Wasn't Perpetua selfish to leave her family and especially her baby behind?
Why couldn't Perpetua lie about being a Christian? Wouldn't it be better to lie and save your life?

What was so special about Jesus that people felt so strongly about him? Wasn't he just a man?

Learning Activity (15 minutes)

"Now the most important thing I want us to think about today is: what was it about the things Jesus said and did that made the early Christians suffer death just for the right to believe in him?"

"Let's break up into groups and work on that. I want each group to take one of these long sheets of butcher paper and some crayons. I want us to remember Jesus' life from his birth to his death—all the things that made people view him the way they did; the special things that made people want to die to have the right to worship him. I'm going to give each group some slips of paper that have Bible verses written on them. Look up the verses and then draw pictures on your murals of these events."

The Bible's Message for Us (15 minutes)

Come together and have children share their murals. If they do not clearly explain how the drawings reflect the special things people perceived about Who He Was (Messiah, Son of God, etc.) try to bring these points out with probing questions, for example, "When people saw that, what did they think? feel? want to do?"

Focus: "There is something very important here we have to remember. We didn't know Jesus personally. We never heard Jesus speak. We didn't see Jesus heal the sick or comfort the poor. We have to rely on what other people have told us about Jesus. In some cases, those things may not be accurate because the people who finally wrote down the gospels were probably not eye-witnesses, and they may have recorded stories that were passed on word-of-mouth over long periods of time."

"What we also rely on is being able to experience a kind of relationship with Jesus through the loving, caring, suffering relationships we have with other people—through the love we feel going out of us and coming into us."

Worship (5 minutes)

Take offering. Lead in prayer, but ask if children would like to add to the prayer.
Prayer: Thank you, God, for the chance to be together to talk about the Bible, to think about the meaning of the words of the Bible, and to find out what the words may mean in our lives in modern times.

Resource Materials:

Scripture passages of incidents in Jesus' life
Butcher paper, crayons
Story of "A Young Christian Faces Death"
LESSON 4

Constantine Stops Persecution
For the Week of February 4, 1979

Main Idea: Early Christians gave up home, comfort, and safety to seek a place where they could worship freely.

Learning Goals: To acquaint children with stories of those who have sacrificed security for the right to worship as they pleased.

To encourage boys and girls to think about how persons sacrifice comfort for the privilege of serving God.

The Bible in this Session: Acts 22
Psalm 122: 1

Friendship Ritual and Introduction (5 minutes)

As the children come in, have them join in the regular circle time; visit for a while and share the important things that have been going on in the childrens' and teachers' lives.

"Last week we talked about the early Christians and their persecution under the Roman government. We found out that the early Christians believed intensely that Jesus was the long-awaited Messiah, and believed in him so intensely that they were willing to die rather than deny that belief."

Discovering in the Bible (20 minutes)

"Our Bible verses today tell an unusual story about a man who stopped persecuting Christians. His name was Paul. Tell me what you know about this story."

Elicit from children as much as possible from the Acts 22 account as you can, prompting or adding where necessary.

"There's another story that tells about a man who stopped persecuting Christians. But this man was a lot more influential than Paul because he was a Roman Emperor. His name was Constantine. Constantine had struggled to gain control of the Roman Empire. One day, the story is told, when he was marching toward Rome, he saw in the sky at sunset a cross of light with the words HOC SIGNU VINCES, which means 'In this sign thou shalt conquer.' Constantine believed that the Christian God must be very powerful, and that if he aligned with this God, he would be victorious..."
and able to overcome his rivals. Constantine himself became a Christian, and ordered the stop of persecution."

"Now these are both stories of men who felt a particular experience of God. I want you to draw a picture of one of these stories."

Talk briefly about the pictures, and then lead into the cognitive conflict discussion.

**Induction of Cognitive Conflict (8 minutes)**

Tell me what you think about these stories.

How do you explain the great light shining about Paul? How do you explain the cross of light and the words in the sky that Constantine saw?

What do you think about the voice that Paul heard?

Do you think these things could happen? Have you seen or heard of something like this happening? What if it happened today?

**The Bible's Message for Us (7 minutes)**

"It's hard to explain things like that happening, isn't it? Yet we do often have very significant changes taking place in ourselves and in others as a result of perhaps different kinds of messages. These too may be expressions of God's presence in our lives."

"How do we explain the difference? Does God act differently now than he did in the First Century? Has God changed?"

Focus: Perhaps it may be explained by understanding that First Century Christians expressed ideas differently than we do in the Twentieth Century. If they wanted to describe or tell about a great change that occurred in Paul, it was more natural for them to think in terms of it having happened with a great light and a booming voice; that was how they thought of God acting. For us, it is more natural to think of God acting more internally; in terms of internalized feelings that develop in us."

**Learning Activity (15 minutes)**

"Once persecution of Christians on a large scale was stopped, the Christians didn't have to be concerned with hiding and trying to survive. What do you suppose they did concern themselves with?" (declaring their faith, and stating their beliefs to others.)

"Only problem was, nobody had ever sent them to Sunday
School to be taught what a Christian is supposed to believe. They had to figure it out for themselves. Do you suppose they argued over what things were "right" and what things were "wrong" to believe in? Probably so. Should they have? If we all believe the same things, does that make them right?"

"What we believe about something is usually based on our experience of that thing. If I experience God in one way, and you experience God another way, we probably won't believe the same thing about God, will we? Does that make either of us "wrong"?

"I want you to think real hard for a few minutes, and then I want you to finish the sentences printed on these papers: I believe God ___________.
I believe Jesus ___________.
I believe the Holy Spirit ___________.
I believe the Church ___________.

"Now let's play a game. Let's start with the first one and go around the circle and find out how many different answers we get. Remember, there are no "wrong" answers because we are the only ones who know what we believe. I'll start. . . ."

Worship (5 minutes)

Take offering. Lead in prayer.

Prayer. Thank you, God, for the privilege to be together without any sense of persecution, to talk about the Bible, to think about the meaning of the words of the Bible, and to find out what the words may mean for us in our lives in modern times. Thank you, God, that we can choose to be here, choose to question, choose to develop our beliefs, choose to have the opportunity to experience you. We pray that we do not consciously or unconsciously persecute others. Amen.

Resource Materials:

Crayons, paper
Sentences printed on paper
Acts 22 printed on chart paper
LESSON 5

Freedom Fighters Make Gains
For the Week of February 11, 1979

Main Idea: Men and women of history fought to secure the freedom to worship which we enjoy today.

Learning Goals: To help children learn about those who worship in difficult circumstances.
To help children feel thankful for the opportunity to worship God in relative freedom.

The Bible in this Session: Galatians 5: 13-15
1 Peter 2: 16

Friendship Ritual and Introduction (5 minutes)

Welcome children to the circle; visit for a few minutes as usual.
"We're going to talk about freedom today. I want to know what you think freedom is." Entertain suggestions. If discussion is slow getting started, show some pictures which may suggest ideas. Also use flash cards with familiar sayings printed on them which may trigger responses: free as a bird, born free, free to be you and me, etc.

Discovering in the Bible (15 minutes)

"There are two interesting verses about freedom in the Bible; let's read them." Read from charts on which verses have been written.

"How do you explain the fact that both of these verses talk about freedom, but both tell us to be servants?" (We are free to choose to obey.)
"All through history men and women have been trying to live these words; they have fought to be free to choose how they would serve God, and how they would experience him. In return, they have been spit upon, cursed, banished from their homelands, put in prison, beheaded, strangled, and burned at the stake. These people were freedom fighters. I want us to find out about some of these freedom fighters today.
"First, let's think about some of the freedoms we have... What are they? If children are slow to respond, prompt them by asking such questions as:
What about the Bible? (Do you own your own Bible? Is it written in a language you know? Can you get it whenever you want it, read it, interpret it yourself?)

What about the Church service? (Can you go to whichever church you want? Can you hear the sermon in a language you understand? Can you say whatever you want about the service or the sermon?)

What about your relationship with God? (Are you free to decide what the relationship is? Can you communicate with God yourself?)

"People have not always had these freedoms; someone had to fight for them. We are going to learn about those freedom fighters today."

"One fighter believed that every person has the right to own a Bible." (Place Tyndale's name on the board; discuss Tyndale) "One fighter believed that every person has the right to attend services of worship conducted in his own language." (Place Luther's name on the board; discuss Luther.) "Another fighter believed that no government has the right to dictate how and when a person can worship. (Place Roger Williams' name on board; discuss Williams.) Two other fighters believed that every person has a direct line of communication to God. (Place the names of George Fox and Anne Hutchinson on the board; discuss them.)

Induction of Cognitive Conflict (15 minutes)

What do you think about these people?

Let's pretend we live back in the time of George Fox. What do you think many people thought when they saw and heard him?

It seems as though these fighters must have been crazy to make the people in authority so mad. Why didn't they just be quiet and believe what they wanted?

Why would God want someone to appear as George Fox did? Wouldn't some other way be better?

Does God give us messages today to keep fighting for freedom to worship him?

Learning Activity (15 minutes)

Break into groups. Assign one freedom fighter to each group. Ask them to use crayons and butcher paper to draw whatever stands out as important to them about that person's life.
The Bible's Message for Us (5 minutes)

"What do you think is the most important thing we can learn from these people? How do their lives help us to remember to live in freedom as servants?"

Focus: They fought for what they believed in.
They believed God was speaking to them in a unique way, whether other people perceived the message that way or not.
They exercised their freedom to choose to obey that message as they understood it.

"When we keep ourselves open to God, we perceive messages that compel us in particular directions."

Worship (5 minutes)

Take offering.

Prayer: Thank you, God, for the privilege to be together without any sense of persecution, without any sense of needing to fight for our right to worship. Thank you, God, that we can choose our beliefs, choose to remain open to the experience of you. Amen.
LESSON 6

Color Our Worship: Green
For the Week of February 18, 1979

Main Idea: Our worship has order and meaning.

Learning Goals: To help children become aware of the seasons of the Church year and the liturgical colors.
To increase children's sensitivities to elements of worship.
To give opportunity to plan a service and discover reasons for orderly worship services.

The Bible in this Session: Psalm 95: 6
Ecclesiastes 3: 1

Friendship Ritual and Introduction (5 minutes)

Come together for the opening circle and spend some time visiting with the children.

Discovering in the Bible (15 minutes)

"Our Bible verses today say some important things about worship. Let's read them. (Read from chart).

This last verse is especially true of worship in the church. Do you know why? There are seasons for the church year, and these seasons change with a sense of order. Discuss seasons.

Advent
The four Sundays before Christmas.

Christmastide
Christmas Day, and one or two Sundays between December 25 and January 6.

Epiphany
The four to nine Sundays between January 6 and the beginning of Lent.

Lenten
The six Sundays before Easter Day.

Eastertide
Easter Day and six other Sundays.

Pentecost
The eleven to sixteen Sundays beginning with Pentecost Sunday (seventh Sunday after Easter Day) and continuing through the next to the last Sunday in August.
Kingdomtide: Thirteen or fourteen Sundays beginning the last Sunday in August and continuing until Advent.

"Each of these seasons has a particular color associated with it. As the seasons change, the color which appears on our altars and the stole worn by the minister changes."

Present the four colors: white, green, red, purple. Have children try to match the colors with the seasons on the chart, after talking about colors as symbols, and what they stand for.

| Purple | symbolizes the majesty of Christ in his humility |
| Red    | symbolizes blood and spirit                     |
| Green  | is the color of nature in the freshness of bloom |
| White  | is the color of light, signifying divinity, purity, and victory. |

Advent: purple
Christmastide: white
Epiphany: white (first Sunday) green (Sundays after)
Lenten: purple
Eastertide: white
Pentecost: red
Kingdomtide: green

"So colors and seasons are very important parts of our worship service. So are the kinds of things we do in the worship service. Did you know there are as many as 14 parts to a worship service. What are some of them? (Prelude, Call to Worship, Hymns, Prayers, Acts of Praise, Anthem, Scripture Lessons, Affirmation of Faith, Pastoral Prayer, Offertory, Sermon, Invitation, Benediction, Postlude. Talk briefly about these parts as they are named.

Induction of Cognitive Conflict (7 minutes)

"Now there's some things I want to ask you about worship and the worship service."

Do you think worship is really important? What exactly is it?

Do we have to have all these symbols and colors?
Should we have all these parts to the Order of Worship? Should there be an Order?

Why do some people think that the church service is boring? Do you think it is?

What should be happening in worship? Does it?

The Bible's Message for Us (3 minutes)

"So what important things are we saying about worship?"

Focus: In worship we are trying to do many things. We have come together to sing, pray, to hear words of comfort, and to be challenged to live a better life. Colors and other symbols give a common language for those who worship.

Different people may feel differently about the best ways to worship, but we all need "worshipful" times to open ourselves to the experience of God.

Learning Activity (25 minutes)

Today we are going to make some banners using the liturgical colors. Each group should select one season for its banner design, think of the events occurring during that season and why we celebrate them, then sketch a design on paper that best illustrates this season. When ready, make the design with felt. Check the liturgical color for the season and plan to have this color dominate the design.

Worship (5 minutes)

Come back together for the last few minutes of the session. Take offering.

Prayer: Thank you, God, for the chance to be together to learn and to worship. Help us remember that worship can be alive and exciting, but we must be willing to participate and to give of ourselves. Amen.

Resource Materials:

Butcher Paper
Pencils, scissors, glue
Felt
Verses on chart
LESSON 7

Worship Around the World
For the Week of February 25, 1979

Main Idea: We can enrich our understanding of worship as we examine how other countries have contributed to worship.

Learning Goals: To enable the children to know something about and appreciate other forms of worship, and to feel that in sharing we all grow.

The Bible in this Session: Psalm 29: 2
Acts 2: 1-4, 37-47

Friendship Ritual and Introduction (5 minutes)

Have children join you in the opening circle. Share some events from the past week.

Discovering in the Bible (12 minutes)

"I've got some paper and markers here, and I want you each to take some and draw a picture about the story I'm going to read."


Allow a few minutes for the drawing to take place. Then lead the children in a discussion of the story with the following questions:
What happened to the disciples?
What was Peter's message to the people?
What was the importance of this event in the life of the church? (Since that day when the disciples were filled with the Holy Spirit and began to preach about Jesus, the Church has spread to all corners of the world.)

"Let's think a little deeper about the story we have just read."

Induction of Cognitive Conflict (8 minutes)

What do you suppose the sound coming from heaven could have been? Was it God's voice?
What about the tongues of fire? Were they actually there, resting on the disciples?
How do you explain the disciples being able to speak in other languages?

The Bible's Message for Us (5 minutes)

"We can't really understand all these things, can we? We've talked before about how the things that happen in Bible stories very often are different from the way things seem to happen now, in modern times."

"If God used to make himself known in the world by doing things like speaking with a physical voice, and sending down tongues of fire, then if he doesn't do these things anymore, does that mean he isn't around anymore?"

"What do you think about this story? What is it really about?" Focus: the disciples felt an enormous experience of God which carried over to 3,000 other people.

Learning Activity (25 minutes)

"The way we experience God tends to be influenced by the kind of culture we live in. So does our worship of God. We are influenced by our own land, our music, our heritage in art and architecture; everything about where we live in time and space has a lot to do with our experience of God. For example, how would you think the culture of Africa has influenced its worship? (music). We're going to talk especially about Japan's contribution to worship."

Talk about tokonomos; then break into groups to construct tokonomos. Provide assistance as needed.

Worship (5 minutes)

Take offering, after coming back together in a circle. Lead in prayer, but encourage participation in the prayer.

Prayer: Thank you, God, for the chance to be together to talk about the Bible, to think about the meaning of the words of the Bible, and to find out the Bible's message for us in our lives in modern times. Help us to know that it is possible to experience you in so many different ways, and that however differently people worship you, the most important thing is the individual's deep-down experience of you. Amen.
LESSON 8
Worship In Your Life
For the Week of March 4, 1979

Main Idea: Worship can give direction and meaning to your life.

Learning Goals: To give opportunity for students to create their own worship service.
To help students grow in awareness of the importance of worship in their lives.

The Bible in this Session: Matthew 4:10

Friendship Ritual and Introduction (10 minutes)

Have the children join you in the regular friendship circle; spend a few minutes sharing together.

"This whole term we have been talking about Worship. The first two weeks we talked about the sacraments used in worship in our Church: Baptism and Holy Communion. Then we spent three weeks talking about our freedom to worship. We remembered the First Century Christians who suffered so much persecution; we talked about how Constantine helped stop the persecution; and we talked about many freedom fighters who have continued to fight for freedoms in worship. Then we talked about the elements in our worship--color in particular. Last week we talked about how worship has developed differently in different countries."

"Today we want to really think about worship in our own lives. Tell me what you think of when you hear the word 'worship.' (singing, praying, fellowship with other Christians)

"Right, those are the kinds of things we do at Church when we worship. In all of these ways, we try to make ourselves more aware of God's presence, and more open to his messages to us."

"But I wonder if we can think even deeper about what worship means. Do you suppose there are other things in our lives we worship? What about money? being popular? What are the ways we do that? So, when we say we worship them, we might really mean we make it the most important thing in our lives, the center of our lives."

Discovering in the Bible (10 minutes)

"Let's read our Bible passage for today."

Read Matthew 4:10. (Then Jesus said to him, 'Begone Satan, for it is written, you shall worship the Lord your God and him only shall you serve.')
Do you remember when Jesus said this to Satan? (when he was tempting Jesus in the Wilderness.)

What did Satan want Jesus to do? (Turn stone into bread, accept power and wealth, throw himself down from the temple.)

So, in other words, what was Satan asking Jesus to worship? (power, wealth, his own authority.)

What was Jesus' answer?

**Induction of Cognitive Conflict (10 minutes)**

"Before we go on, I want to ask you some things about that story."

Is Satan real? What is he like? Is he a person? Can we see him? Where did he come from? Where does he live? Where is that?

The Bible talks a lot about Satan. Do you think people who lived in Bible times saw him and talked to him? Stories from the Bible seem to suggest this; Jesus talked to Satan in this story.

When people do wrong things, is it because Satan has told them to? How does Satan tell people things? How does he make them do wrong things?

Do you suppose we think about Satan differently than the Bible writers did? Remember when we talked about people in Bible times believing in a 3-decker universe. It was easy for them to think about hell being a place below earth where Satan lived. Do you think there is a place called hell?

**The Bible's Message for Us (10 minutes)**

"What is this story really saying?"

Focus: There are many kinds of temptation all around us. We are constantly being tempted to make worldly things the center of our lives, and to worship them.

"Let's think some more about the idea of worship. If we decide to make God the center of our lives, what are the ways we can worship him that are meaningful to us?"

Focus: In worship we are trying to communicate with God, to have an open line with him. How can we best do this?
Learning Activity (15 minutes)

"I want you to look at these symbols that we use in worship. Tell me what you think they say about our relationship with God."

"I want you to take these blank cards and make your own worship emblem. Think about the symbols we have talked about. What did they stand for? What is important to you in worship? What is the most important thing for your emblem that describes how you feel and what you experience in worship?"

Worship (5 minutes)

Come back together in the closing minutes. Take offering. Lead prayer, encouraging participation.

Prayer: Thank you, God, for the chance to be together to talk about the Bible, to think about the meaning of the words of the Bible, and to try to find out the Bible's message for our lives in modern times. Help us to be open to the worship experiences in our church, so that we can develop in our relationship with you. Amen.

Resource Materials:

Worship symbols
blank poster board for emblems
### APPENDIX E

An Overview of the Christian Studies Curriculum

#### Session 1: January 14; A Sacrament: Baptism

**MAIN IDEA:**
Moments of special worship can happen in the life of any person at any time. However, to many Christians, the high points in life are marked by sacraments such as baptism.

**LEARNING GOALS:**
To acquaint students with one of the two sacraments: baptism.
To learn how such "holy moments" can touch our lives.

**THE BIBLE IN THIS SESSION:**
- Matthew 28: 19-20
- Mark 1: 4-14
- Matthew 3: 13-17
- Acts 16: 25-34

**ENRICHMENT ACTIVITIES FOR TEACHER-DIRECTED APPROACH:**
- Discuss ways we use water.
- Discuss the words sacrament and baptism.
- Record ideas about baptism on newspaper display in teaching area.
- Create a sacrament mobile.
- Worship.

**ENRICHMENT ACTIVITIES FOR LEARNING CENTER APPROACH:**
- Discover who, where, and what of Jesus' baptism.
- Become "experts on water" especially as it relates to baptism.
- Study the different ways people are baptized and the reasons for them.

#### Session 2: January 21; A Sacrament: Holy Communion

**MAIN IDEA:**
The sacrament of Holy Communion reminds us of the meal Jesus and his disciples shared during Holy Week.
LEARNING GOALS:
To assist students in learning more about the sacrament of Holy Communion and why this sacrament is an important celebration in the life of the Church.

THE BIBLE IN THIS SESSION:
Matthew 26: 17-30
1 Corinthians 11: 23-26
Ephesians 5: 2
Romans 5: 6-11
1 John 3: 1-2

ENRICHMENT ACTIVITIES FOR TEACHER DIRECTED APPROACH:
Study pictures relating to the Last Supper, Holy Communion, and meals.
Study the Bible to discover what happened at the Last Supper.
Worship.

ENRICHMENT ACTIVITIES FOR LEARNING CENTER APPROACH:
Interview pastor about the ritual of Holy Communion.
Act out portions of the happenings of the Last Supper.
Create a story with pictures.
Use creative movement to express the meaning of a communion hymn.
Review or share learnings.

MAIN IDEA:
Early Christians risked their lives to worship and follow Jesus; that is our heritage and our challenge.

LEARNING GOALS:
To help students learn about the dangers faced by the early Christians, and feel proud of their example of courage.

THE BIBLE IN THIS SESSION:
John 16: 1-4
Colossians 3: 16-17
1 Corinthians 16: 1-2
1 Corinthians 11: 23-26
ENRICHMENT ACTIVITIES FOR TEACHER
DIRECTED APPROACH:

Study scriptures to learn about Paul's message to the early church.
Learn about persecution of early Christians.
Learn how Christians are persecuted today.
Discuss personal experiences of worship and/or persecution.
Worship as early Christians did in the catacombs.

ENRICHMENT ACTIVITIES FOR LEARNING CENTER APPROACH:

Plan a "Catacomb Service."
Make a "Friends Who Were Persecuted" Mural.
Create a yarn collage or fish symbol.
Read the play "A Young Christian Faces Death."

Session 4: February 4; Constantine Stops Persecution

MAIN IDEA:
Early Christians gave up home, comfort, and safety to seek a place where they could worship freely.

LEARNING GOALS:
To acquaint students with stories of those who have sacrificed security for the right to worship as they pleased.
To encourage boys and girls to think about how persons sacrifice comforts for the privilege of serving God.

THE BIBLE IN THIS SESSION:
Acts 22
Psalm 122: 1

ENRICHMENT ACTIVITIES FOR TEACHER
DIRECTED APPROACH:

Share news clippings or articles about persecution in today's world.
Discuss the meaning of freedom to worship.
Learn about creeds of the Christian Church.
Decode a creed.
Worship.

ENRICHMENT ACTIVITIES FOR LEARNING CENTER APPROACH:

Study creeds and write a creed.
Create a symbol of the Christian faith.
Learn about Constantine.
Learn from the Bible how Paul was persecuted.
Session 5: February 11; Freedom Fighters Make Gains

MAIN IDEA:
Men and women of history fought to secure the freedom to worship which we enjoy today.

LEARNING GOALS:
To help students learn about those who worship in difficult circumstances.
To help students feel thankful for the opportunity to worship God in relative freedom.

THE BIBLE IN THIS SESSION:
Galatians 5: 13-15
1 Peter 2: 16

ENRICHMENT ACTIVITIES FOR TEACHER DIRECTED APPROACH:
Study scripture references relating to free and freedom.
Discuss reasons some persons do not worship.
Hear a summary of issues facing the church today.
Worship.

ENRICHMENT ACTIVITIES FOR LEARNING CENTER APPROACH:
Tape a radio play.
Write "advertisements" telling about persons who fought for freedom to worship.
Learn from a resource person what issues the church is facing today.
Learn about freedom of worship ideas in government documents.

Session 6: February 18; Color Our Worship: Green

MAIN IDEA:
Our worship has order and meaning.

LEARNING GOALS:
To help students become aware of the seasons of the church year and the liturgical colors.
To increase students' sensitivities to elements of worship.
To give opportunity to plan a service.

THE BIBLE IN THIS SESSION:
Psalm 95: 6
Ecclesiastes 3: 1
Job 16: 16
Isaiah 1: 18
Matthew 16: 2
Matthew 5: 36
John 4: 35
Psalm 51: 7
Luke 16: 19
John 19: 2
Acts 16: 14
Luke 23: 31
Psalm 23: 2
Deuteronomy 12: 2
Job 39: 8

ENRICHMENT ACTIVITIES FOR TEACHER
DIRECTED APPROACH:
Review important words.
Discuss church colors and seasons.
Make a mobile of symbols of the church year.
Worship.

ENRICHMENT ACTIVITIES FOR LEARNING
CENTER APPROACH:
Create a banner showing seasons and colors of the church year.
Study and discuss your own order of worship.
Look up scriptures relating to colors.
Discuss and sing hymns.

Session 7: February 25; Worship Around the World

MAIN IDEA:
We can enrich our understanding of worship as we examine how other countries have contributed to worship.

LEARNING GOALS:
To enable students to know something about and appreciate other forms of worship, and to feel that in sharing we all grow.

THE BIBLE IN THIS SESSION:
Psalm 29: 2
Acts 2: 1-4
Acts 2: 37-47
Session 8: March 4; Worship in Your Life

MAIN IDEA:
Worship can give direction and meaning to your life.

LEARNING GOALS:
To give opportunity for students to create their own worship service.
To help students grow in awareness of the importance of worship in their lives.

THE BIBLE IN THIS SESSION:
Matthew 4: 10

ENRICHMENT ACTIVITIES FOR TEACHER DIRECTED APPROACH:
Review words and definitions.
Plan a worship service.
Study scripture to learn about early Christian worship.
Make a banner symbolizing worship around the world.
Worship.

ENRICHMENT ACTIVITIES FOR LEARNING CENTER APPROACH:
Create a tokonoma.
Make a worship screen.
Listen to worship experiences around the world.

ENRICHMENT ACTIVITIES FOR TEACHER DIRECTED APPROACH:
Complete unfinished projects.
Complete plans for the closing worship.
Review symbols of the church.
Discuss ways worship helps us reach out to others.
View a filmslip.
Evaluate the study.
Worship.

ENRICHMENT ACTIVITIES FOR LEARNING CENTER APPROACH:
Make final plans for a worship service.
Have an "Open House" on worship.
Make shields representing apostles.
Create a slide show on "What Worship Can Do."
**APPENDIX F**

Comparison of the *Christian Studies* Curriculum and the *Cognitive Conflict* Curriculum for Lesson #2.

**Session 2: A Sacrament: Holy Communion**

<table>
<thead>
<tr>
<th><strong>Christian Studies Curriculum</strong></th>
<th><strong>Cognitive Conflict Curriculum</strong></th>
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<tbody>
<tr>
<td><strong>MAIN IDEA:</strong> The sacrament of Holy Communion reminds us of the meal Jesus and his disciples shared during Holy Week.</td>
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<td><strong>LEARNING GOALS:</strong> To assist students in learning more about the sacrament of Holy Communion and why this sacrament is an important celebration in the life of the Church.</td>
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<td><strong>TEACHER-DIRECTED APPROACH:</strong> Study pictures relating to the Last Supper, Holy Communion, and meals. Study the Bible to discover what happened at the Last Supper. Worship.</td>
<td><strong>INDUCTION OF COGNITIVE CONFLICT:</strong> How did Jesus know that one of his disciples would betray him? Why didn't God stop Judas from betraying Jesus? What did Jesus mean about his Father's Kingdom? Where is it? How do you get there?</td>
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<td><strong>EXPLORING-CENTERS APPROACH:</strong> Interview pastor about the ritual of Communion. Act out portions of the Last Supper. Create a story with pictures. Use creative movement to express the meaning of a Communion hymn. Review or share learnings.</td>
<td><strong>THE BIBLE'S MESSAGE FOR US:</strong> What is this story about? Focus: This is a story that tells us that Jesus wanted us to be involved in his living and dying. This can happen because we believe in the symbols of bread and wine as we celebrate Communion.</td>
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<td><strong>LEARNING ACTIVITY:</strong> Act out scene of the Last Supper.</td>
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### APPENDIX G

**DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE**

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a. First United Methodist Church, Corvallis  
b. Rose City Park United Methodist Church, Portland  
c. Trinity United Methodist Church, Salem  
d. Morningside United Methodist Church, Salem