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DISCUSSION: AN INTERACTIVE MODEL FOR ELEMENTARY SCHOOL CHILDREN

by

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A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled DISCUSSION: AN INTERACTIVE MODEL FOR ELEMENTARY SCHOOL CHILDREN submitted by HEATHER ELIZABETH PYRCZ in partial fulfilment of the requirements for the degree of Master of Education.

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ABSTRACT

This study undertakes the construction of a model of discussion for use in the elementary school context by investigating the nature, value and techniques of discussion. The findings of the study support the view that discussion, used to develop thinking, language and social abilities, is a particular kind of oral mode of interaction and a distinctly social and wholistic method of learning.

There are five conditions which are identified as constituting the interactive nature of discussion: alternation, a restrictive theme, the accumulation of statements for the building of an idea and a shared language. Discussion employed for critical thinking also necessitates the presence of an evaluative question.

The value of discussion lies in its potential for developing a child's thinking, language and social interactions in a manner complementary to accepted developmental growth patterns. Three functions of child development are considered. Social development, progression along the egocentric to sociocentric continuum, is viewed in terms of autonomy and reciprocity. Sociability is encouraged by the interactive character of discussion. Cognitive development, progression along the concrete to abstract continuum, is built into the discussion model by the presence of the evaluative question. Five critical thinking stages provide the basis for cognitive integration: understanding the problem, formulating alternatives, supporting an alternative, evaluating and making a judgment. Language development, the ability to understand others and be understood is the central function of discussion. Language is not only a discrete

objective for discussion, for developing fluent, flexible users primarily through language expansion; but it is also the medium and indicator for social and cognitive development. Language is the unifying force, the means of interacting, the tool for thought, and the method of communication.

The study further translates the aims, structural components, skills and abilities of discussion into curriculum terminology. At the curriculum level, the context, task, content, instructional strategies, teacher's roles and active roles of the learner together with the binding, interactive nature of discussion are utilized in providing a curriculum model of discussion.

The significance of the study lies in its specific framework; a framework that is meant to aid educators in the utilization of a logically consistent and well-grounded approach to developing the child's ability to communicate ideas in a social context.

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CHAPTER I

THE NATURE OF THE STUDY

INTRODUCTION

Discussion has been traditionally viewed as an adult method of problem solving. Yet, it is not only adults who are confronted with dilemmas, conflicts and opposing alternatives. A child's world, full of multirelations, change and uncertainty, gives rise to complex problems requiring a method of resolution. Recently, educators such as Lundsteen (1976), Moffett (1968), and Taba (1967) have recognized the role discussion can play in elementary school programs. Lundsteen (1976) states that "discussion can be a key learning, motivating and thinking activity in any curriculum area (p. 147)."

An examination of the Alberta School Program of Studies (1975) indicates the primacy of aims such as citizenship, the ability to adjust to change, autonomy and communication (p.1). Discussion would appear to be an effective method for achieving these aims because of its social, interactive nature.

If educators say discussion is a valuable tool for developing cognitive skills, attitudes, feelings and sensitivities (Taba, 1967, p. 75); that discussion is a valuable strategy for creative problem solving (Lundsteen, 1976, p. 169) is it being fully utilized in the classroom? James Moffett (1968) implies that discussion has never played a significant role in school programs. He maintains that what is

frequently called a "classroom discussion" is not a discussion at all but simply a question and answer period (1968, p. 94).

Regardless, the term "discuss" is frequently employed in curriculum textbooks. The World of Language, for example, an authorized language text for Alberta schools, advocates discussion as a language objective. However, the objective is neither clearly described nor consistently used. On close examination the term "discussion" in the text refers to numerous tasks such as: (1) Explanation tasks ("initiate a discussion on the poem 'the Earth.' Start the discussion with a consideration of conditions for life as we know it, p. T47"), (2) Descriptive tasks ("further work may be introduced by initiating a discussion of shapes that are like body shapes, p. T14") or (3) Imaginative tasks ("discuss the question 'Tell what the changing shapes of clouds remind you of, p. T46").

Clearly, explanation, description and imagination are significant language activities. Are these activities themselves discussion or, alternatively, is discussion purely a context in which any of them can sit comfortably? What is necessary before these question and answer periods become discussion?

STATEMENT OF PROBLEM

From the standpoint of the teacher the problem is to distinguish discussion not only from other oral language tasks but also from other oral language contexts.

Perhaps the ambiguity of the term "discuss" embedded in the textbooks reflects the lack of a clear, conceptual base. Are educators clarifying the nature, task and objectives of discussion?

Lundsteen (1976) defines discussion as "an experience in group thinking in which, ideally, everyone contributes and each member learns from the others (p. 147)." By concentrating on the roles of discussion (harmonizer, questioner, listener, etc.) she helps isolate some of the requisite skills. However, what constitutes group thinking? What constitutes contribution? Is a group of students, using a common theme, telling stories to one another, discussing?

Moffett (1968) focuses on interaction. "By discussion we mean small group interaction (p. 74)." If discussion is essentially interaction what is the character of this interaction in discussion? Moffett states interaction has an oral base, it pools knowledge, it stimulates and supports its members, it is best facilitated by small groups, it is conversing. Is any talk discussion? Is any method of conversing such as alternating monologues, discussion?

Hilda Taba (1967) does not give a definition, instead she focuses on what good discussion will achieve. Even when she outlines three kinds of discussion they do not clarify the difference between discussion and a question and answer period. For example "free discussion" is simple recall and retrieval while "controlled" discussions are "those in which the cognitive processes are directed by a carefully planned sequence of questions (p. 77)."

The problem is, if there is no clear understanding of what discussion is and how it is structured, there can be no means of insuring that discussion, as opposed to other activity, is occurring in the elementary school classroom; nor can one be sure that the full potential of discussion is realized.

PURPOSE OF THE STUDY

The purpose of this study is to construct a model of discussion, for use in the elementary school context, by investigating the nature, value and techniques of discussion. The study focuses on a model appropriate for children who are moving from th[illegible]ncrete operational stage towards formal reasoning.

DESIGN AND ORGANIZATION

The initial m[illegible]ns employed in the construction of the model defended in this study is an examination of the literature on child development. An understanding of the child, how he develops and learns, is a necessary starting point providing guidelines for expectations and limitations of a model of discussion at the elementary school level. This examination, undertaken in Chapter II, provides three dimensions that serve as the foundation of the model. The dimensions, language, thought and social interaction appear, schematically, as three intersecting circles structuring discussion.

Chapter III reviews the literature of each dimension to discover its contribution to an understanding of discussion. There can be no form without content. Thus, Chapter IV illustrates the kind of content suited to both the means and the ends of discussion. It is limited to an examination of one kind of content--moral questions.

The final substantive task transposes theory into practice. Chapter V is a paradigm of discussion and an illustration of how it might be implemented in the classroom. Chapter VI summarizes, concludes and suggests implications for further research.

Throughout the study, the construction of the model was aided by two field studies: preliminary investigations of small groups of children provided with the opportunity to discuss. The first group were five boys of average or above average intelligence ranging in age from 8-11. The context was controlled to minimize stress and promote optimal conditions for quality and quantity of language production. That is, the boys were good students, fluent, flexible users of language, good friends, known to the investigator, situated in an informal familiar setting outside of the school. This first field study, undertaken during the initial stages of the inquiry investigated whether or not conditions necessary to begin discussion were operational at the elementary school age level and further, what skills characterized the conditions.

The second group studied was more heterogeneous. It consisted of five students, two girls and three boys from different grade 4 and 5 classrooms in Spruce Grove, Alberta. Their teachers were asked to select average learners. The purpose of the second field study undertaken near the end of the inquiry, was to test techniques such as questioning. It was also an opportunity to test the model with an arbitrary group of average students in the school setting. Both field studies consisted of presenting the students orally with four moral dilemmas. The task instructed the students to come to a group consensus as to the best solution. Throughout, the discussions were taped and later transcribed for use in the study.

LIMITATIONS OF STUDY

The field studies undertaken were only a preliminary investigation, they were not meant to provide an empirical grounding of the model. Although they did suggest a number of important aspects for the use of discussion, particularly the appropriateness of its use for children moving toward logical reasoning, the field studies were neither broad samples nor longitudinal in design. As such, the model developed in this study relies most heavily on existing empirical and theoretical literature.

CHAPTER II

REVIEW OF RELATED LITERATURE--CHILD DEVELOPMENT AND INSTRUCTION

INTRODUCTION

Instructional methods presuppose an understanding of development (Vygotsky, 1962, p. 82). "In other words," Moffett (1968) contends, "the sequence of psychological development should be the backbone of curriculum continuity and logical formulations of the subject should serve only as an aid in describing this natural growth (p. 14)." In moving toward an understanding of discussion for the elementary school level, then it seems appropriate to investigate the development of the young child; to identify the general principles of how a child acquires knowledge.

There are no direct, simple answers to the question of child development. The acquisition of knowledge, the theories of development and instruction, are extensive and complex. This chapter isolates two major aspects in the literature to inform the question on the use of discussion at the elementary level: (1) how knowledge is acquired, with particular emphasis on the middle years (7-11), and (2) how learning can be improved, primarily as it pertains to discussion for young school children. The chapter culminates with a brief description of the elementary school child.

CHILD DEVELOPMENT

Central to child development is the question of how a child comes to know, how a child is initiated into his cultural heritage, "the acculated wisdom of the race (Peters, 1964)." This question is inexorably tied to the development, interrelation and intersection of language and cognition. Hence, the work of Jean Piaget and L.S. Vygotsky will be examined to investigate the intimate structures, processes and concepts involved in the child's initiation.

Piaget's Theory of Cognitive Development

Piaget's cognitive developmental theory is perhaps the most widely acclaimed descriptive theory of the acquisition of knowledge. His genetic epistemology is an account of the human's systematic adaptation to the world (Sigel and Cocking, 1977, p. 34). It seeks to uncover the psychological structures that underlie the formation of concepts and the functions or processes by which knowledge is acquired (Piaget, 1967, p. xviii).

Structure and function. The process of coming to know, for Piaget, is a strict function of interactions of the organism with his environment. Structure and function are the conceptual keys needed to unlock Piaget's interpretation of the means and ends of interaction. The term "structure" refers to all the aspects of a given event occurring when the organism interacts with his environment. Phillips (1969) illustrates Piaget's use of the concept with the example of a baby looking at a rattle and picking it up. "The structure of this event includes the means (looking, reaching,

grasping) and the ends (stimulation from the object in hand) (p. 7)." The configuration of relations, each aspect of the event to the others, is what Piaget calls "structure." Function, according to Piaget, refers to the biologically inherited modes of interacting with the environment (Phillips, 1969, p. 7). For Piaget, these are the processes of assimilation and accommodation: assimilating new sensory data and adapting one's cognitive structures to accommodate the new information. Functions are invariant but structures are transitory. Development occurs when the functions facilitate changes in cognitive structures (Phillips, 1969, p. 7).

Piaget's structural framework is composed of units called schemata. All acquired knowledge is organized into schemata. The structures of knowing originate from the sensorimotor coordinations of the infant, with the qualitatively and quantitatively changing series of interactions of the child with his environment (Emans, 1973, p. 302). As the child matures his interactions become organized into more complex, abstract and symbolic schemata.

When actions or activities are internalized by the child they become what Piaget calls "operations." An operation is "internalized action which becomes reversible and is coordinated with other operations into an integrated operational grouping or schemata (Piaget, 1967, p. 78)." Reversibility allows the child a new mobility in that he is no longer tied to perceptual judgment. Operations which allow for a new mobility of thought would include combining, separating and substituting. Although Piaget's examples are usually restricted to logico-mathematical operations, reversibility can also be seen to effect language development as operations such as combining, separating and substituting also have direct meaning for language expansion.

Growth in cognition, indicated by increasing operations and expanding schemata occurs by the assimilation of new information through interaction and the adaptation of inner understanding and the organized system until a state of equilibrium is reached. This concept of equilibrium is the central explanatory principle of Piaget's theory.

> The idea is that structures continually move toward a state of equilibrium and when a state of relative equilibrium has been attained the structure is sharper, more clearly delineated than it has been previously. But that very sharpness points up inconsistencies and gaps in the structure that has never been salient before. Each equilibrium state therefore carries with it the seeds of its own destruction, for the child's activities are thenceforth directed toward reducing those inconsistencies and closing those gaps (Phillips, 1969, p. 10).

Although Piaget recognizes the role of social needs and language in the process of development, the dominant motivation and determining factor is cognitive conflict. This contention firmly establishes the centrality of the concept of equilibrium. As Phillips (1969) states,

> Piaget would assert that except as an aid in stimulating symbolic thought and in focusing on concrete operations, language does not stimulate intellectual development strongly until adolescence. Indeed, language development is stimulated by cognitive growth rather than the reverse (p. 7).

As such, Piaget's theory minimizes the importance attached to language instruction as a significant contributor to cognitive development.

Piaget's stages of development. Piaget's systematic, clinical observations of children led to a description of children at different cognitive stages. These stages were seen as sequential, accumulative and corresponding to particular mental ages. Piaget describes four major, qualitatively different, stages of cognitive development.

The sensori-motor period (0-2 years) is considered a physical stage in that interaction is manifested in coordinations. These

coordinations move from purely reflect action in the first month, to the beginnings of means-end behavior (8-12 months), to the increasingly covert use of symbols by 18-24 months.

The pre-operational period (2-7 years) is the stage in which the child, earlier restricted to direct interactions with the environment, can now manipulate symbols representing the environment. Rapid language and conceptual development occurs and this stage sees the beginnings of explanation and anticipation. However, thinking is not logical. Rather, it is perceptual in judgment and magical in outlook. The egocentricism of the child in the sensorimotor stage is manifested in his actions. The egocentricism, still apparent in the pre-operational child, is manifested in his representations. The pre-operational child expects to be understood even though his referents are idiosyncratic, his logic indiscernible.

> The ability to take the view of the other (without losing his own) and the corresponding social norm of logical consistency are acquired gradually, through repeated social interactions in which the child is compelled again and again to take account of the viewpoints of others. This social feedback is extremely important in developing the capacity to think about his own thinking, without which logic is impossible (Phillips, 1969, p. 63).

The concrete operational period (7-11 years) marks two significant developments: reversibility and cooperation. Phillips (1969) contends that it is the mobility of thought (reversibility allowing for increased operations, conservation, transformation, transductive reasoning) which permits the child to shift rapidly back and forth between his own viewpoint and others, making it possible to recognize mutual responsibilities and shared goals. "In short, it makes cooperation possible (p. 85)." Piaget (1967) eventually shrugs off the question as a chicken or egg

dilemma (p. 41). Regardless, the emphasis in this stage is on the relations between thinking and symbolic logic. Classes and relations such as one to one correspondence, conservation of quantity, and cardination (which requires putting together two operations) are evident in the concrete operational stage.

The formal operational stage (11-15 years) of the adolescent is the period in which thinking becomes symbolic and abstract. From concrete operations, "he then operates on those operations by casting them into the form of propositions. These propositions then become a part of a cognitive structure that owes its existence to past experience but makes possible hypotheses that do not correspond to any particular experience (Phillips, 1969, p. 104)." Content becomes subordinated to the form of relations such that all types of logical operations can, in principle, be solved.

The concrete operational stage. Since the elementary school child is primarily in the concrete operational stage, an elaboration of this period is essential. The change from the pre-operational roots of action to concrete operations is a process of becoming aware and mastering one's own thought. Sigel and Cocking (1977) suggest cognitive conflict plays a significant role, initiating tension and creating a state of disequilibrium. The child becomes aware of his actions and is propelled from one competency level to another (p. 22).

The transition from pre-operations to concrete operations, motivated by cognitive conflict and facilitated by assimilation and accommodation, is a change intellectually from intuitions to operations and socially from an egocentric to a sociocentric point of view. The

intellectual and social aspects are interrelated:

> With respect to intelligence we are now dealing with the beginnings of the construction of logic itself. Logic constitutes the system of relationships which permit the coordination of points of view corresponding to different individuals as well as those which correspond to successive percepts or intuitions of the same individual (Piaget, 1967, p. 41).

Intelligence, Piaget says, has two main functions curiously uninvolved with one another: inventing solutions which is a manifestation of imagination and verifying solutions which alone is logical (Piaget, 1964, p. 202). The egocentric child is surprisingly strong in his convictions and statements. However, as long as he is thinking and talking for himself, he needs neither proof nor "consciousness" of the operations employed. The pre-operational child is precausal, he sees no need to verify his statements, to explain or justify. The egocentric child has yet to differentiate himself from others, his egocentricism is therefore global, he sees his point of view as everyone's.

The social need to share, to communicate with others is at the root of verification (Piaget, 1964, p. 204). The concrete operational child has differentiated himself from others, he has realized not everyone shares his perspective, his ideas. In the company of others he now desires to prove his statements. Verification, the giving of reasons, marks the beginning of logical reasoning, logical thinking.

The concrete operation stage differs from its successive stage, that of formal operations, in that the child's thinking is still moored to the concrete referent. In formal operations thinking is truly abstract. "For logical thought sees the achievement of some system of notation (e.g., language or some other symbol system) which frees thought from external and internal action (Emans, 1973, p. 303)."

Language becomes more important as stages progress. In outlining Piaget's theory, Pflaum (1974) states, "Language enables children to detach thought from action at the start of the pre-operational stage. Thus thought becomes symbolic and because language too is inherently symbolic, it becomes the natural medium for representing absent objects and past events (p. 6)." As the stages progress, thought relies more and more on a system of notation.

Relation to discussion. Although Piaget is a psychologist whose work was descriptive rather than prescriptive, his work has implications for education. As Phillips (1969) contends, "teaching is the manipulation of the student's environment in such a way that his activities will contribute to his development (p. 108)." Piaget has something very definite to say about children in environments. Essentially, the child must be active, that is interactive with his environment. Furth (1970) states that Piaget believes development takes place in any environment and that intelligence grows from within, thus, "the task becomes one of furthering and nourishing this growth by providing suitable opportunities, not by explicit teaching of what to do or what to know (p. 74)."

Can discussion provide a suitable environment, an inquiry or discovery context in which interaction leads to cognitive growth?

Interpreting Piaget, Phillips (1969) suggests that when a child finds himself in a new situation he relies on past experience, he thinks about it in terms of familiar patterns. If it is the same as established structures, or conversely, if it cannot fit at all into established structures, no learning occurs. The discrepancy, the threshholds of a given task, therefore, must be within an optimal range (p. 110).

Can discussion tasks be constructed such that they create cognitive conflict and, inching their way into familiar thinking patterns disrupting the relative peace, reconstruct a new, more complex structure?

Piaget's descriptive, developmental account of the acquisition of knowledge has given an immeasurable foundation to the study of child development. However, as it is a descriptive, maturational epistemology educators such as Vygotsky and Bruner depart from Piaget on the role of instruction.

Vygotsky's Theory of Intellectual Development

However, before examining Vygotsky's instructional theory it is necessary to sketch his intellectual developmental theory especially in terms of how it differs from Piaget. Vygotsky's theory with its principle theme of language and thought is also an account of intellectual development. Unlike Piaget, it is a theory which values the role of instruction.

Pflaum (1974) briefly outlines the similarities and differences in the theories of Vygotsky and Piaget. Vygotsky's theory, she suggests, differs from Piaget's on two central points. First, Vygotsky views language as a major stimulant of thought and second, Vygotsky contends that the strategies used in learning language become a major means for acquiring thought processes. The significant similarity in the two theories is in their attention to the active participation of the learner in acquiring concepts and structuring experience.

Language and thought. The relationship of language and thought, a point of contention between Vygotsky and Piaget, is far more reciprocal and interdependent in Vygotsky's theory. Vygotsky (1962) expresses the relationship thusly, "Thought is not merely expressed in words; it comes into existence through them. Every thought tends to connect something with something else, to establish a relationship between things (p. 125)."

The relationship of thought and word is reciprocal, a dynamic process whereby concepts gain meaning.

> The structure of speech does not simply mirror the structure of thought, that is why words cannot be put on by thought like a ready made garment. Thought undergoes many changes as it turns to speech. It does not merely find expression in speech, it finds reality and form (Vygotsky, 1962, p. 126).

The progression can be likened to Piaget's stages. In the active process of acquiring meaning children pass first through a stage in which they group objects into haphazard groups or "heaps." With conceptual thinking pseudo concepts are formed. In this stage classifications are determined by syncretic organizations of the child's visual field. Finally, as the ability to abstract and generalize is developed, true concepts are formed.

Language as a learning strategy. The contrast between Vygotsky's and Piaget's interpretations of the role of language in cognitive development is fundamentally tied to their understanding of egocentric speech. Piaget contends that egocentric speech does not fulfil any useful function. In the progression from egocentric to socialized speech, egocentric speech simply atrophies as the child begins to interact with others. Alternatively, Vygotsky contends that not only is the progression the reverse, from socialized to egocentric to inner speech, but also that

the egocentric stage fulfils a necessary and significant role. That is the earliest function of speech is social, global and multifunctional. Egocentric speech is the transitional stage of children internalizing vocal speech. Egocentric speech does not atrophy, rather it evolves into inner speech when the child has differentiated speech functions (i.e., inner speech for autistic and logical thinking and external speech for communication).

For Vygotsky, external speech, dialogue between adult and child is the critical factor influencing language development and stimulating cognitive growth (Pflaum, 1974, p. 8). From the adult model children learn names and structures. These imitative, habitually learned patterns, when internalized, are used to structure the child's inner thought.

Vygotsky's interpretation of concept formation has implications for learning. Pflaum (1974) gives an example illustrating the contrast between Vygotsky and Piaget and the effect of learning for acquiring meaning:

> Those interested in child language and cognition frequently point out that children use words without mature meanings or with missing attributes. When a youngster of five, let us say, uses "because" and "although" without full conceptual understanding, Piaget would say that they are largely meaningless terms. In addition, he would contend that until the child acquires the complex significance of these terms, no amount of use in speech will help him learn the meanings. On the other hand, Vygotsky's analysis would hold these words are used in speech with partial understanding of position but without the mature idea of coordination. Vygotsky would also contend that an individual child's understanding increases gradually as he uses the terms in everyday speech (p. 9).

The role of language as a learning strategy, a stimulant for cognitive development is the crossroads for Vygotsky and Piaget, a significant crossroads, particularly for educators.

Lewis (1963) also illustrates the significance and the implications for education of the contrast between Vygotsky and Piaget's interpretation of the relationship of language and thought. He contends that Piaget and his followers dwell on language as a hinderance to concrete thinking without examining the ways language may promote thinking.

> They point out that because a child is now so constantly in conversation with other children, because in school so much of his education must be through words, spoken or written, and because usually he is so quick and eager to conquer new fields of language, there is a danger that his use of words may run ahead of his understanding. Now more than ever before there is the risk of an empty verbalism (p. 179).

Lewis recognizes the validity of Piaget's general principle when he wrote

> . . . if a child is to advance in ability to deal adequately with more complex and increasingly unfamiliar situations, he must be led to apprehend concepts which relate these situations to others in his experience. But in order to perceive relationships between situations he must be practiced in grasping relationships that are latent in a situation--the various ways in which the concrete features of a situation are related to each other. This in turn rests upon his ability to organize things, to classify them or arrange them in serial order to one or more criteria. And this ability may be hindered if a child is encouraged in a pre-occupation with words or numbers as objects in themselves instead of the concepts they symbolize (p. 180).

Lewis argues, however, that this view of language is one sided. The positive functions of language in cognitive development are also noteworthy. Lewis also relates Vygotsky's understanding of the relationship of language and thought and the consequence of the interactive role of language on cognitive development. Lewis (1963) is mindful of Vygotsky's contention that Piaget's tests were most often if not always done by the clinical method (i.e., "he observes the child's surroundings and his behavior, formulates a hypothesis concerning the structure that underlies

and includes them both and then tests that hypothesis by altering the surrounding slightly (Phillips, 1969, p. 4)") whereas, instructional methods go beyond the clinical method, questioning, discussing, illustrating, promoting conceptual thinking, hastening the child's development (p. 185). Language is the major learning and teaching tool in these situations.

Vygotsky's theory inevitably spills over into the area of instruction. An investigation of the question of the role of instruction for language and cognitive development follows in order to ascertain to what extent Piaget's stages can be fostered, improved or accelerated; to understand the effect of instruction on development.

INSTRUCTION AND THE CHILD

The contrast between Piaget's and Vygotsky's theories of development is also reflected in their understanding of instruction.

Jean Piaget

Piaget, as we have seen, understands development as a process of maturation. Instruction is the utilization of opportunities created by development (Vygotsky, p. 94). The significance of this interpretation of the relationship of development and instruction is that instruction must follow development which occurs by an inner, biological process. The maximum effect instruction can have on development is to elaborate and extend development (Sigel and Cocking, 1977).

Vygotsky (1962) argues that by stressing and separating development and instruction, Piaget relegates instruction to a purely extraneous factor of minimal importance:

> The former creates the potentialities; the latter realizes them. Education is seen as a kind of superstructure erected over maturation; or to change the metaphor, education is related to development as consumption to production. A one sided relationship is thus conceded: learning depends on development, but the course of development is not affected by learning (p. 94).

L.S. Vygotsky

Vygotsky's own studies (1962) supported a different, if tentative, relationship between development and instruction.

First, development and instruction are interdependent. The psychological structures (that Piaget is waiting to develop or mature before starting instruction) are immature when instruction begins. "Thus our investigation shows that the development of the psychological foundations for instruction in basic subjects does not precede instruction but unfolds in a continuous interaction with the contributions of instruction (p. 101)," Second, Vygotsky observed that the curve of development did not coincide with the curve of instruction, there was never a complete parallelism between the two. "We found that instruction usually precedes development. The child acquires certain habits and skills in a given area before he learns to apply them consciously and deliberately (p. 101)." Third, in terms of the effect of instruction and the transference of training, "we found that intellectual development is not compartmentalized according to topics of instruction. Its course is much more unitary and the different school subjects interact in contributing to it (p. 102)."

Vygotsky's final observation concerned the major role of instruction in the child's development.

> What a child can do in cooperation today he can do alone tomorrow. Therefore the only good kind of instruction is that which marches ahead of development and leads it; it must be aimed not so much at the ripe as the ripening functions. It remains

> necessary to determine the lowest threshold at which instruction in, say arithmetic, may begin since a certain minimal ripeness of functions is required. But we must consider the upper threshhold as well; instruction must be oriented toward the future, not the past (p. 104).

Vygotsky is implying that Piaget's interpretation orients instruction to the past. Instruction becomes a handmaiden waiting on development. Vygotsky suggests that rather than waiting for development, instruction should move children toward it, guiding them to it. For example, discussion at the elementary level, if situated with the threshholds of learning, could be moving children toward certain habits and skills, giving them practice in using concepts and relationships necessary for higher levels of thinking. Vygotsky is suggesting that cooperative, external practice in the language structures will result in the internalization of the structures for inner, individual cognitive use.

Jerome Bruner

Vygotsky maintains that, in part, the task for instruction becomes one of determining the threshholds at which instruction may begin and end. Delineating the upper and lower threshholds for learning at any one particular mental age is not a straightforward task by any means. Educators and theorists span the full spectrum in their views of when instruction can begin.

Bruner (1971) maintains that "any idea or problem or body of knowledge can be presented in a form simple enough so that any particular learner can understand it in a recognizable form (p. 343)." Bruner outlines three forms of presentation: active manipulation, iconic (a pictorial state) and symbolic.

Unlike Piaget's maturational, invariant stage sequence, Bruner's theory or instruction puts the main emphasis on instructional prescription rather than psychological description. Such is the power of instruction on development for Bruner, he argues (1973) that "even readiness is a half truth because it turns out that one teaches readiness or provides opportunities for its nurture, one does not simply wait for it (p. 473)."

Bruner (1966) outlines five major aspects for his theory of instruction. First, he identifies predispositions for learning: a social disposition that is both autonomous and reciprocal, a predisposition to govern one's own reason, master one's own thought and, at the same time, share the thoughts of others; and a cognitive disposition, a predisposition to explore alternatives. Second, specified experiences are chosen to implant in the student a predisposition to learning. These specified experiences are 3) sequenced and 4) structured such that knowledge can be readily grasped by the learner for effective learning. Finally, reinforcement is incorporated for pacing and motivation.

Although the instructional map for development is a departure from Piaget, the foundation of Bruner's theory of instruction remains in the active participation of the learner, a base in experience.

The Role of Instruction

Vygotsky has sowed the seeds of discontent with Piaget's theory. Questions have since arisen particularly pertaining to the role of instruction, questions such as are the stages invariant? Are the stages age-bound? Can development be improved or accelerated?

Stage invariance. The question of stage invariance raises questions for a model of discussion at the elementary school level. If discussion is an adult method of problem solving why introduce it to children? If children at the concrete level cannot reason, which requires abstract thinking, why attempt the impossible?

Lewis (1963) raises a number of contentions with Piaget's invariant, developmental stage theory as it applies to education.

> First, it must be understood that "concrete thinking" is not simply a stage of general development. A child of a given age may vary between intuitive, concrete and formal thinking, according to his past experience and the nature of the situation confronting him. Further, it is clear that by the use of carefully devised methods, children can be helped to advance in their concrete thinking and even to engage in formal thinking during this period of later childhood (p. 178).

Like Vygotsky (1962), Lewis recognizes that there is a "sensitive period" an optimal time for instruction, a period nevertheless influenced by factors other than merely biological development.

Ausubel (1958) agrees that although children pass through gross qualitative stages, concrete thinking does not occur only at one age level. Rather, much overlapping of thinking levels prevails between age groups. More specific to discussion Ausubel states, "All kinds of causal explanations are found at all age levels . . . . Furthermore, changes tend to occur gradually and the quality of causal thinking shows much specifity and dependence on particular relevant experience (p. 568)." Unmoored from Piaget's fixed order, Ausubel, like Lewis and Vygotsky, sees the child as a product of learning experiences such that the child shows varying levels of knowing, awareness and skills depending on the experience. The process of learning, Ausubel contends, is fundamentally the same for adults and children, the differences are in degree, not kind.

> Similarly, the evidence points unmistakenly to the conclusion that the same kinds of thought processes, logical operations, and problem solving techniques are employed at all age levels, differing principally in degree or complexity (p. 568).

One of the principle means of advancing stages, of interacting with the environment for cognitive development, is social interaction. Although social interaction is inherent in Piaget's theory, as Herber (1977) points out, Piaget deemphasizes its role in development (p. 85). Lewis (1963) also refers to the discrepancy,

> Piaget indeed strongly emphasizes the modes of child's thought, without however discussing the possibilities of deliberate education as a means of promoting cognitive development (p. 178).

Both Isaacs (1966; 1973) and Tough (1973) in their studies of young children claim children do reason and not only in the form of perceptual judgment and practical manipulation. Although examples of Piaget's egocentrism were present, so too were many instances of directed talk, social, shared activity, discussion, argument and questioning.

Lundsteen (1976) suggests that the discrepancy between Piaget's cognitive theory and the findings of those theorists might have to do with the nature of the problem solving situations the children are in when tested.

> Children are testing such ideas (comprehending, hypothesis) long before the ages suggested for Piaget's stages of concrete and formal operations. This kind of hypothetical thinking may begin quite early, especially in regard to behavior with people--social behavior. Problem solving development related to human relations or "people problems" may have a different developmental schedule than does Piaget's logical-mathematical problem solving (p. 65).

Perhaps Tough (1976) would suggest "people problems" are more motivational, the essential factor for language use and hence, development (p. 14). Perhaps Vygotsky would suggest educators such as Issacs and Tough were

using a different method, an instructional rather than clinical method of observation.

The tentativeness of Lundsteen reflected in the above quotation is indicative of the trepidation in the literature when focusing on how a child learns and the role instruction plays. Nevertheless, from the many, varied and often dissonant theories of child development an image of the elementary child emerges. Its description is a picture in motion. As well as language, the cognitive and social development of the child are in transition; moving from the idiosyncrasies of childhood toward adolescence; moving toward the more sociocentric, explicit and logical state of adulthood.

THE ELEMENTARY SCHOOL CHILD

In summary, there are three main aspects of development discerned from the theories of development and instruction: socialization, cognition and language. Their description helps illuminate where a child begins or comes from in approaching discussion in the elementary school. The purpose of the summary is to briefly sketch the upper and lower threshholds of child development during this period to seek what skills and abilities elementary school children (7-11) are moving toward.

Social Development

The main trend or growth pattern in the social development of the elementary school child is his declining egocentricity. The move from egocentrism toward socialization is reflected in the child's ability to differentiate himself from others and to subsequently engage in cooperative, reciprocal ventures. Peers become more significant and

the emergence of peer groups reveals a decline in the child's consciousness of adult authority for the mutual and reciprocal sanctions of the peer group. The differentiation of self and others is accompanied by the need of verification, the desire to prove statements and the beginning of logical reasoning.

Cognitive Development

The child's emerging autonomous and reciprocal self has direct influence on his cognitive development. The realization that his own point of view is not global, is not shared coupled with his strong need to be one of a group, to assert his individuality in relationships with others, provides the motivation for verification. The requisite skills and abilities for moving toward logical reasoning are present though undeveloped. Organized experience, instructional methods and language learning appear to accelerate, expand and elaborate the child's cognitive development. An accumulation of experience moves the child from a concrete immobility of thinking toward a flexibility in time and space, the ability of abstract thinking.

Language Development

In his social use of language the child is becoming more explicit as he recognizes the need to use language for increasingly differentiated uses; in expressing a variety of feelings and ideas; in communicating to a widening audience, in a multitude of contexts. "Cooperation and competition are now expressed by symbolic patterns of behavior, in which the verbal ritual is again the most important element (Lewis, 1963, p. 212)." As an instrument of thought his language is developing more complex

structures and an extension and precision of vocabulary as he seeks to make his thinking more explicit. Language does not develop in isolation, its progress is intimately interwoven with social and cognitive development. Language moves the child from implicit to explicit awareness; a cognitive awareness of emerging structures and a social awareness of self and others.

CONCLUSION

In summary, the main principles of child growth, reviewed in this chapter, are reflected in three continuums of development: (1) for cognition, a movement from concrete to abstract thinking, (2) for socialization, a movement from an egocentric to sociocentric point of view and (3) for language, a movement from implicit to explicit awareness. These continuums suggest a distinct instructional strategy. They are the aspects through which discussion, its nature and value as a teaching and learning method at the elementary school level will be examined.

CHAPTER III

DISCUSSION: SOCIABILITY, COGNITION AND LANGUAGE

INTRODUCTION

The structuring of discussion for the elementary years need not be elusive nor arbitrary. A solid foundation for the emerging structure can be provided by employing the three aspects or functions of child development isolated in Chapter II.

Sociability, cognition and language combine to structure discussion. Each function will be examined separately to establish (1) its ties with the program of studies (i.e., general aims or objectives), (2) how discussion incorporates these objectives (i.e., what structural component of discussion has a direct relationship with the objective), and (3) the skills and abilities related to each function taken at their concrete, observable level. Discussion is thus separated into its composite parts to better understand the whole. However, it is in the final restructuring of the interrelationships of sociability, language and thinking that discussion, its nature and value, is revealed. A final section suggests sustenance for the framework. Moral questions are offered as a motivational, compatible and significant content for a model of discussion.

SOCIAL FUNCTION OF DISCUSSION

General Objective

Essential to any program of studies is the underlying assumption that education "provide opportunities for students to meet individual and societal needs (Alberta Program of Studies, 1975)." Thorn, (1974) states that the common objective for language arts in all schools includes the responsibility to "develop in each individual the capacity to function to the best of his or her ability in the various situations in which each must perform and awaken in each individual a better understanding of self and others (p. 47)."

Autonomy and reciprocity. Piaget (1932) claims that until he understands self as distinguished from others, when he is liberated from the thought and will of others, the individual cannot become autonomous, master of self (p. 87). As the world view of the young child is egocentrically global and his actions are controlled by adult authority, autonomy for the child comes only with the decline of egocentricism (reciprocally, with the increase of sociability) and a replacement of external, adult authority with collective peer agreement. The psychological principle of autonomy is represented by the movement away from egocentricism toward sociocentrism. "In short, the claim is not too bold that we become conscious of ourselves to the extent that we are adapted to other people (Piaget, 1964, p. 210)."

Social development then, has two different but mutually necessary objectives: autonomy and reciprocity. Autonomy is the ability of an individual to govern himself with his own reason. Reciprocity is the

ability of an individual to interact with others, both socially and intellectually, with mutual respect. Whereas autonomy leads the child toward independence, reciprocity, Piaget (1932) claims, leads the child toward universality and generosity towards others (p. 63). It appears to be the balance of the two that leads the child toward relationships of equals based on mutual respect. Autonomy without reciprocity leads to the egocentric, egotistic man. The man Tolstoy so aptly describes as unable to grasp another's thought and very partial to his own (Vygotsky, 1962, p. 142). This road to knowledge is long, arduous and lonely. Reciprocity without autonomy leads to the dependent man always seeking the reactions and support of others. His relationships cannot be relationships of equals based on mutual respect because of his own insecurity.

It is argued in this chapter that discussion facilitates the development of individual autonomy within a socially dynamic context, fostering the development of reciprocal interrelationships.

Discussion as Interaction

Discussion is "a collection of interacting persons with some degree of reciprocal influence over one another (Schmuck and Schmuck, 1975, p. 6)." Interaction, discussion's most readily observable quality, is the primary factor which distinguishes discussion from other modes of expression (e.g., monologue, storytelling or lecturing). Although monologues or storytelling do require an audience, the audience is receptive only, listening to ideas expressed by and contained in one person. It is interaction, the dialectical context of discussion that fosters social development. Discussion, unlike other oral modes, has a dual nature: each participant in discussion is both expresser and receiver; both autonomous and reciprocal.

In its simplest form a discussion is a dialogue. Reigel (1976) states,

> A dialogue has temporal structure. The speakers alternate in their presentations, and each successive statement has to reflect at least the one immediately preceding it. Incorporating only the preceding statement represents, of course, a minimum requirement for dialogue . . . . Each utterance must be consistent with the proponent's own views and must represent equally consistent or systematically modified reactions to all statements made by the opponent. Moreover, each utterance should reflect basic issues of the topic or theme which are presupposed but not necessarily openly expressed in dialogue (p. 691).

Reigel is offering three main conditions for delineating the interaction necessary for dialogue or discussion. The interaction of discussion occurs when at least three conditions are met: (1) alternation of speakers, (2) the restriction of an implicit or specified theme, and (3) an accumulation of statements for the building up of a central idea. According to Reigel, interaction occurs when there are at least two people alternating their statements for a logically consistent and mutually responsible building of an idea with a specified theme to restrict the context. The theme, a single idea or group of related ideas, helps insure that the participants do not go off on tangents or flit from topic to topic. A specified theme restricts what is relevant in terms of facts, experiences, reasons, analogies, examples or interpretations. In order to facilitate the vertical movement of a discussion, the horizontal movement is restricted, that is, a theme restricts quantity or breadth of ideas for quality or depth of an idea.

Alternation and a spectified theme alone do not constitute discussion. Together with the crucial condition, the building of an idea, they can however provide the context for the development of a child's autonomous reasoning in relation to others. This third condition,

the building of an idea, is defined in terms of two subconditions: (1) that the speakers maintain a consistency in their own line of thought whilst responding to the previous statements of others (which paradigmatically includes a systematically modified position in reaction to the other speaker's statements); and (2) that there is a tension between the participants characterized by partial and opposing points of view. Logical consistency, like the theme, restricts one aspect of discussion in order to facilitate another. Consistency restricts the breadth of the speaker's contribution (he cannot flit from position to position denying statements already made) in order to facilitate the logical pursuit of one position in depth. Partial and opposing points of view provide a motivation and purpose for the discussion. If there is prior total agreement on the question to be discussed the most that can happen in a discussion is a checklisting of reasons for the agreement. Partial and opposing points of view provide each participant with a motivation for verifying his position and a reason for pursuing the discussion toward a resolution. The building of an idea, the moving toward a resolution from different directions, expanding one's own thinking by interacting with another's thought is an illusive but crucial condition of discussion (Reigel, 1976).

For example, consider two or more people telling about their experiences in world travel. Alternation (taking turns) and a theme (world travel) are evident. The participants are taking cues from one another's preceding statement ("that reminds me . . ."). However, the only interaction of ideas is a brief and often obscure association. The exchange might be a pleasant conversation or storytelling but, as

Reigel (1976) would probably contend, it is not a discussion. If, however, our world travellers were engaged in resolving what the common experience in Tanzania is, discussion could occur. Clearly, in the first example there is alteration, a restricted theme and an albeit tentative involvement in one another's ideas; so too in the second example. What then differs? In the latter example, the experiences of each participant would likely differ; if the members are interested in pursuing the question their position is likely partially formulated, not sedimented; the partial and opposing points of view create a tension motivating resolution; experiences would not constitute the whole of the meaning of the exchange, rather, they become reasons supporting a given position. The participants are no longer passively listening, they are critically listening for meaning, for the validity of the argument, for the persuasiveness of the expression.

Discussion, then, is a dialectical interaction of subjects, each with their own wills, their own intents, moving towards a resolution of a question in the form of an argument. Alternation with dialectical interchange is not significantly different from Piaget's collective monologues. As Reigel (1976) claims, if the speakers do not respond to the prececing statements,

> The dialogue would degenerate into alternating monologues in which each speaker would merely follow up on his or her earlier statements without reacting to the other's elaboration. The other speaker's statements would appear as distractive interruptions (p. 692).

The significance of discussion as compared to other oral modes lies in what Schmuck and Schmuck (1975) refer to as the "reciprocal influence (p. 6)." Reigel (1976) presents a simple construct to clarify the nature of interaction in discussion (p. 692), as shown in Figure 3.1.

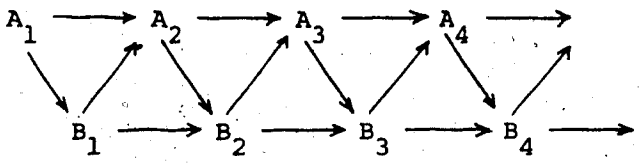


Figure 3.1

The Nature of Interaction

In the diagram the parallel arrows between the two speakers (A and B) depict the process of alternation. The interactive arrows depict the building of an idea, i.e., what is said by A, is taken into consideration by B before he replies. B_1's reply and therefore his own line of thought is a synthesis of his own ideas and the idea inherent in A_1's statement. In other words, the effect is accumulative.

An analogy can be drawn between the principle of interaction and bidding in the game of bridge. In bridge the cards are dealt and A looks at his hand, first only from his own point of view and makes an opening bid with one or two subsequent bids in mind. His partner, B, responds not only by what he has in his own hand but also, in part, in response to A's statement (A_1) or bid. A's second bid (A_2) therefore is necessarily from a new perspective. B's bid opened up some possibilities and closed off others. A does not deny or forget or leave aside his first bid, rather, keeping in mind his first bid and B's response, he makes a further bid on the information and understanding now gained.

Similarly, discussion forces the participants to first "read their own hand," to start from an autonomous position based on past experience

or knowledge and through reciprocal exchange build toward a resolution, a final bid, a jointly acceptable, mutually responsible position which maintains the integrity of each participant's contribution. It is a sympathetic contest of wills, intentions, and reasoning in which each speaker attempts to retain his own autonomy while at the same time modifying his own position through an interaction with others.

However, although Reigel's conditions are central there appears to be a further condition of interaction. Before two or more speakers can communicate there must be a minimal shared language. If only English is spoken by one person and only French by another they cannot engage in discussion. Similarity, a fundamentalist and radical antithesist although both speaking English would have little or no shared vocabulary and understanding. Their experiences, their language meanings, their world views would be so disparate that even if a discussion started it would likely collapse. As Vygotsky stated (1962), "It is not only the deaf who cannot understand one another but any two people who give different meaning to the same word or who hold divergent views (p. 141)." The way language is used, the meanings given words need to be compatible if discussion is to occur.

It is the interaction of discussion that allows for the objectives of autonomy and reciprocity. The structure, the conditions of discussion force the participants to first formulate their own position and maintain a logically consistent pattern of thought while engaging (modifying, amending, restructuring) in a reciprocal exchange.

Skills and Abilities

The structuring conditions of interaction: alternation, a restricted theme, the building of an idea, and shared language meaning are not only the distinguishing characteristics of discussion. They are also the conditions of discussion which may allow for the social development of the participants. Therefore, the next question to be asked is what social skills and abilities implied by interaction are evident in children discussing at the elementary level?

An informal field study, a preliminary investigation of children in the context of discussion, was undertaken to ascertain what behaviors are evident when children are confronted with a problem to be solved by a group. The study focused on examining the conditions for discussion and isolating some of the skills and abilities characteristic of each. The following excerpts from the language samples obtained in the field study are meant to illustrate the existence and character of the interaction of elementary school children in the discussion setting.

The sample in the field study consisted of a group of five boys, friends ranging in age from 8-11. The boys were presented with an evaluative question and asked to come to a group decision as to the best solution. Although there was guidance through the first stages of critical thinking (i.e., the investigator raised questions about the nature of the problem, what possible answers could be considered, why they thought the answer they had was best and the consequences of each answer given), for the final part of the discussion the boys were left on their own trying to solve the problem by way of a group decision.

The evaluative question referred to in the following excerpts

from one of the discussions posed this dilemma for the boys:

> Rule #1 was "be on time". Coach Jones was waiting, <u>again</u>, for Tom, the number 1 goalie. The rest of the team was on the ice waiting nervously. This was the playoff game. Just as the game was about to begin in dashed Tom. What should Coach Jones do?

The boys were not experienced in this kind of a discussion, the language samples therefore were not prolific, however, each of the conditions were demonstrated to a greater or lesser degree even in the one discussion.

<u>Alternation</u>. The following excerpts are taken from the latter part of the discussion when the boys were left on their own. During the first part of the discussion alternation was often elicited by the investigator through questioning.

When left on their own, although they did take turns, the alternation by the boys was at first abrupt, inconsistent, and impatient. The boys frequently interrupted one another and showed partiality to their own views before considering the other's points of view. As illustrated in the following excerpt from the discussion:

Example:

Rob: I think that's a little drastic.

Calvin: Well, he'd let him off the hook but he's, you know--

Scott: That's what we said.

Rob: Talk to him after the game and said well if you get late anymore, you know, you're not going to play a couple of games.

Scott: Ya.

Aaron: I think that's drastic--

Scott: No, listen--

Aaron: Maybe he had tons of homework.

However, as the discussion slowed down and a compromise was imminent, alternation and the skills associated with it became more apparent. Utterances became longer; thoughts were completed without interruption; the boys listened more carefully and began to structure a compromise from the ideas of one another as revealed in the next example,

Example:

Scott: Well, like maybe, if he was late for part of the game-- oh ya, he's a goalie. I was going to say if he was a player, then have him sit off for part of the game.

Calvin: Oh, I know. Like, you see, umm, he just/he just/every game he's late for he misses.

Scott: Ya. Ya. Yah! That's a good idea.

David: No. Whenever he misses/is late for the next game the coach should double the amount of time he sits off.

Group: Ya. Ya!

Scott: So he misses one game um then he sits off maybe 5 minutes the next/if he misses again he sits off for 10 minutes.

This example illustrates the existence of alternation and suggests the importance of attending to its character. Taking turns involved more than insuring everyone had their say. The building of an idea (suggested by the final compromise in this discussion) required alternation in order that the participants could build on one another's ideas. This would likely not occur, however, without the existence of skills such as critical listening, patience to hear ideas through, taking turns and remembering one's own ideas while critically listening to others.

A restricted theme. As shown in the two examples above the boys were able to enforce the condition of a restricted theme. That is, the boys' statements were relevant, they attempted to pursue the question at

hand. There was only one instance in which the discussion digressed or floundered off on a dubious tangent. This excerpt is recorded below not only as an example of how a lack of a restricted theme diverts the discussion and scatters it into all directions, but also as an example of how inadequate questions by the leader can derail a train of thought. The investigator was attempting to help the children examine the consequences of their various positions.

Example:

Investigator: Alright, what would <u>happen</u> if we let Tom get away this time? What if next time he came the same thing happened?

Calvin: But this is the Championship game so there won't be no games.

Investigator: What about next year?

Calvin: He probably won't be on Coach Jones' team again because, well, like he's in a different league (giggling).

A subsequent refocusing question posed by the investigator enabled the boys to return to a more relevant argument. As illustrated, irrelevant tangents can, however, change the focus and cause the discussion to flounder or digress.

<u>The building of an idea</u>. The third and crucial condition for discussion is the most illusive. Because the building of an idea is not a single condition nor requires a single skill, it was difficult to find a single illustrative example. However, the following excerpts illustrate some of the main skills for this condition, particularly those of autonomy and reciprocity. To discuss, a participant starts from an autonomous position at the same time consistently amending his position in reaction to the statements of other members.

Autonomy, characterized by the ability to think for oneself, was demonstrated by Calvin and Scott in their opening, opposing viewpoints. Although Aaron first articulated the idea that Tom was not necessarily at fault for being late (there could have been extenuating circumstances), Calvin was in agreement and early in the discussion adopted this position to become the main spokesman for it.

Example:

Calvin: I think he should just tell him to go on the ice, to hurry up and get in goalie.

Investigator: Why?

Calvin: Because it wasn't his fault he was late and--

Investigator: Do we know that?

Calvin: No, but I think so.

Scott, on the other hand, was not going to let Tom off so easily. He seemed to view the problem from the beginning, as a question of punishment. For example, he said,

> The problem is what you should do with this guy that was late because he was supposed to be on time and he wasn't on time so you gotta figure out something to do with this guy.

In opposition to Calvin's description, Scott painted a very different picture of Tom when he said,

> Ok. Well, let's say Tom, he was just kinda lazy and he was just reading a book at home and really couldn't care less. Maybe if the coach could have told him that if he didn't get to the next game maybe he should just umm kick Tom off the team. If he was going to be slow.

Although the boys started from partial and opposing viewpoints, illustrating the ability to think for themselves and argue for it, reciprocity, the reciprocal influence on one another, was also evidenced. The boys did not remain with their original viewpoints; instead, they moved toward

a compromise, a mutually arrived at position they all could accept. Skills such as sympathy, empathy, interpreting, were needed for the opposing positions to interact. In the following example, Robert stepped in to interpret, mediate and further explain Calvin's position.

Example:

Investigator: Do you think that's a good idea?

Scott: Not really.

Calvin: Yes.

Investigator: Why?

Robert: To give the guy a chance?

Calvin: Ya.

The boys aligned themselves with one or the other position early in the discussion. They showed support for and elaborated on Calvin's and Scott's articulated positions. For example, in the following excerpt Cavid is agreeing with and supporting Scott's position; Robert is aligning with Calvin; and Aaron is elaborating Calvin's argument.

Example:

David: The coach should kick him off the team.

Calvin: No.

Robert: Just because he missed two games isn't fair.

Aaron: Maybe he had something to do before the game. Maybe he had some homework to finish.

The preceding examples do not include all the various skills involved in the building of an idea. The ability to compromise demonstrated by the boys pointed to further skills, skills such as welcoming differences, the ability to change point of view if a better one or one held by the majority is put forth, and patience in the face of

frustration. Although no official means of recording nonverbal behavior was used in the field study and many of these skills were indicated by behavior and attitude, the fact that the boys were able to reach a compromise without losing self control, coercion, intimidation, or manipulation suggests that these skills were operant.

From observations made, albeit informally, what seemed to prevail in all the discussions by the boys was the sincerity of statements espoused coupled with an openness to new or different ideas. The evidence of these attitudes in these five elementary school age boys suggests the time is ripe to pursue the social function encompassed in discussion.

Conclusion

Figure 3.2 provides an overview of the social function of discussion. The social development of the young child constitutes progression from an egocentric to a sociocentric point of view. In order for the child to develop socially he first has to distinguish himself from others and liberate himself from imposed adult authority. In doing so this child in relationships with others, particularly peers, begins to realize that his own egocentric point of view is not everyman's. Two significant changes occur: adult authority is replaced by collective peer agreement and the child begins to recognize other points of view and to defend his own. This social development encompasses mutually necessary objectives: autonomy and reciprocity. The child's egocentric world view is being replaced by the creation of a new set of relationships. Sociocentrism allows for both autonomous development (moving toward a state of governing himself with his own reason) and reciprocal development (moving toward better relationships with others). The egocentric to sociocentric continuum

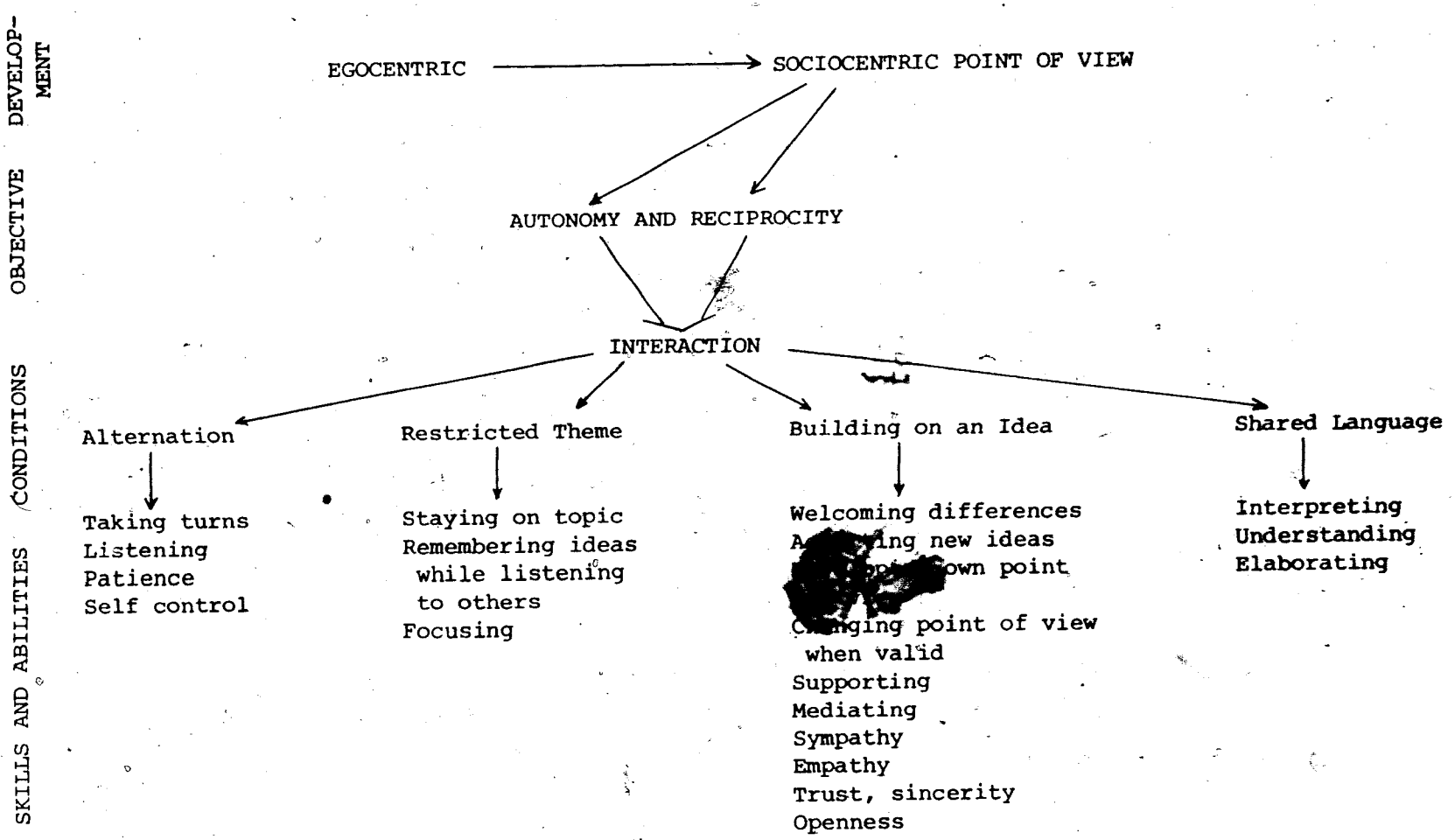


Figure 3.2

The Social Function of Discussion

does not stop when the very young child begins to interact with others. This is the beginning not the end of social development. Discussion sets the stage for sociability; it provides a complex context in which the child is simultaneously involved in maintaining his own autonomous will while interacting with others.

Finally, interaction is seen as a composite, structural component of discussion, composed of varied and disparate skills and abilities, each contributing to the quality of interaction.

INTELLECTUAL FUNCTION OF DISCUSSION

General Objective

A central concern in the Alberta program of studies (1975), representative of most progressive school systems, is the provision of educational opportunities for developing critical, objective and logical thinking skills. "Learn how to organize, analyze and use information in a critical and objective manner . . . . Develop skills of thinking and proceeding logically (p. 2)." Thus, the intellectual or cognitive objective of discussion is to help students develop skill in critical thinking; to provide an external model for problem solving that can be internalized for the inner, individual thought process.

The ability of critical thinking in a social context is not solely the domain of the impending adult. Children too have problems. During the elementary school years the child's dependency on adult autonomy is being replaced by collective, peer agreement. Individually or in a group, children may be faced with problems without the essential intellectual and social skills to cope.

In the previous section it was illustrated that a small group provides the context for interaction, it provides the environment where cooperation may be learned more readily than if left to chance or the playground. Cooperation, based on mutual respect, is a necessary requisite for autonomy, Piaget says (1932). But thus far only the social implications have been discussed. What about intellectual autonomy? How can we help children learn "to govern themselves with reason?" What more can we do than set the stage for sociability?

The Evaluative Question

To the conditions for discussion established in the previous section (alternation, restrictive theme, building of an idea and shared language meaning), one further condition needs to be built into the model to allow for the main cognitive objective--critical thinking. This fifth condition for effective discussion is the presence of the evaluative question.

Examination of Bloom's taxonomy of behavioral objectives (1956) reveals that reasoning is placed high on the ladder of abstraction. Evaluation, Bloom contends, is the highest level of the cognitive hierarchy because it contains all other levels of thinking as well as conscious value judgments. A question is the motivating force initiating and sustaining the thinking process, it is the initial doubt or problem that seeks resolution.

> Not every question presents a problem, but some do . . . . If the question presents a live issue and cannot be answered automatically, then it gives rise to a problem. The asking of such questions is one of the chief sources of critical thinking (Organ, 1965, p. 8).

Thus, an evaluative question edges the critical thinking process toward higher levels of thinking.

For example, consider the evaluative question, "Should Edmonton host the Commonwealth Games?" It is a question that requires critical thinking. There is no immediate, "correct" answer, the participants must consider and argue the pros and cons, the reasons presented, the consequences and implicit judgments entailed in the choice of reasons in order to resolve the question. Choosing requires evaluation and justification, what is best and why. Compare this question to a non-evaluative question such as, "Why does the earth revolve around the sun?" The response to this question is an explanation of known facts and therefore will most likely remain at the level of explanation. Participants involved in giving an explanation may describe, share information, quote sources, relate details, accumulate facts for a complete explanation and construct a sequence but there is nothing in the nature of the question to encourage higher levels of thought. Evaluation and justification are thus requisites of discussion if discussion is to develop critical thinking abilities.

Critical Thinking

The evaluative question sets the stage for critical thinking. However, merely asking an evaluative question, although it allows for critical (evaluative) thinking, does not necessarily foster it. For children to learn to discuss, they need to discuss, hence the need for the interactive context and evaluative question. However, it cannot be assumed children know how to discuss. In order to play a game, the participant has to know the rules, in part, the rules define the game. Discussion for critical thinking can be viewed as a game in which the rules have to be made public and be understood before the game is fully

played. Knowing the rules does not necessarily tell anything about how well the players will play the game. However it does insure that that is the game being played.

The rules of discussion are its conditions: alternation, a restricted theme, the building of an idea, a shared language meaning and the presence of an evaluative question. These conditions for discussion delineate its boundaries; define what is and what is not discussion. There are, however, various kinds of discussion each serving different ends. (E.g., Lundsteen (1976) describes [illegible] socratic, task, brainstorming, p. 169. Gall and Gall (1976) illustrate subject mastery, issue oriented and problem solving discussions.) This section examines the character of a discussion structured to promote critical thinking.

Critical thinking is a well defined process or activity. Shurter and Pierce (1966) state that critical thinking is "a persistent, [illegible]ed inquiry into the grounds for belief or action (p. 23)." Organ [illegible]65) states, it is the use of intelligence in making decisions, used to [illegible]mprove the ability of problem solving (p. xii). A synthesis of the critical thinking process described by Shurter and Pierce (1966), Organ (1965), Ennis (1969), Glaser (1941), Russell (1956), Thomson (1959) recognizes five essential steps or stages: (1) understanding the problem, (2) formulating alternatives--making a statement; stating own position, (3) supporting an alternative--giving reasons for statement, (4) evaluating alternatives--evaluating reasons, appraising arguments, examining consequences, and (5) making a judgment--choosing.

Understanding the problem. The first stage of critical thinking is primarily a focusing task. It requires stating, defining the problem and giving the relevant facts and details already known. In an elementary school program in which problem solving discussions are being introduced the question will most often originate from the teacher. Therefore, this first stage for the student is the task of fully understanding the problem. In the field studies this investigator undertook, it was found that when children with little experience in discussion are left to themselves to solve a problem this stage was invariably overlooked. Presumably, the children assumed they understood the problem. However, when queried at this stage, it was found they had difficulties focusing on all the relevant details. The boys' opening statements to problem #4, Promise keeping, jump directly into alternatives. For example, Scott said, "I think that he should ask one of the other guys to build it . . . ." There is no mention of the problem itself, what they were trying to find out or solve, or the facts already known. This stage almost appears redundant to children but their grasp of the problem greatly influences the quality, depth and level of complexity of the subsequent discussion. Lundsteen (1967), Moffett (1968) and Taba (1967) suggest the teacher, acting as a guide, can help the children by asking questions. For the first stage of critical thinking questions such as, What is the problem?; Who can put the problem in their own words?; What do we know about this problem already?; What facts do we have to work with? would help focus the child on the question.

Formulating alternatives. At this stage, the primary task for each member is an imaginative or inventive task. It requires inventing

solutions or positions or statements. In relation to others, it also requires each member to make sure he understands the other's alternatives. The dual task then is (for self) invention and (for others) clarification; making one self understood and understanding the statements of others.

Russell (1956) states that children often fail to solve problems because they lack the imagination to posit alternatives. A number of techniques can alleviate this problem. Lundsteen (1976) suggests the teacher give not only the problem but also some alternatives so the children have models to work from; ideas to spark others. A large group discussion following the small group would also provide models, not only teacher originated but peer originated, that would broaden the children's repetoire.

Clarification questions can help insure everyone is starting with the same understanding of the alternatives and alleviates ambiguity and misunderstanding; questions such as, Could you tell us a little more?; Would you put that in other words?; What do you mean? (Lundsteen, 1976, Taba 1967).

Supporting an alternative. Piaget (1964) claims that children most often fail to justify or support their statements because their egocentricity prevents the desire for objective proof (p. 24). Put simply, although valid reasons are often implicit in the child's speech he sees no need to make them explicit. In a discussion situation, however, the "pyschological movitation" for verification is high. Supporting an alternative means giving proof in the form of reasons. In a discussion these are best drawn out with the direct questions, Why?; What are your reasons? Ennis (1969) categorizes three kinds of reasons: reasons based on authority, observation statements and

assumptions (p.384). Each, he says, is fraught with difficulties and pitfalls. Empirical statements can best be supported by observation and authority. However, value statements receive little support from either or these first two kinds of reasons. Ennis uses assumptions (as reasons) as starting points in a line of reasoning.

Rather than attempt to state what constitutes relevant reasons in an argument, theorists (Glaser, 1941; Ennis, 1969; Dworkin, 1968, Shaffer, 1965) prefer to state which are irrelevant; which "reasons" are erroneous, fallacious and should be discarded. Reasons, they claim, are not: rationalizations, emotional statements, personal wants or preferences, mimicked statements of others or irrelevant statements. Once these are discarded, presumably the reasons left are those that need to be seriously considered, particularly in light of their consequences.

For example, in the consideration of "should Edmonton host the Commonwealth Games" reasons such as "I'll be too tired," "Who needs it?" "I want it to be here," "My brother says it would be neat" or "the Queen has blue eyes" should be all discarded as unacceptable. Reasons, however, such as "Yes, Edmonton will benefit from having the games because lots of tourists will come to the city" or "No, the taxpayers will end up paying for it" are valid and relevant. The choice involves choosing the best answer, given all the circumstances and in light of the consequences.

Evaluating alternatives. Evaluating alternatives involves making the best decision on a valid, relevant set of criteria. The existence of the critical stages will not automatically mean children will come up with all the "right" answers. Children are restricted in their critical abilities by both their experience and their social and intellectual

developmental stage. Certainly the child's ability to evaluate, compare and contrast reasons will be based on a very elementary set of criteria. His experience is limited, his background, his home and earlier school models will have their effect. On what can we focus their learning in order to evaluate alternatives and reasons? Fraenkel (1977) states that a focus on consequences must be the starting point for evaluative discussions. The children, then, are not only examining the problem, formulating alternatives, supporting it with reasons, they are also facing the consequences of what would happen, and are initiated into the responsibility of actions and the desire for worthy principles that are universalized. Directive aids at this stage might include: What might happen?; Which alternative is better?; Why?

Making a judgment. This takes us to the final stage--choosing. The essential difference between value statements and empirical statements is that the former are based largely on justification. This makes the issue very difficult. The critical stages can help this final process, steering it away from sheer opinion and securing the responsibility of the participants. But in the end,

> Given the limitations within which we have been working, a value judgement is more likely to be justified to the extent that it is in accord with worthy principles and is based upon a careful consideration of the consequences. Each person must make his own judgements, drawing upon his own experience and that of his culture, but must bear the responsibility for what he decides (Ennis, 1969, p. 421). (Investigator's emphasis.)

Skills and Abilities

In the field studies undertaken a number of stages and their composite skills and abilities were identified. For example, the following excerpts are from the fourth discussion by the boys which they undertook without the guidance of the investigator. The problem or dilemma was posed and the only directive given them was to come to a group decision as to the best solution. This was the problem posed:

> You have promised your Mom you will clean your room after school. During school your teacher asks for volunteers to construct a six foot rocket for the school play. You offer and are chosen. After school you suddenly remember your first promise. What should you do?

Understanding the problem. Although the boys focused on the problem when guided by questioning, there was no evidence at the beginning of this discussion of stage one. However, when the discussion digressed because of an attempt at rationalization (David: he didn't promise his Mother to clean it right after school) Scott, who assumed the role of leader, referred to the problem: "Alright, let's see what it says here. . . ."

Formulating alternatives. A number of alternatives were given and the boys attempted to understand one another's alternatives. It can be seen that Scott's position is opposed by Calvin. Calvin's position is then reiterated by Robert, modified by his own thinking and experience.

Example:

Scott: I think that he should ask one of the other guys that wanted to build it and just tell the teacher or whoever/wanted to/was going to supervise the building of the rocket tah just get another guy to take his place and get that guy to tell the teacher and he go home and clean his room.

Calvin: But I think he should do the stuff and then he should go home and say he was sorry that he did that 'cause he accidently forgot and volunteered for/to doing the rocket and he would do it after supper.

Rob: Well, he should do what he was suppose to, not clean his room--he should do the rocket and then go home and maybe he was going to play with his friend and just say oh I'm sorry you know I have to clean my bedroom.

Calvin: That's like I said.

Supporting and evaluating alternatives. Calvin, supported by Robert, gave reasons motivated partly by self interest, partly by what happened to be an awareness of the teacher's expectations. Scott, on the other hand, saw the principle of promise keeping, though not as attractive as self interest, nevertheless the right principle from which to derive his position. In the following quote Robert is particularly concerned about the consequences of action based on the principle of promise keeping versus self interest.

Example:

Scott: OK. But just wait. How many of you think that he should come/he should build the rocket first? OK. Hold it. (3 to 2) Why do you guys think he should build the rocket first?

Calvin: It's the only fair way because he would disappoint his teacher and his teacher likes him.

Scott: No, because there were alot of other people building the rocket. OK. Lookit. OK. Lookit. He made a promise to his Mom FIRST before he promised to build the rocket.

Calvin: Carry out his first promise--

Scott: Carry out his first promise and then come back and see if they need any more help.

Robert: No, but he would loose his job.

Scott: So what? They'll be lots of others guys building it.

Robert: But then he couldn't go back and help building it.

Choice. The compromise was part wants, part promise keeping:

Example:

Calvin: I would umm build the rocket for about 1/2 hour and say I had to go home and I would do my thing and that way you could do both.

Robert: Ya, that's what I would do.

David: I would do that.

Scott: OK. You'd build part of the rocket and then you would go home and clean your room.

Calvin: Ya. At least you participated.

Scott: Ya. OK.

The compromise suggests that the children were not aware of one of the higher level aspects of critical thinking--consistency. Nevertheless, the consensus arrived at illustrates that the children understood that alternatives required support (in the form of reasons) and that the process of choosing a final position entailed the evaluation of these alternatives.

Conclusion

Critical thinking is a skill that can be initiated in the elementary years but one which develops throughout a life time. Although children's developmental stage restricts the alternatives given, the reasons, evaluation and thus, often their choice, children are being initiated into a critical attitude, the realm of reason. They cannot

argue, at this stage, that the argument is invalid because of an error in the structure of a syllogism. They appear, however, to have the means of reasoning through a problem by examining the consequences of actions.

The advantages of situating critical thinking in a structured discussion group are twofold: first, the group experience allows for the kind of intellectual exchange in which ideas are picked up from one another, built upon, elaborated, amended (Moffett, 1968). Thus the problem is more widely defined, more alternatives espoused. If the context includes group consensus, more and better reasons will be needed to persuade the group. Instead of merely stating their opinion, students will need better evaluative and persuasive tools. The model, then, is more elaborate, richer. Secondly, this external model for critical thinking is likely to be internalized for individual use. An early study by Parker (1924) supported by many studies since, suggests that when a technique of critical thinking is taught, pupils try more varied methods of attack, reject erroneous suggestions more readily and maintain suspended judgment until the method has shown to be correct. Furthermore, the training in these methods and attitudes tend to carry over to other problem situations. The child learns to use the same multialternatives and differing viewpoints in his own individual thinking process; to think alone with more reflection, imagination and wit (Moffett, 1968, p. 32).

Figure 3.3 summarizes the intellectual function of discussion, that is, the critical thinking stages, their definitions, the tasks demanded of the learner and the means (questions) the teacher has of initiating and guiding the learner's development.

STAGES	DEFINITIONS	TASKS	QUESTIONING TECHNIQUE
UNDERSTANDING THE PROBLEM	Stating the problem	focusing defining selecting relevant facts and details	What is the problem? Put it in your own words What do we already know that will help us? What facts do we have to work with?
FORMULATING ALTERNATIVES	Making a statement Stating own position	invention clarification	What do you think? Who has another (different) idea? What else could (he) do? What do you mean? Could you tell us a little more? Would you put that in other words?
SUPPORTING AN ALTERNATIVE	Giving reasons	giving relevant reasons	Why? What are your reasons?
EVALUATING ALTERNATIVES	Evaluating reasons Appraising arguments	examining reasons comparing and contrasting discarding non reasons examining consequences	What is that a good reason? What will happen if (he) does that? Could you do that? How does that relate to the question --why does that matter? Which alternative do you think is better--why?
MAKING A JUDGMENT	Choosing based on worthy principles and a set of relevant criteria	choosing understanding why and how you chose	What have you decided? Why?

Figure 3.3

The Intellectual Function of Discussion

LANGUAGE FUNCTION OF DISCUSSION

General Objective

The general aim of language study is to develop communication skills, for understanding others and being understood (Program of Studies, Alberta, 1975).

The main objective, therefore, for the Alberta language arts program is to develop fluent, flexible users of language. Sapir (1962) tells us "language is a purely human, non-instinctive method of communicating ideas, notions, desires by means of a system of voluntarily produced sounds (p. 5)." Historically language programs sought to make explicit this sound system as a method of learning language. The understanding of how language is acquired has influenced language programs as educators turned their attention away from what language is towards how language develops. What language development research (Cazden, 1972; Britton, 1970; Wilkenson, 1971) has told educators is that one cannot map a given, static, "correct" language on children. Rather, instruction must start with what the child brings and develop degrees of abstraction, complexity, appropriateness, and precision. As the child becomes increasingly fluent with his language, when structure and meaning are implicitly used, intuitively understood, then "grammar" can be taught, the rules of language made explicit.

Language curriculums are invariably designed around four main modes of discourse: listening, speaking, reading and writing. Or, more abstractly, a first person, a second person, and a third person: a speaker, listener and subject (Moffett, 1968, p. 10).

> What creates different kinds of discourse are shifts in the relations among persons--increasing rhetorical distance between speaker and listener, and increasing abstractive altitude between the raw matter of some subject and the speaker's symbolization of it (Moffett, 1968, p. 11).

Discussion is restricted to the oral mode, the rhetorical distance is immediate. The subject matter, however, runs the full abstractive continuum. It is therefore a most flexible, method for the second stage (conversation) of Moffett's rhetorical distance continuum; (reflection--conversation--correspondence--publication).

Situated in the language curriculum how can discussion help develop fluent, flexible users of language?

Language as a Structural Component of Discussion

Isolating language from cognition or its social context is not a straightforward task. Language by its very nature involves a relationship. Its purpose is relational not only in giving form to thought but also in expressing thought to others. Thus, language has been examined as the last of the three intersecting circles structuring discussion such that its description might reflect the overlapping aspects of thinking and interaction.

The language of discussion is oral, its rhetorical distance is immediate, its abstractive altitude, flexible. Language in a discussion is language in interaction. It is the interactive quality of language in discussion that differentiates discussion from other kinds of oral language and provides for its unique strengths.

Although language is also an indicator and medium for cognitive and social development, this section examines the role of language as a

means of developing individual language competency, of expanding language. Smith, Goodman and Meredith (1970) define the task of expansion as stretching the limits of children's language. The opportunity to use their own language in communication is intrinsic motivation to stretch their language limits.

Oral language can be separated into three dimensions that together allow for the communicative process: rhetorical features, linguistic structure and meaning. This section examines each of the dimensions, their composite skills and abilities and how discussion incorporates them.

Rhetorical features. Rhetorical features refer to the choices of appropriate language. In any language exchange a number of decisions are required. Appropriate choice of language means taking into account why you used a particular language for a certain person at this time, in these circumstances (Moffett, 1968, p. 243). Competency of rhetorical features requires a variety of expression, a knowledge of audiences, and a suitability to context.

Variety of expression can be viewed as types of language or uses of language. Many theorists have suggested models of language use (Hennings and Grant, 1973; Lundsteen, 1976; Halliday, 1973; Tough, 1974; Britton, 1971). For example, Hennings and Grant (1973) describe three major types of language: (1) functional language--language that identifies interrelationships existing in the world and language that projects original ideas that go beyond observable data; (2) personal language--the expression of personal feelings, preferences and beliefs; and (3) creative or inventive language--the fabrication of persons,

events and descriptions. Lundsteen (1976) outlines four types of language: (1) self expression--speech for self; (2) explosition--language used to get things done. (This aim of speech includes argumentative discussion, analytical processes, informational uses). (3) literature--imaginative use of language for poetry, writing and sharing; (4) persuasion--use of language to influence others (p. 111). As Lundsteen states, "these aims of discourse might be pictured as liquids poured carefully into a glass to form layers. The quick stir of the reality of discourse in action quickly mixes them (p. 112)." What, then, is the purpose of isolating language uses? Lundsteen contends that recognition of varying uses insures a balanced program. A model such as Halliday's (1973) that describes the breadth of functions or uses of language (instrumental, regulatory, interactional, personal, heuristic, imaginative and representational) tells us something quite different about language use than Joan Tough's (1974) model, for example, which attempts to determine the complexities of operations within a function. Thus, within each utterance Tough looks for functions such as the ideational (content), relational (maintenance of relationships), projective, directive and interpretive functions. Tough maintains, however, that two purposes are dominant. "It is clear that even within a single utterance at least two purposes are served, one is concerned with establishing and maintaining relationships and the other with the kind of content conveyed (p. 10)." The two purposes, social and cognitive, relational and ideational, are particularly dominant in oral, interactive contexts where the necessity of maintaining relationships is essential to intellectual exchange. For example, ideas cannot be shared if differences are not welcomed.

A discussion, because it is an immediate, interactive context incorporates the dual functions, the relational and ideational. It also spans the breadth of language uses such as those described by Halliday (1973). For example, in maintaining the relationships the participant might try to manpulate the environment ("Why don't you sit there" instrumental use) or regulate the behavior of others ("We're supposed to take turns" regulatory use). He is certain to use the interactional function as he uses language both as participant and observer at the same time. As discussed in the social function, the child is also learning autonomy, to govern himself, this might be reflected in his personal use of language that expresses his own individuality ("I don't think so, I think . . ."). Discussion also spans the many ideational uses: in formulating alternatives, imaginative use of language is called for; questioning requires the heuristic use, and of course, in the communication of ideas the representational use of language is employed.

Other kinds of oral language, such as storytelling and drama, are further removed from the audience. Thus usually fewer uses of language are being employed (the choice, the act of choosing appropriate language therefore is less complex). The maintenance of a relation becomes less important the further removed the audience is. Mastering this double edge sword (relational maintenance as well as ideational conveyance) in a highly volatile context requires an awareness of not only what you are saying but how you are saying it.

Although necessary, a repetoire of language uses is not sufficient for choosing appropriate language. Both the audience and

and the context affect language choice. Moffett (1965) claims that the persons to whom the discourse is directed (audience) and the context affects the choice of both thinking patterns and language patterns. He states,

> The fact that my account is . . . uttered to this person for this reason at this time and place and in these circumstances determines to an enormous degree not only the overall way in which I abstract certain features . . . but also much of the way I choose words, construct sentences and organize parts (p. 243).

Moffett deals with audience awareness in terms of rhetorical distance. He states that in discourse the further away the audience the more selective, composed and public the discourse; the slower the feedback; the less emphasis on the relational (I--You) and the more emphasis on the content (I--It) relation.

Discussion can run the full gamut of Moffett's rhetorical distance continuum. An interior dialogue, a conversation, a correspondence or a series of publications can be continuing discussion (i.e., dialogue between persons). However, discussion at the elementary level is situated in Moffett's "conversation" category. As such, it is a midpoint, a turning point in the I/You--I/It relationships. At this stage the audience is close but not self, the feedback is immediate, and both the relational and content functions are necessary. Children are dealing with the wills, the intents, the personalities and the ideas of others in the process of understanding and being understood.

Although, on the surface, in a structured discussion for critical thinking, the context seems relatively stable, choosing appropriate language for this person, at this time, in these circumstances has an added dimension. Children are not only choosing the appropriate language

for one person for one relatively isolated task. They cannot choose the most appropriate language, given the person, the time and circumstances and leave it at that. Discussion in which five different individuals with different personalities and different cognitive abilities come together provides for what can be a highly fluctuating, volatile context. It requires choosing the appropriate expression for different members; finding different ways and means of expressing a single idea to different members so that everyone understands; and knowing when to emphasize maintaining relationships and when to concentrate on ideas. It requires flexibility to change usage quickly given changing social and cognitive relationships.

For example, most children have little difficulty communicating with peers or with their mothers separately. But what stammering and stuttering overcome many children when faced with both at the same time! Is it only embarrassment or could it be lack of flexibility? While it may be reasonably easy to speak French when surrounded by the sounds, when immersed in the language, what happens if the person talking begins to skip back and forth in English and French? Speech requires fluency and flexibility to display that kind of familiarity of languages or language uses. The structure of group discussion provides for a complex set of relationships encouraging practice in many language uses, audience awareness and suitability to context.

Linguistic structure. By the time children are in elementary school the syntax of their language is fairly well developed (Wilkenson, 1971; Cazden, 1972). The child has already been using language for two or three years. He has a rapidly increasing basic stockpile of words and

primary relations, he is abstracting rules and generalizing them to new situations. The syntactical task of language instruction is basically one of expansion: to develop simple structures into complex ones. Smith, Goodman and Meredith (1970) state that one way language matures is in its increased use in complex structures. Cazden (1972) states that vocabulary development involves not only learning new words, but also the complex structural relationships of the new word to words already known. She contends,

> According to Noam Chomsky, each work in a person's lexicon or mental dictionary has a set of tags or syntactic features that govern the slots in the phrase structure in which a word can be placed and the words in other slots it can co-occur . . . . When a word enters a child's lexicon, it does not enter with a full set of syntactic features correctly attached. Vocabulary development in children involves both acquisition of new words and addition of new features (with their relative implications) to words already learned (p. 43).

The process involved in acquiring syntax is developmental. Brown and Bellugi (1966) isolate three processes in the acquisition of syntax: (1) Imitation: in the child's imitation of language they preserve word order. This suggests the child perceives the sentence as a total construction rather than a list of words. The young child reduces the imitation to a telegraphic utterance, retaining the heavily stressed content words, i.e., "Mommy socks"; (2) Expansion? When an adult expands a child's utterance he is putting back the structural words, teaching the grammatical patterns but in context, influencing the child's world view: (3) Inducing latent structure: Imitation and expansion are not sufficient processes to account for a child's acquisition of language (p.3-12). Children induce a latent structure from the language models they hear. They induce a productive rule, a generalization

they can use to construct utterances they have never heard. Understanding and recognizing latent structure as an essential element of development influences methods of teaching grammar. The learning of syntactical rules is a process of differentiation and integration (Cazden, 1972). Children overgeneralizing a rule, such as the plural form of nouns, in which they construct "foots" or "sugars" are, in fact, underdifferentiating a rule. With differentiation a child begins to integrate units into more varied "slots." If structural acquisition is seen as developmental, some traditional attitudes about teaching grammar must change. First, labels must become secondary. What becomes significant is recognizing that a child's errors reveal not only a lack of a specific structure but also a competency with structure. A child saying "sugars" does not know that mass nouns do not take the inflection "s" but he does have a productive rule (nouns take s for the plural form) that he can readily use. Development of metalinguistic awareness is delayed until the process of acquiring the rule has progressed to the stage where the child is using it fluently. Then, one makes explicit what the child knows intuitively.

Acquisition of structure is a process of moving toward an overgeneralized but nevertheless productive rule to the correct form used with almost total accuracy. Forcing rules or insisting a child accept a rule that has not been intuitively understood and used retards the child's own formulation of the rule. Teaching the rule follows practice of its use. Therefore, motivating children to use language to communicate with peers, parents and teachers is a basic step.

Motivating children towards more complex grammatical structures

requires facing them with more complex tasks in the form of more complex stimulus and content. As Joan Tough (1973B) contends, language disadvantaged children are not disposed to use language requiring a high degree of complexity, to explain, justify, predict, plan or consider alternative solutions. The difference in language advantaged and disadvantaged children is the latter were continually placed in problem solving situations. Language structure advances in this environment, not because of a concentration on linguistic structure but because the child practices using his language for mental, physical, social activities. Tough states,

> In such an environment the child is being stimulated to use his language to ask questions, to justify, to explain, to recall, to compare, to see alternative choices, alternative solutions (p. 21).

Tough is discussing young children but surely the analysis holds. As pointed out previously elementary school children's linguistic structures differ in degree, not in kind (Ausubel, 1958, p. 568).

Discussion requiring critical thinking provides not only the motivation to communicate, to express one's ideas, to share, it also creates a need for higher level thinking necessitating complex language. For example, in the following illustration, in which Calvin (the nine year old in the group) was formulating a new alternative to a given problem, it was revealed that the structural problems are relational and grouping problems. "I think/like/because/people should/If they're very good at a position I think they should play that position all the time." Here, Calvin's false starts are very revealing, he wanted his listeners to know it was an opinion (I think), he realized his statement was relational (because, later turned into if/then), and that it was

value laden (should). His following sentence copes with all three. "They shouldn't put someone else in goalie because maybe he was just/ like/he wasn't on time because something/maybe he didn't get a call/ like he didn't/he had to stop for something/like/stuff like that." Here, Calvin is grouping specific examples or reasons trying to find a general principle that he can apply. Again, the kind of thinking involved (abstracting) is going beyond his structural usage causing him to falter as he seeks new patterns.

When children's thinking is elevated to the higher levels of evaluation and justification which subsume the lower levels, their language structures are stretched, expanded. Discussion for critical thinking is primarily concerned with expanding the structures used for causal and logical (this is relational) language.

A closer examination of the language used by the boys to express the critical thinking stages might shed light on the nature of the relational structures being used. The following question of authority was posed to the boys:

> The class is putting on a spring concert. The teacher has let the children choose the play and the parts. Ten days before the play was to be put on the teacher walked into rehearsal to see how the play was going. After watching for awhile she realized the play was too difficult and that the children could do a much better job with some other play. The children wanted to continue. What should she do?

Scott's initial position reflected a number of critical thinking stages and the relational language structures needed to articulate them. For example, Scott said,

> "I think the teacher should just let them go on and that um to see what happens because maybe they will end up doing it um pretty good. It's just that she thinks/and actually she let them pick which one they want and if she um if she tells/makes them do something else she's really cheating them out of what she said that they could do."

Even in this initial stage of discussion Scott attempts to use language to order the facts and reasons for a logical presentation. He gives his position in the first sentence ("I think the teacher should just let them go on . . . ."") supported by a causal conjunction ("because maybe . . ."). He selects what he sees as the relevant details (e.g., letting the children choose), predicts a consequence for his position ("maybe they will end up doing it pretty good"), abstracts a moral principle in argument against the opposite position (i.e., cheating or breaking a promise is wrong), using an if/then structure to achieve this (i.e., if she makes them do this then she's breaking her promise, cheating them out of what she said that they could do).

Scott has language and ideas. The struggle appears to be finding an effective intrinsic structure to convey increasingly complex ideas. It is this interaction of language and thought that furthers development.

As Vygotsky (1962) points out, thought is not only giving meaning or life to the words but language is bringing thought out of the shadows. Moffett (1968) suggests that the way in which language structures are stretched, given the motivation created by higher levels of thinking, is a combination of Brown and Bellugi's acquisition process and Cazden's generalizing principle. He states,

> I would like to submit that the most important and successful way we learn linguistic forms is by internalizing the whole give and take of conversations. That is, the learner synthesizes what <u>both</u> A and B said, especially when he himself is one of the interlocutors, and produces in the future a new sentence that is a conjoining, embedding or other synthesis of the two utterances (p. 78).

This process of taking two different, and simpler utterances and through synthesis producing a more elaborate statement than either before is

parallel to the cognitive process (taking two different ideas) expressed earlier as one of the conditions of interaction--the building of an idea. And, if Calvin and Scott's attempts at structuring their thinking in new language forms are generalizable, it is a slow, difficult process.

Meaning. Word meaning is the union of word and thought. Verbal thought is the explicit expression of implicit understanding. The relationship, Vygotsky contends, is interwoven. "Word meaning is a phenomenon of thought only in so far as thought is embodied in speech and of speech only in so far as speech is connected with thought and illuminated by it (1962, p. 120)." Word meaning is a dynamic process. Meaning is not static; rather it is constantly changing, growing with experience. A child learning the meaning of a concept is bombarded with pieces of the whole. He starts with specific, concrete referents and moves toward a representation, a generalization, an abstraction.

The very young child uses external language for social and emotional functions. With maturity he develops egocentric language with one point of view. Gradually he develops inner speech, the internalized representation of thought. The child first grasps the "name" or label as just another property. He grasps the external structure earlier than the inner symbolic structure. Vygotsky claims thought and speech develop independently until the intellectual stage when thought and speech join. Speech becomes rational: thought becomes verbal. In word meaning thought and speech unite in verbal thought.

Learning language is learning meaning. As in structure, practice in the use of language extends many facets of the continuum. Hence this section focuses on what discussion does to develop meaning.

Meaning overlaps with structure in that the "concepts" or words being learned in a discussion for elementary children are, primarily, the structural words. Discussion promotes the development of two primary concepts: relational concepts (e.g., the logical query "why"; causal and logical conjunctions "because," "therefore," "for," "since"; discordance conjunctions "although," "but," "even though"; modifiers "except," "unless") and value concepts ("should," "right," "good"). Value concepts are dealt with in Chapter IV, Moral Questions as Content.

Relational concepts. Piaget (1964) argues that logical justification or implication arises out of psychological motivation;

> . . . to justify a judgement is, after all, to give the motive for an act or at any rate for a certain kind of act viz. that which consists in narrating the action instead of carrying it out. In this way the more conscious the child becomes of himself, the greater will be the importance of the "because" of justification as against the "because" of purely psychological motivation (p. 24).

Two decisive factors influence the move toward logical justification, contact and contrast with the thought of others and experience.

> Highly instructive in this connexion are the justifications which we classified as "incomplete" when we sorted out the results of our collective inquiry. A separate analysis of these shows very clearly that each one contains implicitly a perfectly valid reason, but one which the child cannot express, just because it is not the kind of reason which he ever tries to give (Piaget, 1964, p. 28).

Thus, putting children in discussion groups in which the problem solving is a consensus task encourages both contact and contrast of other's thought and experience in reasoning. Their structural vocabulary is an indication of their understanding of relations, the central thinking and language task in any discussion. As Seigel and Cocking (1977) contend, any open ended inquiry (such as discussion), "allows the child greater

opportunity to use language as a medium with which to represent his ideas (p. 177)." Discussion affords greater opportunity to use or develop his language of relation. Figure 3.4 provides a summary of three types of structural words that allow the child to make explicit implicitly known relationships, that help move the child from implicit to explicit awareness or consciousness (adapted from Piaget, 1964, p. 1-61).

Conjunctions which denote:

(1) Causality: cause and effect relations; causal relationship connecting two events or facts: because, since, for, therefore, then.

Example: "Why would you need a rocket for just a play?"
"You'd build part of the rocket and then you would go home and clean your room."

(2) Logical: a relation of implication connecting two ideas, two judgments, a reason and a consequence: because, since, for, therefore, then.

Example: "It's the only fair way because he would disappoint his teacher and his teacher likes him."
"I would go home because I already promised.?

(3) Discordance: antithetical relations denoting a negative relationship between cause and effect, reason and consequence: although, in spite of, nevertheless, but, unless, except, all the same, even though.

Example: "He should carry out his first promise."
"No, but he would loose his job." (the first idea is implicit in his "but")
"So what, they'll be lots of other guys building it."
"But then he couldn't go back and help building again."
"But he made his first promise and he should stick to it."

Figure 3.4

Relational Concepts

Figure 3.5 is a schematic representation of the language function of discussion. The overriding objective, to develop fluent, flexible users of language, is substantively a task of language expansion; that is, expanding (1) rhetoric or language use in terms of variety of expression in a multiplicity of contexts for a range of audience; (2) syntax or structures from simple to complex, particularly the use of relational structures both causal and logical as higher level thinking necessitates more conjoining, more embedding; and (3) semantics or meaning, again, particularly the relational concepts necessary to articulate increasingly logical and evaluative thinking.

Conclusion

The artificial distinction of the social, thinking and language aspects or functions of discussion have been made only to better understand the whole. It is when these aspects are interrelated in the activity itself that the child benefits in his development (see Figure 3.6).

Earlier it was illustrated that the child needs a cooperative understanding and a desire to share ideas, to communicate, before autonomy is possible. Sociability, however, is not just an initial step to language and thought development, it is a continuing, interrelated, interdependent aspect. Consider the analogy of the halfback who runs a pattern, down a football field on which blocks have been set. This is representative of individual learning. The football player is learning a certain kind of knowledge--perhaps, the most efficient, effective pattern given the conditions. Compare it to the halfback who runs a pattern down a football field in which the opposing team plays. The

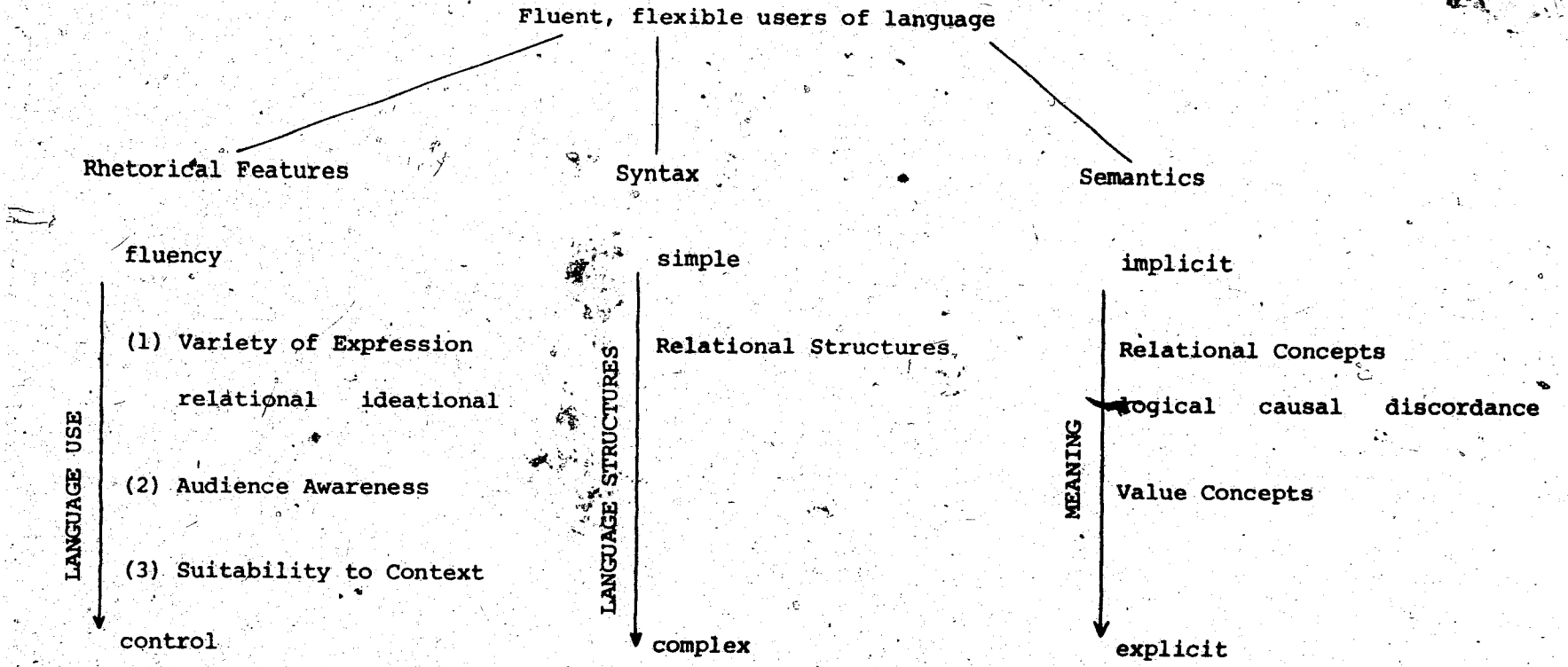


Figure 3.5

The Language Function of Discussion

opposing team intends to stop him, they block his original play or pattern and force him to different kinds of thinking (i.e., to reconsider, change tactics, dodge, invent alternatives). The halfback has acquired both the basic knowledge and the knowledge of others. Sociability, such as discussion, is the structured opposition of subjects with different, and most often, conflicting intentions. A speaker in a discussion cannot be content with one line of thought, one decided, efficient pattern. The intention of the other speaker, imposing his will, forces new patterns, new lines of thought, new development.

The successful speaker will need a variety of tools (facts, reasons, examples, logic) and his own strong will. In learning about other wills he is learning something important about the world. Perhaps Reigel (1976) would agree that the speaker is learning the dialectical quality of interpersonal relationships. Certainly, Apple (1975) would agree that the speaker is learning the nature of knowledge--that the pattern chosen for the blocks cannot and will not remain forever the same given an opposing team. Why choose the social road to knowledge, rather than the individual? One answer is provided by Piaget (1964) when paraphrasing Blondel, he said,

> . . . the pathological thought is the result of the given individual's inability to submit to social habits of thought. Discursive talk and reasoning are the product of intercourse between individuals. When a man cannot fit his personal thoughts and emotions into this schema, when he ceases to think socially, the mere fact of this isolation destroys the logical structure of his thought (p. 204).

A similar point of view is shared by Ratner (1970) when he stated,

> . . . sanity entails a dialectical relationship between individuals such that each person is simultaneously "for himself" and "for others." One comes to be oneself and know oneself through interaction with others, yet one must not permit the other to totally constitute oneself (p. 112).

Reasoning, whether an individual or group process is an argument which by its nature is a social activity. It is a process of verification to others of one's own beliefs; a process that can be internalized such that an attitude of reasonableness, a desire for rational decision making and the means to achieve them are developed in the individual.

And what of language? As Lewis states, language is the instrument of relations between persons. "Language plays an important part in the progressive emergence of clearer self awareness out of the stresses of social life (1963, p. 218)." The child not only learns his social structure through language (Berstein, 1967) but also his cognitive structures are given form through language (Vygotsky, 1962).

Thus, the three intersecting circles overlap in discussion. Intersecting, interdependent and interwoven, the social, cognitive and language functions combine to give us form and substance for an underlying basic framework of discussion.

In summary, Figure 3.6 depicts the structure of discussion. The social function, facilitated by the character of interaction such that the child progresses along the egocentric to sociocentric continuum; the cognitive function, facilitated by the evaluative question and critical thinking, moving the child to more abstract levels of thought; and, the language function, structuring the child's expanding world view giving him meaning, expression and structure through increasingly explicit, complex language.

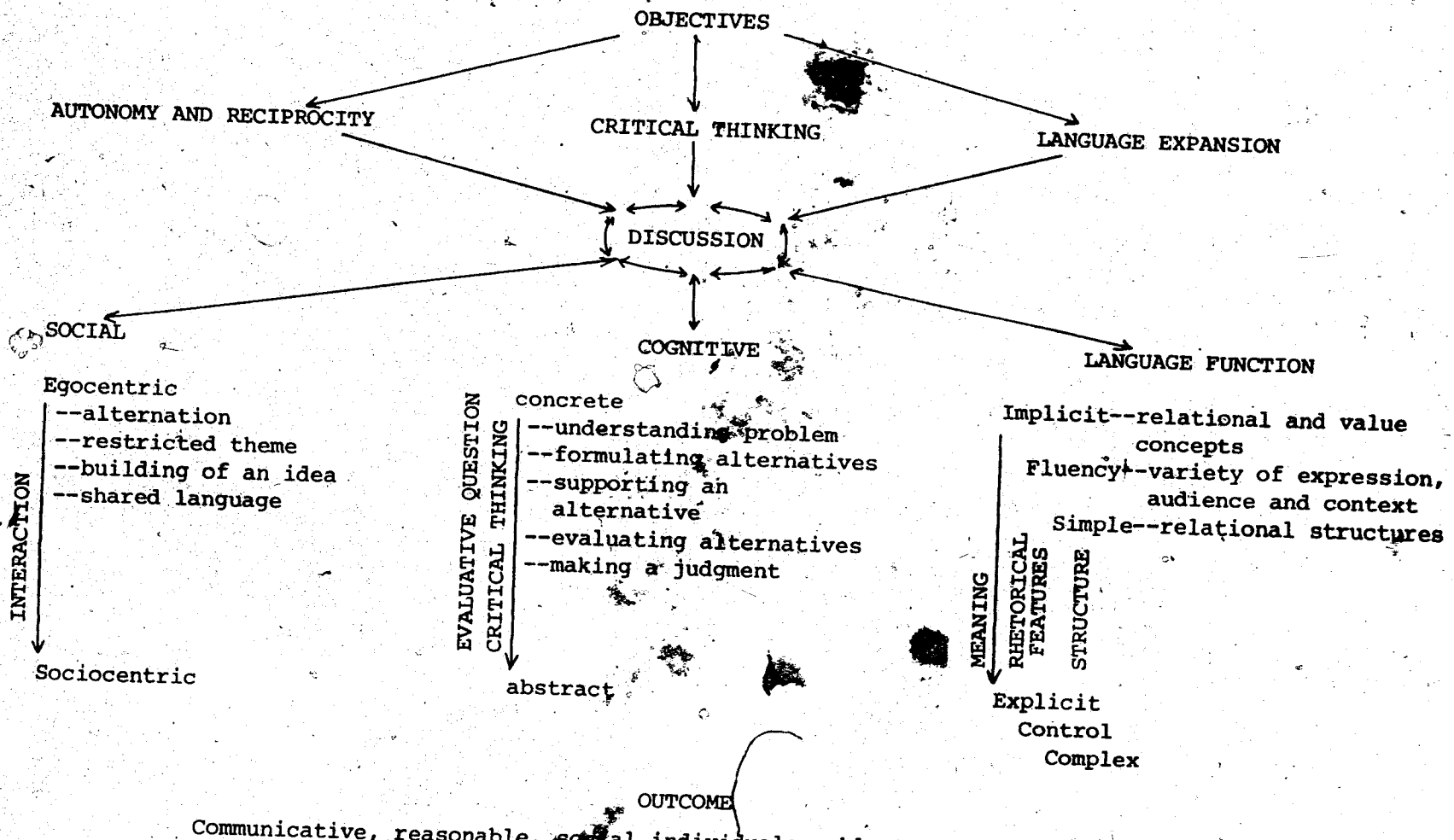


Figure 3.6

A Theoretical Framework of Discussion

CHAPTER IV

MORAL QUESTIONS AS CONTENT

INTRODUCTION

Peters (1964) states that "it is equally absurd to foster an abstract skill called critical thinking without handing on anything concrete to be critical about (p. 36)." If problems are the central means of motivating critical thinking (Organ, 1965), what problems best facilitate language development and sociability? Lewis (1963) claims that the role of language is expanded most notably in ethical problems. In both ethical and other kinds of problems the cognitive skills share a similarity but with the ethical problem, the verbal formulation of principles, unimportant in non human problems, is central. This is, "in ethical education the verbal formulation of principles is not merely a means to an end--it is an end in itself (p. 135)." Further, in ethical development speech is a mode of ethical behavior, "a means of bringing about changes in other people's conduct (p. 135)." Thus, not only does this development implicate language but also the character of sociability. Unlike mathematical or non human problems, sociability and language are intricate parts of the resolution of an ethical problem.

> The several functions of language in ethical development become more clearly differentiated. The child is moving toward the time when language may serve him in his personal and social life in a diversity of ways. It will become a means of symbolizing his attitudes to other people, of formulating principles of conduct towards them, of symbolizing and so enhancing his awareness of himself and of debating problems of conduct within and for himself as an individual (Lewis, 1963, p. 135).

Therefore, moral or ethical questions will be examined as an example of the kind of content that will help foster sociability, critical thinking and language development in elementary school age children through discussion. The first question considered is the meaning of ethical or moral questions.

MORAL QUESTIONS

"Morals" are generally held to mean that which a person considers to be right or wrong and that which he considers he ought or ought not to do (Wright, 1975, p. 13; Cronkhite, 1977, p. 9). Moral questions, then, ask what is right or good or obligatory (Frankena, 1963, p. 8). For example, should I break my promise? Should girls be allowed to play hockey in a boy's league? Should I cheat on this test? Is honesty a virtue?

Answering a moral question involves moral reasoning, a consideration of alternatives between principles, policies or courses of action based on criteria for right action (Wright, 1975; Cronkhite, 1977). The central factors of moral reasoning are moral judgments and their reasons (Frankena, 1963, p. 8). In his introductory essay on ethics, Frankena outlines three distinct kinds of moral judgments: (1) judgements of moral obligation--having to do with actions (e.g., What he did was wrong. All men have a right to freedom.); (2) judgements of moral value--having to do with persons, intentions, motives (e.g., His motive was good. Benevolence is a virtue.); (3) judgements of non-value--not strictly speaking moral judgements. They are things that in themselves cannot be morally good or bad (e.g., That is a good car.).

In the literature the debate about morals is not so much concerned with what constitutes a moral judgment but rather with how moral judgments ought to be made, the question of moral reasons. Asking the question, "What are moral reasons" actually raises two distinct questions. On the philosophical, theoretical level the question raised is: What are good criteria for evaluation of reasons? That is, which principles are the best principles. At this level of debate the emphasis is on "moral," the debate is the search for the universal principle which changes, depending on the theory. It is not in the design of this thesis to advocate any one ethical theory, to answer the question at this level. However, what is essential is the underlying, implicit agreement of all the ethical theorists that a moral judgment requires moral reasons to justify it. The separate question addressed in this study asks which kinds of reasons actually count as moral reasons. As outlined in a previous section "Intellectual Function of Discussion" (p. 44), theorists find it more appropriate to state what are not relevant reasons rather than what precisely count as reasons. Reasons, they claim, are not rationalizations that confuse or explain away the facts, emotional statements, (moral reasons are used to justify emotions not to articulate emotions), personal wants or preferences (the same for emotional statements holds true here), nor irrelevant statements.

The importance in the distinction between "what are good criteria for the evaluation of reasons" and "which kinds of reasons actually count as moral reasons" is magnified in moral education. It is impossible for any one school curriculum to align itself with a particular ethical theory just as it is impossible for a public school system to advocate

one religion. But to step away from the first question is not to assume that one also steps away from the second. For example, value clarification, espoused by Louis Rath (1966), conflates the two questions and, as a result, claims that because universal, moral principles cannot be determined, all values are equal, no reason can be evaluated as better than any other. Therefore, value clarification followers must accept whatever "reasons" given, whether they are reasons, emotional statements or preferences, as being equal in status and equally right.

In summary, moral questions ask what is right or good, "what ought I do"; they require moral reasoning, the two central factors being moral judgments and moral reasons. Further, while no single standard of morality is appropriately enforced in the public school, not all "reasons" count as a justifying basis for the resolution of an ethical problem.

Moral questions are but one example of the evaluative question. There are others. However, moral questions are introduced here as an illustrative example of content for three reasons. Moral questions are motivational for the elementary school child, compatible with the theoretical framework of discussion and significant in themselves.

Moral Questions as Motivation for Discussion

A moral question, situated in a child's world, drawn from the child's experience, worded in concrete terms is a source of motivation. Cognition studies have shown that the first, initial step to critical thinking is a problematic situation which blocks customary thinking patterns. Organ (1965) contends that for a problem to motivate critical thinking, it must be a "live" issue that cannot be answered automatically

(p. 8). The literature reviewed in Chapter II suggests that the question should be situated within the child's experience, within an "optimal range" of his development. Nevertheless, it is important that the categories of questions are not trivialized during the task of matching questions with the child's level of development. Moral questions would include questions of punishment, distributive justice, promise keeping, and fairness. They ought not, however, include questions of feelings, good manners or politeness. Although these categories are worthy aims for the classroom, they should not be confused with moral categories primarily because they do not invoke the same levels of critical thinking. Although these categories could be formulated into questions that could fit most of the conditions for discussion and therefore would provide another kind of content, there is a qualitative difference in the kind of thinking involved.

Taba (1971) describes three strategies in developing a child's own value system: (1) feelings, which could be described as empathy, (2) interpersonal problem solving, which deals with a problem between two children, (3) analyzing values (p. 77). The first two stages are not involved in higher level moral issues. The emphasis is on psychological development such as broadening their point of view. For example, Shaftel's (1967) problems for role-playing appear to be at these first two levels. Problems for role-playing such as self-acceptance or managing one's own feelings (p. 419) might be experienced and enhanced with role-playing. However, with higher levels of moral issues such as justice, punishment, promise keeping or rights, we want interaction on an objective, rational and critical level. It is crucial for Shaftel

that the child knows what it is like, physically and emotionally; to lose one's temper if Shaftel hopes to teach them "how to manage one's own feelings"; or what it is like to desire another child's toy, if she hopes to teach them to sublimate desires in certain conditions. Role-playing is certainly the closest experience we can give a child in a staged environment. They experience the loss of control then move toward an understanding of "why," alternatives, and subsequent consequences. This is necessary and desirable content for children in the elementary school but it is not the same content as higher level moral issues. In Shaftel's "problems" there is not the open-endedness nor the open inquiry of the discussion situation. There are, rather, very definite modes of behavior, "answers" to the question of how to behave [redacted] "manage one's own feelings" in a given situation. The childre[redacted] looking for the "right" answers, not the best answer they can create given their cognitive, moral and linguistic stage of development.

Instead of trivializing moral education by simply asking questions of feeling at the elementary level, as Bruner (1971) suggests, categories such as promise keeping, fairness, justice must be simplified and matched to the child. For example, a motivational moral question posed for the elementary school child on promise keeping could be as follows:

Example:

> Fred promised Alan to meet him after school in order to walk to hockey practice together. On the way to meet Alan, Fred is offered a ride to the game with another friend. They don't have time to tell Alan or pick him up. If he takes the ride, Fred will be on time, if he walks with Alan, he will be late. What should Fred do?

Again, the question must be simplified without losing the integrity of its character as a moral question.

The Compatibility of Moral Questions with a Model of Discussion

The making of moral judgments requires the critical thinking process. Reasoning, the background of critical thinking, is not the only condition for moral development, but it is a necessary one. Lewis (1963), referring to Piaget, said, "It is however not the least merit of his work that he constantly reminds us that moral judgement is inseparable from reasoning (p. 139)." As stated previously, the debate in the literature is not so much what constitutes a moral judgment but how moral judgments ought to be made.

In the educational literature on moral education there are two predominate theories on how moral judgments ought to be made. They stand in staunch opposition. "Value clarification," espoused by Louis Rath (1966), is an approach that concerns itself with the process of valuing rather than determining the nature of values (p. 10). It is an ethical or a subjective relativism in that it stresses that all values are equal, there are no absolute values or principles, values are merely "different" not better or worse, right or wrong. Moral absolutism, in contradistinction to moral relativism holds that there is a value hierarchy, that there are values or moral principles universal to all man. Kohlberg's (1971) cognitive developmental theory of moral education, derived from Dewey and Piaget's work, is structured toward a search for these universal truths.

Moral questions can only be seen as appropriate content for discussion if they are compatible with the basic elements of discussion, that is, if moral questions serve the compatible objectives and ends as discussion. The question to be asked then is whether Rath's value

clarification theory and Kohlberg's cognitive developmental theory are compatible with the model of discussion constructed thus far.

Rath's value clarification. The purpose of value clarification is to help students "clarify," for themselves, what they really value. The methodology involves leading students through three processes--choosing, prizing, acting (Rath, 1966). This could be interpreted as a critical thinking process except for two underlying stipulations of value clarification. In an attempt to do away with "moralizing" and help students accept other value systems that might differ from their own, value clarification theory claims that all values are equal and can only be based on personal experience. In doing so, value clarification tends to undermine the critical thinking process. With all values being equal, no rational criteria for justification can be established. Even though the critical process is used, responses are not judged better or worse (Kirschenbaum, 1977, p. 12). Hence, there is no point in critically examining one's own values, particularly in relations to others.

John K. Smith (1977) elaborates these criticisms but, unlike many critics of value clarification, argues further that it is "not merely a mindless, harmless exercise that is easily dispensed with through logical argument (p. 4)." Value clarification, Smith argues, by inculcating in students the view that all values are equal and moral values are personal and can only be based on what has been directly related not only advocates the weakening of a moral hierarchy, it also legitimizes the individual and social flight from moral responsibility.

> By abolishing a knowledge of good and evil through making them arbitrary categories, we in essence tell man that he is free of moral responsibility. After all, if there is no good and no evil, the fear of choosing and accepting the consequences of that choice becomes meaningless (Smith, p. 8).

The analyzing of values in light of their consequences is subsequently ignored in value clarification to avoid "moralizing."

The misconceptions embedded in value clarification have had an effect in other curriculum areas. Lundsteen (1976), a language theorist, interested in the discussion methods, attempts to deal with the moral issue:

> Spokesmen for the social sciences and the humanities say that right and wrong are relative to the values and characteristics of different cultures. These spokesmen say that there are more than two sides to an issue; each person is entitled to an opinion . . . . In any case, the creative problem-solving type of discussion needs no one best solution. The process is what is important (p. 169).

To such language theorists it is, of course, the process that is important, but given our original definition of discussion accepting any answer (all values are equal) precludes "the process" because the process is the building of an idea, (in this case, the search for the best answer given certain conditions), not collective or alternative monologues.

Kohlberg's cognitive developmental moral theory. The purpose of Kohlberg's theory in terms of moral education is to provide optimum progression through moral stages (Kohlberg, 1972). Kohlberg (1963) distinguishes a number of developmental stages or morality that each person passes through. The highest and only defensible level of moral development in his view, is the principled level. Autonomy in judgment based on the universal principles of justice, reciprocity and equality of human rights and the respect for the dignity of human beings

characterize the reasoning at this level (Lickona, 1977).

There are three central assumptions in Kohlberg's theory (Fraenkel, 1977; Gibbs, 1977). First, relying heavily on Piaget's theory of cognitive development, Kohlberg claims that cognitive-structural features are the core of moral development. That is, moral development is correlated and affected by cognitive development. Second, but tied to the first contention, is Kohlberg's claim that development is sequential. As in Piaget's cognitive theory, there are stages of development, clearly distinguishable, cumulative and sequential (Kohlberg, 1966, 1963). Moral judgment develops as the person attains higher stages. Stages are the same for all people, they cannot be skipped although a person can be in more than one stage at any given time. The stage of moral reasoning is determined by the reasons given for the judgment, as illustrated in Figure 3.7. Thus, given the problem of promise keeping, the child's moral developmental stage would be determined not so much by his decision as by the reasons given for his decision. Finally, like Piaget, Kohlberg claims development occurs with the interactions of the person, his cognitive structure and the environment (Gibbs, 1977, p. 44). Piaget described the process as accommodation and assimilation. Essentially, this interactionism is how the cognitive structure develops to accommodate the changing experiences of the child, transforming the structure to a more adequate one.

These three assumptions have significant import for discussion. First, Kohlberg's theory emphasized the relationship between moral and cognitive development; second, the process of reasoning is isolated as

PRINCIPLED LEVEL (Concern for fidelity to self-chosen moral principles)	STAGE 5	MOTIVATOR: Internal commitment to principles of "conscience"; respect for the rights, life and dignity of all persons. AWARENESS: Particular moral/social rules are social contracts, arrived at through democratic reconciliation of differing viewpoints and open to change. ASSUMPTION: Moral principles have universal validity; law derives from morality, not vice versa.
CONVENTIONAL LEVEL (Concern for meeting external social expectations)	STAGE 4	MOTIVATOR: Sense of duty or obligation to live up to socially defined role and maintain existing social order for good of all. AWARENESS: There is a larger social "system" that regulates the behavior of individuals within it. ASSUMPTION: Authority or the social order is the source of morality.
	STAGE 3	MOTIVATOR: Desire for social approval by living up to good boy/good girl stereotype; meeting expectations of others. AWARENESS: Need to consider intentions and feelings of others; cooperation means ideal reciprocity (golden rule). ASSUMPTION: Good behavior equals social conformity.
PRECONVENTIONAL LEVEL (Concern for external, concrete consequences to self)	STAGE 2	MOTIVATOR: Self-interest: What's in it for me? AWARENESS: Human relations are governed by concrete reciprocity: Let's make a deal; you scratch my back, I'll scratch yours. ASSUMPTION: Have to look out for self; obligated only to those who help you; each person has own needs and viewpoint.
	STAGE 1	MOTIVATOR: Fear of getting caught; desire to avoid punishment by authority. AWARENESS: There are rules and consequences of breaking them. ASSUMPTION: Might makes right; what's regarded by those in power is "good"; what's punished is "bad".

Adapted from Thomas Lickona's article "How to Encourage Moral Development" in LEARNING, March, 1977.

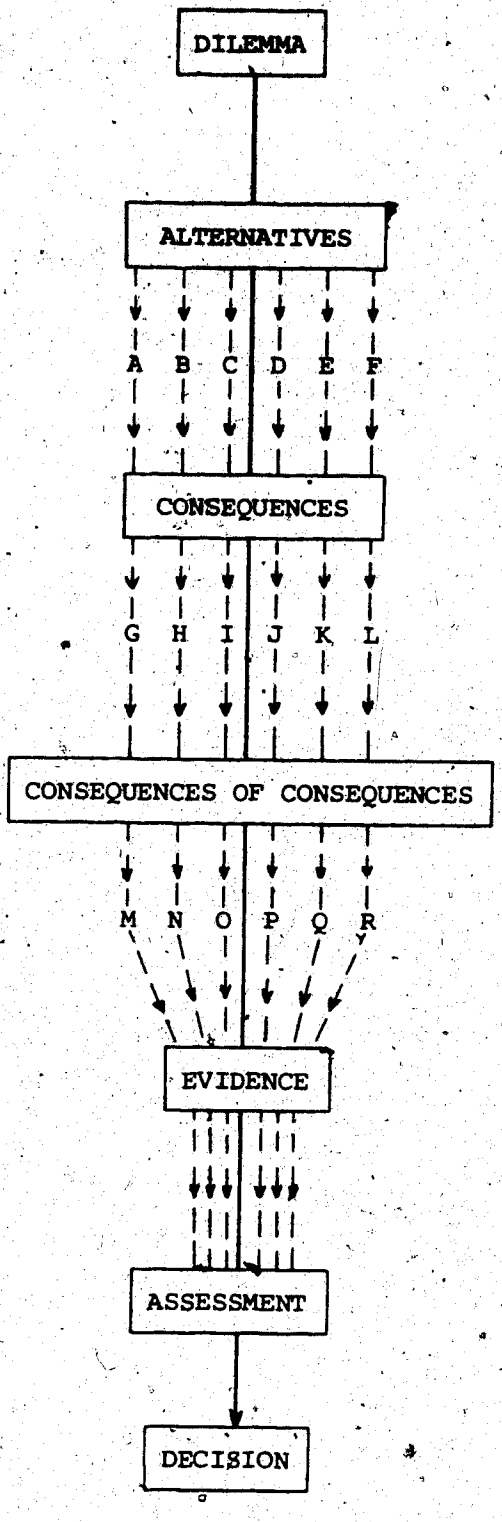
Figure 4.1

Kohlberg's Stages of Moral Development

a key factor in development (i.e., if the reasons given for the judgment determine the moral stage, how a person arrives at the reason must also be crucial). Third, that the importance of frequent and quality experiences which cause dissatisfaction with old cognitive structures or thinking patterns becomes apparent.

Not surprisingly, the difficulties with Kohlberg's theory reflect similar difficulties encountered with Piaget's theory. Are the stages invariant; are they universal; are there universal truths such that at the principled level of stage 5 justice can be seen as the overriding principle? Kohlberg's purpose is to provide optimum progression through the stages of moral development. This purpose differs from that of discussion. Although seemingly more compatible than value clarification, which precludes discussion allowing only for collective or alternating monologues, moral absolutism implies a criteria of evaluation, universal truths which is perhaps too controversial for public schools. Relativism and absolutism, however, are not the only two alternatives.

Fraenkel's third alternative. The similarities and differences in Rath and Kohlberg are emphasized in Fraenkel's method for moral education. Fraenkel (1977) neither acknowledges Kohlberg's universal truths nor Rath's relativism. Like Rath, Fraenkel puts the emphasis of learning on the critical thinking process (see Figure 4.2), that is, understanding the problem, formulating alternatives, examining consequences in light of evidence and choosing. Like Rath, he states the need for moral education in the school should be tied to the child's developing rational and logical thinking: formulating alternatives, examining consequences, choosing. Unlike Rath, however, Fraenkel does not find



What is this incident about?
What happened here?

What could (might) X do in this situation?

If X were to do this, what might happen as a result?

If that happens, then what might happen (i.e., what might be additional short- and long-range effects)?

What evidence is there that these consequences will occur?

Which consequences would be good? bad? Why? (Measured against what criteria?)

What do you think X should do? Why?

Figure 4.2

Steps Involved in Assessing a Value Dilemma

(Fraenkel, J.R., 1977.)

the valuing process of the individual sufficient. He supports the position that there are standards but, unlike Kohlberg, holds that these standards are not necessarily universal for all men nor absolute regardless of conditions or circumstances.

These subtle differences in Fraenkel's theory of how to teach values are, nevertheless, significant for a model of discussion. Fraenkel's theory does not preclude discussion. Rather, in searching for the best solution, the standard on which action can be based given factors such as conditions and circumstance, the group discussion is motivated and propelled to the evaluative level of thinking. Neither does Fraenkel's theory cause consternation in the face of educators as a pluralistic public raises questions on the basis of "selected" universal principles. Fraenkel's theory presumes no given answers. Rather, it maintains that only through the continual process of reasoning in discussion will children learn to cope with moral questions and increase their criteria of evaluation as their cognitive and moral understanding evolves.

It is this final, third alternative that best meets the needs of discussion with its emphasis on interaction, reason and consequence and language as a means of interacting, expressing, a tool for thought and an end in the verbal formulation.

The Hidden Curriculum

> The handling of value questions by a teacher is extremely difficult because the issues are often complex and controversial. One solution is to avoid dealing with these issues. Sometimes this is appropriate but sometimes this leaves a vacuum which is filled up with emotion and bigotry. One must choose (Ennis, 1969, p. 421).

The third and final reason that moral questions are used as content lies in the significance of moral education in the schools. As stated earlier, moral education is a controversial issue but one that cannot be ignored because too many recent theorists have brought "the hidden curriculum" into the light (Apple, 1975, Kohlberg, 1971). The fact that moral education goes on continually, implicitly and overtly without schools formulating its goals and methods is no longer acceptable to many theorists, administrators, teachers and parents (Fraenkel, 1977). Moral education permeates every level of school activity from the activities teachers engage in, the books, seating arrangements, topics and materials they choose, to the administering of punishment and rewards to the selection of personnel (Fraenkel, 1977, p. 1).

The fact that moral education is occurring, that value judgments are being made extensively in schools is secondary to the fact that moral judgments, moral values are important, relevant issues for schools and for children. Value judgments are an integral part of the fully developed citizen schools seek to initiate:

> Without a value system life would have neither meaning nor direction, and thinking would have no purpose. We could only describe the world; we could not distinguish what is desirable and what is not, for man reacts to reality not only in terms of how he perceives it but also in terms of how he values it (Moore, 1967, p. 134).

CONCLUSION

Thus, moral questions as live, relevant issues with no obvious, "correct" answer are motivational questions for children. Situated in Fraenkel's third alternative with the emphasis on critical thinking, reasoning and an examination of alternatives, moral questions are

compatible with the means and ends of discussion. And they are significant issues, significant content for schools, in themselves. Moreover, for those who view an integrated [illegible] to knowledge and learning as an important learning meth[illegible]ons provide the further advantage of integrating [illegible]th other "disciplines" such as social studies.

CHAPTER V

A CURRICULUM MODEL OF DISCUSSION

INTRODUCTION

Aristotle suggested that the things we have to learn before we can do them, we learn by doing them. Children think, express and relate through practice. It is by discussing, however, that children learn to disouss. Learning the discussion skills in isolation is like trying to play hockey by learning to skate, puck handle and shoot a puck into a net. Although the individual skills are important, in order to learn hockey the player must learn to puck handle and puck handle with team members complicated by an opposing team intent on both stopping him and initiating their own line of play. As hockey is distinct from other games, discussion is distinct from other oral modes by the character of its interaction. It is this character of interaction, distinguishing discussion, which structures its component parts (language, thinking and sociability) such that the skills of each cannot be fully developed in isolation.

This chapter constructs a curriculum model which outlines feasible instructional strategies for the implementation of discussion in the elementary school classroom. The model is based on a) the conceptual base of discussion elaborated in Chapters II and III, b) selective research studies on instructional methodology, and c) tentative findings from the discussion samples obtained from two groups of children ages 8-11.

INSTRUCTIONAL STRATEGIES

Teacher Roles

It is primarily the task of the teacher to structure the learning environment of discussion through the choice and implementation of instructional strategies. Educators (Lundsteen, 1976; Moffett, 1968; Taba, 1967) suggest that there are three distinct roles in discussion for the teacher: planner, guide and model.

The teacher's first role is that of planner, responsible for the preparation of ideas, materials, and modes of presentation. In this capacity it is incumbent on the teacher of discussion to assess the developmental stage of the children in order to choose or construct questions at their level, situated in their experience and interests; to group the children in compatible but motivating groups; to set a task within the optimal range of their skills and abilities.

The teacher's second role is that of guide. Discussion as a discovery method dictates that the teacher cannot become the dominant participant, nor an authority figure with the right answers and the sole source for finding them. Thus, questioning is the guide's tool for helping children develop their language and thinking, attitudes and feelings. The guide is the unobtrusive overseer of process and progress.

In discussion, which introduces a relatively distinct set of skills for children, acting as model is perhaps the teacher's most salient role. The teacher, as an initial contributor and participant, models attitudes, skills and structures. For example, the teacher can model alternative behaviors such as how to disagree without antagonizing, how to express support or empathy, how to ask a clarification question,

how to keep to the critical thinking stages. The objective of modeling, however, is to demonstrate these skills, structures and behaviors in such a way that the children are encouraged to assume these roles as quickly as possible (Lundsteen, 1976, p. 154).

In all three capacities the teacher has means of establishing an open, flexible and supportive environment. The difficulty lies in knowing when to guide and when to step back, when to model and when to let the children find their own means, when to push and when to wait. An understanding of what discussion is, its aims and component parts together with understanding of child development can assist the teacher in establishing a balance and integration. This is, however, a complex and demanding task. At any given moment in discussion when a problem arises the teacher should be aware of whether it is a cognitive, linguistic or social problem, the stage of critical thinking, the child's developmental stage which will effect, to some extent, the teacher's actions in terms of kind of questions asked, language use and level of abstraction employed; while, at the same time, constantly aware of the character of the discussion's interaction.

Discussion is a method of both teaching and learning. Like the children, the teacher can best develop an understanding and application of her roles through practice (Taba, 1967, p. 76). An overview of the instructional strategy of context, task, content, environment and a questioning technique will, however, provide a base from which the instructional decisions can be made.

Context. Essentially, the context of discussion is a group of interacting individuals. In a recent review of literature and studies

on the discussion method, Gall and Gall (1976) examine studies on group dynamics, the comparative studies of discussion and alternative methods and the few available studies concerning student characteristics and the effects of the discussion method. They found three major variables that effect group interaction: the size of the group, the seating arrangement and group composition.

Gall and Gall (1976), in synthesizing the findings of a number of studies, found that the most effective size was a group of five. A smaller group had its dynamic quality severely limited while a larger group restricted participation time. Further, the odd number combated deadlocks and since majorities tended to be 3 to 2, helped insure individuals were not isolated (p. 175).

The discussion samples obtained in this study suggested a concurrence with Gall and Gall's findings insofar as majorities did tend to be 3 to 2, everyone participated though to varying degrees and there appeared to be a complexity of dynamics. However, no means of comparison was available to the investigator as both groups were sets of five students. The question of Gall and Gall's findings in terms of the model for discussion developed in this study is a question beyond the limits of this investigation--a question for further research.

Research on seating arrangements, Gall and Gall (1976) conclude, shows that eye contact increases communication. Visual contact between students is vital for decreasing teacher/student and increasing peer interaction. Further, it is recommended that more talkative students be placed opposite quiet ones to combat monopolizing and that teachers attempt to deemphasize their own role and create a decentralized network

of communication in which each member feels free to initiate and receive communication from every other member (p. 190). Again, the groups in the field study were situated in a circle which did appear to encourage peer interaction. This investigator also found it necessary to remove herself physically at times from the discussion to quickly increase peer interaction and concretely deemphasize her role in the discussion for the students. In other words both groups found it hard to believe, at the beginning that 1) the answer was not known by the teacher (investigator), and 2) peer interaction rather than teacher/student interaction was going to be necessary for completing the task. However, the effects of seating arrangement on communication and interaction is another comparative area for further research.

Gall and Gall's (1976) synthesis of the research studies on group composition found no consensus on the question of heterogeneity versus homogeneity of groups. While some studies evidenced that homogeneous groups are associated with greater group cohesiveness, other studies showed that heterogeneous groups increased the accuracy of perceptual judgment. Group cohesiveness, characterized by students being actively involved with one another, caring and helping one another, has three positive effects on group functioning: improved maintenance of membership and participation in the group, increased communication and positive feelings of members (Gall and Gall, 1976, p. 182). Gall and Gall (1976) issue a warning, however, that cohesiveness ought not supercede the task. They state,

> Enough cohesiveness should exist that the group members experience some reward from interaction and can establish smooth working relations, yet cohesiveness should not be so high that members holding minority or deviant opinions are rejected or that the task is ignored or actively resisted (p. 186).

The question of grouping in friendship clusters is a difficult one. In the field studies one group was a group of friends. In fact, the investigator asked a young friend of hers to select a group of friends. He chose all boys. This, of course, would be common practice at this age level (8-11). The second group was more heterogeneous. It was both boys and girls from different grades and classrooms and unknown to one another. There were a number of tentative findings from an informal comparison of the two groups. First, the level of thinking appeared to be similar in both groups; second, in an interview afterwards both groups stated that friendship clusters are preferable because it is easier to give opinions and ideas. This was supported in the discussions by the fact that the first group showed no hesitancy in expressing their ideas while the second group were often reticent to interact directly with one another; third, what seemed more significant in sustaining quality discussion than friendship or sex or any other variable was the variety of perspective. For example, in the group of friends, Calvin and Robert were the closest and seldom differed in viewpoints, whereas Scott, older than the others and more independent, provided the greatest source of dynamics. These illustrations are very tentative but do support Gall and Gall (1976) in that moderate cohesiveness should be maintained such that the atmosphere is comfortable but that cohesiveness does not supercede the task. As Gall and Gall (1976) conclude,

> Therefore, insofar as he is free to select the members of a discussion group, the teacher probably should include students who have a variety of perspectives on the topic, and a range of talents relevant to the group's task (p. 181).

Task. The purpose of the task is to outline what it is the learners are expected to do (Alberta Language Arts Handbook, 1973). Thus, the task sought for the model developed in this study was one that would best foster interaction in critical thinking, language and social relations. Gall and Gall's (1976) research was limited. Stanford and Roark (1974), however, contend that group discussion is most effective when the task is group consensus (p. 116). Group consensus fosters a number of essential skills and behaviors. For example, "a conseneus is achieved when the group arrives at a decision that all members agree with or can support (Stanford and Roark, 1974, p. 116)." To do so requires critical listening, evaluation of different points of view, social skills such as empathy, support, and interpretation that facilitate interaction. Perhaps, most importantly, group consensus encourages the building of an idea as the group seeks a compromise in the melding of their individual and joint ideas. That is, group consensus provides motivation for keeping the discussion going. Without consensus the members might simply state their individual positions, arguments or statements. With consensus, the further stages of critical thinking (and thus, languaging) are needed to support statements, evaluate alternates, and choose the best one from an explicit set of criteria.

The task of group consensus, however, is not sufficient to satisfy the requisites of discussion as interaction. It could be construed by the students as simply a problem solving task, that is, finding a solution, a compromise. If, however, the children are instructed to come to a group consensus as to the best solution, the task is re-identified. For example, in attempting to reach a consensus as to the

best solution in a promise keeping dilemma, Scott could have given in to a majority ruling that the second promise is more fun so that's the promise to keep if he understood the task as simply consensus. After all, at least in this country, majority rules. But he held out because he believed the best solution was upholding a prior promise. His understanding of the task prolonged and developed the discussion. The others could not stop thinking, expressing or relating because a consensus had not been reached. In the following example it is apparent that Scott felt they had not yet reached the best solution.

Example:

Scott: I think that he should ask one of the other guys that wanted to build it and just to tell the teacher or whoever/wanted to/was going to supervise the building of the rocket tah just get another guy to take his place and get that guy to tell the teacher. (Interruption) oh, just wait, and he go home and clean the room.

Calvin: But I think he should do the stuff and then he should go home and then--

Scott: And get crap from his Mom.

Calvin: No, no and then say that he was sorry that he did that 'cause he accidentally forgot and volunteered for/to doing the rocket and he would do it after supper.

Robert: Well, he should do what he was supposed to, not clean his room--he should do the rocket and then go home and maybe he was going to play with his friend and just say oh I'm sorry you know I have to clean my bedroom.

Calvin: That's like I said.

Scott: OK. But just wait. How many of you think that he should come/he should build the rocket first? OK. Hold it. (3 against 2.) WHY do you guys think he should build the rocket first?

Calvin: It's the only fair way because he would disappoint his teacher and his teacher likes him.

Scott: (Talking over the others.) No, because there were a lot of other people building the rocket. OK. Lookit, OK lookit--he made a promise to his Mom FIRST before he promised to build the rocket--

It is the opposing tasks of group consensus and the reaching of the best solution which encourages both the individual's autonomy and the group's reciprocity. The opposing tasks also necessitate the evaluation of each alternative in order to choose the best solution, thus encouraging quantity and quality language production.

The group of five with the task of group consensus in order to reach the best solution raises a further question--the question of leadership. Who should lead, when and how? The research reviewed by Gall and Gall (1976) reveal two significant findings: leaders will emerge in leaderless groups and discussion requires student centered leadership in order for the discussion method to be implemented. That is, without peer interaction the utility of discussion is severely hampered and, until the teacher's role declines, peer interactions will not increase. These findings suggest that the small groups, as much as possible, be left on their own to discover means of relating, thinking and communicating to one another.

However, if the role of the teacher is to be minimized in the small group discussions, how and when can she be a source of guidance, a model for the skills and abilities of discussion without hampering peer interaction? In the paucity of the research, this question is left unanswered. One possible method might be to follow the small group discussions by a discussion by the large group, the total class. The large group would critically listen to a presentation of a summary and final position of each small group, then repeat the small group

process and attempt a group consensus as to the best solution. The large group, led by the teacher, would reinforce the structure, process, skills and abilities of the discussion model. Since the thinking would have been done, for the most part, in the small group, the emphasis of the large group would be on language, on summarizing, articulating, arguing and persuading.

Content. Chapter III stressed the significance of the evaluative question as the key factor in a discussion model for critical thinking and language expansion. Both the intellectual and language functions illustrated the need for techniques that would motivate children toward evaluation and justification.

The child is not cognitively nor linguistically capable of utilizing the sophisticated criteria of evaluation or structures of logic. It is, however, appropriate and beneficial to initiate him into a mode of thinking that will move him toward logical reasoning and language expansion (Peters, 1963; Vygotsky, 1962). It is to this end that the evaluative question is incorporated into a model of discussion for the elementary school child. Even though the child's reasons are childlike, often fraught with inconsistency and ambiguity, both in structure and meaning, the initiation of critical thinking sends him on the road to reasonableness encouraging hypothesis-making, tentative thinking, multialternatives, inference, an examination of consequences and evaluation.

Moral questions have been used in this study as the illustrative example of motivational, compatible and significant content for the evaluative question. As argued in Chapter IV, moral categories

provide for questions such as promise keeping, distributive justice, authority, and punishment. The difficulty, in instructional terms, is translating abstract, moral categories into concrete problems that are motivational and within the child's experience and development stage. Furthermore they provide no obvious, "correct" answers.

Questions are motivational for children if they are structured around their interests (Lundsteen, 1976; Organ, 1965; Smith, 1972). For example, in the field study the question of punishment was put into a hockey context. All of the boys were involved in hockey, either as a league-member, an NHL follower or simply a street hockey player. The question of punishment itself was within their experience, that is, they had experienced punishment and understood its consequences. The problem, therefore, could arise in their everyday life, it was a live issue they cared about. This was the question posed:

> Rule #1 was be on time. Coach Jones was waiting, <u>again</u>, for Tom, the number one goalie. The rest of the team was on the ice waiting nervously. This was the playoff game. Just as the game was about to start in dashed Tom. What should Coach Jones do?

That the boys understood the question was clear. When queried Scott said, "I know. The problem is what you should do with the guy that was late because he was supposed to be on time and he wasn't on time so you gotta figure out something to do with this guy.". The alternatives and reasons given also suggested the question of punishment was within their experience. Aaron said, "Maybe he had something to do before the game started." That was not in the problem.

In terms of instructional strategy, perhaps the most important aspect of the question is its form. In the question above it was a dilemma. There was no obvious, "correct" answer. There is no book in

which the boys could have looked up the right and final answer. Further, the dilemma gives a number of important facts and complicates the problem by 1) making the Tom the goalie, and 2) making this the playoff game, and 3) making Tom's action a repeated action. Other suggestions for moral questions are listed in Appendix 1. They are questions that attempt to take into consideration children's interests (ages 7-11) and general development stage. They are, primarily, dilemmas providing no obvious answers. They are also structured to give a significant number of facts to promote multialternatives. Moral questions, however, are not the sole source of evaluative questions. Other disciplines can provide substantive content inasfar as they comply with the conditions set forth. Evaluation of art, literature, and music, for example, can initiate the discussion process such that children are using increasingly explicit, fluent language to express evaluative thinking in a socially, dynamic context.

Environment. Discussion is primarily a discovery method. Ausubel (1962) states that, "the essential feature of discovery learning . . . is that the principal content of what is to be learned is not given but must be independently discovered by the learner before he can internalize it (p. 89)." Clearly, the content of discussion is language expansion, critical thinking development, social development and, where included, moral development. All of which are extant as the child engages in the activity. The quality of participation is, therefore, a major factor in a discovery method of discussion.

Language is the central means of participation in discussion. Freedom of symbolic expression, Rogers (1959) states, is dependent on

"psychological safety (p. 79)." A primary requisite, then, for participation in discussion in which students take risks, try on new ideas, explore relationships, attempt new language structures to express emerging logical relations, is an atmosphere of trust. In order to explore, a child needs a sense of self security, of surrounding trust and support.

For example, when questioned after the discussions as to what helped the discussions, the boys cited aspects which are related to Rogers' concept of psychological safety. Calvin said, "I think because we all got involved," which implies they all felt they could get involved. Scott said, "Well, everybody was willing to give their different ideas or opinions." Robert's answer perhaps showed the most concern for the feeling of a supportive, trusting environment when he replied, "If somebody said something good then they's say, well, you know, that's a nice answer, that's a good answer, you know, I'll go along with that."

The teacher can foster a productive environment by encouraging and modeling a feeling of openness, trust, flexibility (Smith, 1972, p. 67). For example, by accepting alternatives in the formulating stage; insuring that while ideas are critically assessed they are not mocked; giving learners ample time to express their ideas, and supporting ideas through interpretation, clarification and elaboration when the learner has difficulty expressing them. An open, flexible and supportive environment allows for "the playful and spontaneous juggling of percepts, concepts, and meanings which is part of creativity (Rogers, 1959, p. 80)." In the same manner that the babbling infant plays with the sounds of language in order to learn them, the child moving toward logical reasoning

needs the kind of environment in which he can play with language structures and relations in order to develop them.

A questioning technique. Although the child is developing his language, thinking and social skills, primarily through employing them in discussion, the development ought not be left totally to chance. Not only as planner (of context, task and content) but also as guide and model, the teacher structures the learning experience. Questioning, during the activity, is the principal tool of the teacher (Lundsteen, 1976).

A questioning technique has three main aspects: the kinds of questions, the sequence of questions and the pacing of questions. As illustrated in Figure 4.1, numerous educators have constructed models and taxonomies of kinds of questions.

Bloom (1956), Taba (1967) and Guszak (1967) state that the simplest questions are those based on specific facts, dates and events; questions of knowledge recognized or recalled. They can initiate or focus the student on specific information.

Although most of the theorists do not include imagination as a specific task or level of thinking for questions, Guszak includes questions of conjecture, those initiating invention.

Bloom (1956), Taba (1967) and Lundsteen (1976) cite comprehension as the next level of questions; questions that explain, extend, elaborate or sequence knowledge; questions that translate information to give reasons.

A qualitatively higher level of questions are those of analysis

BLOOM (1956)	TABA (1967)	LUNDSTEEN (1976)	GUSZAK (1967)	BUSHMAN (1976)
knowledge --of specifics (emphasis on symbols with concrete relevants) --of terminology --of specific facts (dates, events, persons) --ways and means --conventions --trends and sequences --classification and categories --criteria for evaluation --application, methodology --universals and abstractions --principles and generalizations	initiating or focusing clarifying or extending lifting and evaluating summarizing	selecting facts and details ↓ sequencing ↓ main idea ↓ summarizing ↓ relating ↓ inference making	recognition recall translation conjecture explanation evaluation	elaboration clarification comparison contrast justification evaluation
comprehension analysis application synthesis evaluation				

Figure 5.1

Sources of Taxonomies for a Question Sequence

(Bloom, 1956, Bushman, 1976). These are questions that compare and contrast, classify and categorize, and examine parts of the whole; questions that examine relationships such as reason and consequence.

Finally, in any taxonomy of questions are those questions of evaluation, synthesis and application; questions that bind choice with a justification, an evaluative set of criteria, a principle, a standard, a generalization.

A synthesis of kinds of questions for discussion, then, includes knowledge, conjecture, comprehension, analysis and evaluation.

The sequencing of questions from simple to complex insures that questions do not leap over levels of thought and demand generalizing and abstracting too soon thus causing the discussion to flounder (Lundsteen, 1976, p. 162). The sequence of questions in a discussion serves two ends: to guide students to higher levels of thought and to guide students through the critical thinking stages. Figure 4.2 demonstrates that these are compatible, parallel sequences.

For example, the punishment dilemma outlined in the content was a question posed to the first group of five boys. The first question asked of the boys by the investigator was a knowledge question: "In your own words, what is the problem?" It was a low level (of abstraction) question asking the boys to focus on the specific information given in the problem. It was also, therefore, a question that focused them on the first stage of critical thinking: understanding and focusing on the problem. In this particular discussion it took the boys a while to focus on the facts. Both Calvin and David found it necessary to rephrase Scott's initial explanation of the problem into their own words.

SEQUENCE OF QUESTIONS	CRITICAL THINKING STAGE	EXAMPLE
Knowledge: recognition, recall, focus	UNDERSTANDING AND FOCUSING ON THE PROBLEM	"What information does the problem give us?" "In your own words what is the problem?" "How could this problem be solved?"
Conjecture: Cognitive leap: what could or might happen	FORMULATING ALTERNATIVES	"Can you create an alternative solution to the problem?" "What could or might he do, given this dilemma?"
Comprehension: explain, extend, elaborate, translate; give reasons	SUPPORTING AN ALTERNATIVE	"Why?" "Can you explain further?" "Can you give an example?"
Analysis: compare and contrast. classify, categorize, examine relationships, infer	EVALUATING ALTERNATIVES	"Compare alternatives. What would be the consequences of each?"
Evaluation: evaluate, apply synthesize, generalize.	CHOOSING	"Why have you chosen that alternative?" "What is the similar rule or standard that is common to these three decisions we have reached?"

Figure 5.2

A Taxonomy of Questions for Discussion

Scott opened the discussion by stating that "the problem is what you should do with this guy . . . ." Calvin was then asked, "What else do you know about Tom?" he replied, "Well, he's late. He doesn't race against time . . . . He just takes his time." David said, "He doesn't get to the game when he's supposed to." The second kind of question was more direct because the boys had failed to see the significance of all the facts given in the dilemma: "But what else do we know about Tom? What is he?" The exclamation in the chorus of "a goalie!" foreshadowed the emphasis the boys were to put on the role of the goalie in the championship game.

It is highly probable that without the question to focus the boys on the significance of Tom's position, particularly as it was the championship game, these facts would not have played a significant role in the discussion. The teacher's guiding questions are both influential and directive. She must, therefore, choose carefully.

The next kind of question asked was qualitatively more difficult: "What do you think he should do, Calvin?" It was a conjecture question asking Calvin to formulate an alternative. A question for invention. Calvin responded, "I think he should just tell him to go on the ice to hurry up and get in goalie." This was followed by a comprehension question, asking for support; simply: "Why?" Questions of conjecture and comprehension, that is, questions asking for new alternatives, their support and elaboration were then asked until each member had either given an original alternative or their own reasons for supporting someone else's.

After the alternatives were stated, supported and understood, a

fourth level of question, and subsequently, thinking, was injected: analysis questions for evaluating alternatives. As Fraenkel (1977) claims, the best way to get children evaluating is to have them examine the consequences of actions. Thus, when the alternatives seemed to have been exhausted and the boys seemed to be putting the most emphasis on letting Tom "off the hook" in order to win the game, these questions: "Do you think that's a good idea? Why?" and further, "What would happen then if we let Tom 'of the hook' . . .?" focused them on the relationship of reason and consequence. The final kinds of questions asked, questions of evaluation, involved choosing an alternative and justifying it. The boys reached a compromise: they decided the coach should double the amount of time Tom sits off for each game missed. In other words, they chose but their justification was only implied by their earlier arguments, that is, they felt Tom should be punished, the punishment should match the deed and it should not interfere with winning the game. One further question could have been asked to try and make these rules or standards explicit. However, as it was one of the boys' first discussions this investigator decided they were not yet ready for this stage.

As Lundsteen (1976) states, pacing and timing significantly effect the success of a questioning technique. Pacing means knowing when and where to progress in light of student responses (p. 162). Further, a discussion will flounder if questions leap over levels of thought and demand generalizations and abstractions too soon (p. 162). Timing often means waiting for expression. Slowing down and giving children time to think, then respond increases participation, raises the quality of the response and avoids the frequent inequality of time passage allowed for average or poor students as compared to good students.

The level, sequence, pacing and timing of questions depends on the teacher's sensitivity and comprehension of the students' responses (Lundsteen, 1976, p. 162).

Active Roles of the Learner

The instructional strategies of any teaching method are vital means of defining, for the teacher, the ways of structuring the learning environment in order to foster the child's development in specific skills outlined as the learning aims or objectives. Discussion as an interactive learning method has three central aims, developed in Chapter III and summarized below, that integrate the development of the child's sociability, thinking and language.

The aim of the social function of discussion is best described as the development of the child along the egocentric to sociocentric continuum (Piaget, 1932, 1964). This initial shift is the key developmental factor that allows the child to recognize himself in relation to others, thus necessitating a need for verification. Without the shift toward the sociocentric point of view neither the logical features of thought nor the explicitness of language development occur. Discussion encourages social interaction such that the child is confronted with other points of view differing from his own. Discussion provides the opportunity for legitimately opposing another's will and ideas, for testing the strength, depth and understanding of one's own ideas, for trying on increasingly complex relationships within a problem solving context.

The aim of the cognitive aspect or function of discussion is to develop the child's thinking along the concrete to abstract continuum

(Piaget, 1967; Vinacke, 1954). Although moored to the concrete referent the child is beginning to see relations, to group for classification, to reason, to predict, for the more complex stage of logical reasoning. Discussion focuses on creative problem solving, on critical thinking to provide an external model of reasoning that can be internalized for the individual thought process.

The aim of the language function of discussion is threefold: 1) to develop the explicit expression of the child's thinking (Piaget, 1967; Vygotsky, 1962); 2) to develop the children's language use (Halliday, 1973; Britton, 1971; Moffett, 1968; Lundsteen, 1976; Tough, 1974); and 3) to develop increasingly complex structures (Cazden, 1972; Brown and Bellugi, 1966; Wilkinson, 1971; Smith, Goodman and Meredith, 1970).

Explicitness of language requires an awareness of other points of view. In discussion, the child gradually learns that others do not think exactly the same way or harbour the same opinions and therefore know what he is thinking. Discussion encourages the child to state his own thought and listen for differences in others.

Development of language use entails both expanding the variety of expression and the appropriateness of use. Fluency of expression is a necessary first step but should be tuned to an awareness of conscious control. Discussion gives children practice in expression with an eye toward precision and specific use of language in control for persuasion, exposition, and argumentation.

Finally, discussion facilitates growth toward more complex structures as the participants seek to express increasingly complex

relations. The Alberta Language Arts Handbook (1973) states that,

> The structure of language is a reflection of the structure of thought. Language proficiency will foster cognitive proficiency. Therefore, children need to be taught the language of tentativeness, of hypothesis making and other language structures which facilitate thinking (p. 41).

Form and content, language and thinking, structure and meaning are ultimately inseparable. Thus, as the child's evaluative thinking progresses so too does his language as he seeks to communicate with others.

Ultimately, in a discovery method such as discussion, the individual is responsible for his own learning. The stage is set, the teacher can model and guide but the aims of discussion are not set into motion for the learner until he takes responsibility for his own action, his own participation. Stanford and Roark (1974) suggest one way of encouraging active participation is for the teacher to delegate roles to individual group members, roles such as initiator, contributor, clarifer, summarizer, harmonizer (p. 103). These "roles" can be seen as incarnations of aims or skills, summarized in Figures 3.2, 3.3 and 3.5. Paradigmatically, as the roles of learners multiply, the roles of the teacher diminish. Thus, the learner becomes increasingly responsible, active and autonomous.

Figure 4.3 is a schematic representation, a curriculum model, of the teacher's roles in terms of instructional strategies and the active roles of the learner. At its centre, however, is the character of interaction--the key structural component of discussion.

DISCUSSION AS INTERACTION:

Alternation; A restrictive theme; The building of an idea; Shared language

TEACHER ROLES: Planner, Guide, Model

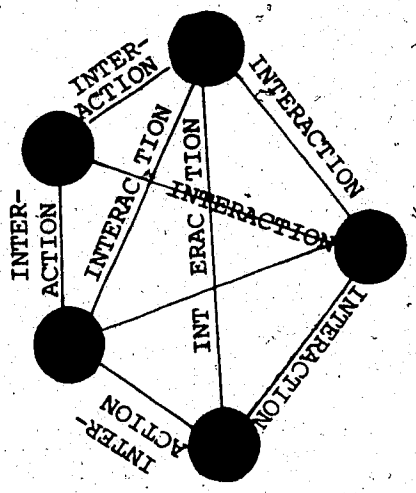
INSTRUCTIONAL STRATEGIES

CONTEXT: five, heterogeneous students with visual contact

TASK: group consensus as to the best solution

CONTENT: evaluative questions e.g., moral

ENVIRONMENT: open, supportive, and flexible



SKILLS AND ABILITIES

SOCIABILITY: (Egocentric---Sociocentric)

CRITICAL THINKING: (Concrete---Abstract)

LANGUAGE EXPANSION: (Implicit---Explicit)

ACTIVE ROLES OF THE LEARNER

QUESTIONING TECHNIQUE
kinds of questions, sequence and pacing

Figure 5.3

A Curriculum Model of Discussion

CONCLUSION

As suggested in Chapter I, various educators have identified a role for discussion in the elementary school curriculum. Yet, in doing so the categories they have employed to outline a curriculum framework for discussion are open to a variety of interpretations.

Discussion, however, does not appear to be an umbrella concept. What this study has revealed is that discussion is more than a teaching method serving other ends or a learning method for developing a potpourri of isolate skills or abilities. The difference consists of the requirement for structured interaction (Figure 3.1) which distinguishes discussion from other language activities. Moreover, it is this structured interaction which establishes the joint and overlapping development of the social, language and cognitive realms of child development.

The curriculum categories and teaching techniques outlined in this chapter are not, at one level, significantly different from those advanced by educators such as Lundsteen (1976), Taba (1967) and Moffett (1968). What distinguishes the categories here is that they are grounded in a prior integration of the cognitive, language and social functions, an integration allowed by the positing of an interactive model.

Taba (1967) suggests that "many teachers are reluctant to use class discussion because of previous unsuccessful experiences (p. 76)." Moffett (1968) and Lundsteen (1976) support this contention. However, a clear understanding of the nature and value of discussion, of the parallel development of language, cognitive and social skills enabled

by discussion and an awareness of discussion's distinct interactive model could serve as a starting point for the rectification of this problem. Lastly, as Taba (1967) concludes,

> . . . teachers who have mastered the use of discussion as a teaching tool testify first that it is well worth doing; second, there is no such thing as a perfect discussion--hindsight will always tell the teacher he could have done something better; and third, the only way to learn discussion strategies is to try them. Teachers, as well as children, learn by doing and by the discovery process (p. 76).

CHAPTER VI

SUMMARY, CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH

SUMMARY

Nature of Discussion

Kliebard (1975) contends that there is a paucity of ordered conceptions in the curriculum field and therefore a need, not simply to stipulate definitions, but to critically analyze the concepts used in order to clarify the chaotic state of curriculum terminology (p. 43). Discussion is one of the concepts esconced in ambiguity. Curriculum theorizers, educators and teachers tend to use "discussion" as an umbrella term conflating task, method and context without clearly delineating discussion from other language modes and often without clearly stating what discussion is.

Theorists such as Lundsteen (1976), Moffett (1968) and Taba (1967), concerned with developing the discussion method, have outlined in general terms how discussion is to be implemented in the classroom. However, as Kliebard implies, the ambiguity of the concept will not be removed until the concept itself is clearly understood. The findings of this investigation support the view that discussion at the elementary school level, used to develop thinking, language and social interaction abilities, is a particular kind of oral mode of interaction and a distinctly social method of learning. Five conditions constitute the interactive nature of discussion: alternation, the restriction of an

implicit or specified theme, an accumulation of statements for the building of an idea, (i.e., a maintained consistency by each speaker of his own line of though whilst responding to the previous statements of others and the existence of a tension between participants characterized by partial and opposing points of view), a shared language and meaning, and finally, the presence of an evaluative question as content. The building of an idea together with the initial evaluative question necessitates critical and logical thinking.

Logical reasoning, although a high level of thinking for the elementary school child, does not obstruct the use of discussion at this age. Theorists such as Piaget (1964), Vygotsky, 1962), Bruner (1966), Tough (1973), Ausubel (1958), and Lundsteen (1976) state that children move toward abstract, logical thinking through experience--interactions with their environments. However, it is interactions with others that is the single most important factor which propels the young child toward higher levels of thinking. At the elementary school age (7-11), children are shifting from implicit acceptance of parental or adult authority to their own rational and objective scrutiny of both moral and cognitive realms. Organized experience, instructional methods and language learning appear to accelerate, expand and elaborate the child's cognitive development. Discussion of evaluative questions situated within the child's experience, interest and abilities not only make discussion possible in the elementary school, but also valuable. The preliminary investigations undertaken and presented in part in previous chapters clearly illustrate the capacity of children to discuss, when these conditions prevail.

Value of Discussion

The value of discussion is derived from its structure. Discussion has the potential for developing the child's language, thinking and social interactions. Interdependent and overlapping, language, cognition and social functions provide both the means and the ends of discussion. Children learn by doing. In discussion children develop their language, thinking and social skills by using them. More specifically, it is the development of the skills and abilities of each function, together with the skills of the functions that comprise the complex skill of discussion. Peters (1963) said,

> The teachers who have taught me most about golf and about philosophy are those who have insisted on conveying an overall picture of the performance as a whole in which the particular moves have to be practiced under the aspect of some wider conception instead of concentrating either on drilling me in moves which are conceived in a very limited way or going simply for the overall picture without bothering about practicing the component moves (p. 258).

The component parts of discussion are extensive. The objective of the social function is to develop the child along the egocentric to socio-centric continuum. It can be understood as two mutually necessary objectives: the ability of an individual to govern himself with reason (i.e., autonomy) and the ability of an individual to interact with others with mutual respect (i.e., reciprocity). These aims are fostered in discussion by structured interaction and are illustrated in skills such as taking turns, listening, staying on topic, welcoming differences, developing own point of view, interpreting, mediating and self control.

The aim of the intellectual function is to develop the child along the concrete to abstract continuum. More specifically, in discussion, the aim is to provide opportunity for the child to develop critical

thinking skills. The structural parts of discussion which incorporate these aims are the evaluative question and the critical thinking process. Thus, the skills and abilities acquired as the child progresses toward abstract thinking are those implied by the critical thinking stages: understanding the problem (focusing, defining); formulating alternatives (invention and clarification); supporting an alternative (giving relevant reasons); evaluating alternatives (examining consequences, comparing and contrasting); and making a judgment (choosing from a justified set of criteria).

The objective of the language function, the central function in discussion, is to expand children's language through extending language use (both relational and ideational), language structures (particularly relational structures) and language meaning. It is primarily concerned with the child's progression along three language continua: 1) making explicit, the child's implicit thinking or meaning; 2) developing his language structures from simple to complex; and 3) moving the child from fluency of uses to control of his language.

But the role of language in discussion does not end here. It also ties together the social intents with the cognitive aims. It is the unifying force, the means of interacting, the tool for thought, and the method of communication.

The three intersecting, interdependent functions used to forge the model of discussion require a particular type of content, the evaluative question, in order to allow for the development of the diverse skills and abilities identified. A variety of disciplines can provide the content for the evaluative question used in the context of discussion.

However, as Wilson (1973) contends, ". . . all cultures and societies that we have at least pay lip service to the notion that education should do more than teach social skills, increase factual knowledge or improve intellectual activity (p. 12)." He is, of course, raising the concern first raised by Socrates of whether virtue could be taught and if so, how--the concern for moral education. Moral questions are motivational for elementary school children, compatible with the process and aims of discussion and, as Wilson points out, significant in themselves. As such, they are appropriate content for a model of discussion. Moreover, the conceptualization of moral education required by the condition of compatibility with the aims of discussion must, as Peters (1963) suggests, "combine a degree of non relativeness at one level with a degree of adaptability at the other (p.249)."

Techniques of Discussion

Constructing a curriculum model for discussion for the elementary school years required translating the aims, structural components, skills and abilities of the three functions into curriculum terminology. They were identified at the curriculum level as the context, the task, the content, the instructional strategies, the teacher's roles and the active roles of the learner.

Findings from existing research studies established that a group of five, heterogeneous learners with good, visual contact provides the most effective small group context for discussion.

Group consensus was evidenced as the most effective task for promoting language, thinking and interacting. This consensus task, however, is most effective if situated against moderate cohesiveness;

that is, there needs to be competing views, a sympathetic tension of partially held views in the participants' attempt to reach the best solution to the evaluative question.

A second stage of discussion involved a restructuring of context and change in emphasis of task. A large group discussion by all members coming together from the small groups allows for an appropriate increase in teacher participation, a change in audience for the speakers (i.e., the audience is more distant, less immediate), and a change in the task, from working toward the best solution to synthesizing the small group's discussion and articulating it for a class presentation.

The instructional strategies of significance for discussion were grouped under three headings: a questioning technique, the critical thinking process and classroom environment. Intricately woven into the strategies are the teacher's roles. As planner, guide and model the teacher's choice of strategies as well as her attitudes, talents and priorities permeate all component parts of discussion. Discussion is primarily a discovery method in that the child learns by doing, partly by trial and error, and partly by experimenting, imitating and verbalizing. Nevertheless, the manner in which the teacher establishes the environment, structures groups, explains the tasks, guides and models determines the effectivity of the discussion method. The teacher must structure the discussion without prejudicing or pre-empting the child's learning.

Finally, the focus of the model is on the active roles of the learner. As Peters (1963) would support, not only is the child getting an overall picture of the whole, actively involved in discussion, he is

also developing the composite skills and abilities which constitute discussion from the areas of language, thinking and social interaction.

SUGGESTIONS FOR FURTHER RESEARCH

The structuring of discussion as a model for the elementary school child (7-11) is an initial step toward its full utilization in the school. The next stage requires a longitudinal study of the model in the field. Ideally, the study would collect a significant number of language samples over a long period of time to chart the development of the child's skills and abilities in discussion. However, an intensive study over a period of two or three months would probably indicate the strengths and weaknesses of the model and the degree or kind of progression in children's abilities. Such a study might also profit from a control of many of the instructional variables outlined in Chapter V.

Other aspects of the model and related hypotheses that can and should be researched include:

1. Teacher Roles and Behavior

   i) The effect of teacher attitudes on the child's development of various aspects of discussion.

   ii) The effect of the teacher's use of competency in instructional strategies such as questioning (the kinds of questions asked, the timing of questions, pacing), critical thinking (knowledge of stages, kinds of reasons) on the child's development in the areas of language, thinking and interacting.

   iii) The effect of different teacher models (e.g., are there

significantly different kinds of models, can they be classified, do they effect the child's development in discussion skills, and if so, how?).

iv) The effect of the teacher's competency as guide (e.g., to what degree does teacher interjection help or hinder the child's own postulation of alternatives or reasons?).

2. The Student

i) The effect of demographic variables such as class, ethnic culture, or residency (suburban, innercity, rural) on the readiness and ability of children to discuss. (e.g., compare the degree of language flexibility, variety of rhetorical uses, in discussion with groups from a suburban and innercity school. Compare the ability to create alternatives with groups from high and low s.e.s.).

ii) The degree of internalization of structure and transference to other areas. (e.g., Given moral questions as content, does the child internalize the structure of the discussion such that he demonstrates a similar sequence of thinking in an individual problem solving task?).

iii) The effect of the interactive aspect of discussion on the child's social development.

3. Content

i) The effect of content on the child's development in language, thinking and social interaction (e.g., compare the differences in degree or kind of abilities developed with different kinds of content).

4. Context

i) Compare the effect of various group sizes on different aspects of the discussion model, particularly interaction.

ii) The effect of different seating arrangements on group participation or peer interaction.

THE CONCLUDING STATEMENT

Oral language is a significant aspect of language arts programs. Its use as a learning method, however, need not be limited to the isolated practice of the component parts of language (i.e., the skills of the flexible, fluent language user). Language is more than its component parts. It is also communication.

Language can be understood exclusively as the communication of ideas. It is, however, clearly more than ideational; it is also social. Particularly in the oral mode the social function of language, the structures used to maintain self identity and integrity, to convey the acceptance of another's ideas, to relate trust and empathy and to persuade are as important as the structures used to convey meaning in the total communication process.

Oral language tasks such as reporting, puppetry, story telling and show and tell in the elementary school setting, although developing isolated language skills, do not insure practice and development of the dynamic dialectical aspect of communication. The acquisition of this social dimension of language should not be left to chance. Wholistic, interactive, and integrative methods such as discussion can be utilized to develop in the learner a balance of ability and an

understanding of both dimensions. The discussion method, developed in this study, allows the learner to develop the skill of communicating ideas in a social context.

However, not any discussion will do. A careful structuring of the discussion method, based on a clear conceptualization of the nature and value of discussion is crucial to insure the presence of both aspects of language. The conceptualization of discussion developed in this study provides a model that is meant to insure this integration. It is a model of discussion which takes as its general objective the development of language for interpersonal communication.

The significance of this study lies in the specific framework it provides educators. It is a framework that is meant to aid educators in the utilization of a logically consistent and well grounded approach to developing children's language through discussion.

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APPENDIX I

EXAMPLES OF MORAL QUESTIONS FOR ELEMENTARY SCHOOL CHILDREN

APPENDIX I

Fred promised Alan to meet him after school to walk to hockey practice together. On the way to meet Alan Fred is offered a ride to the game with another friend. They don't have time to tell Alan or pick him up. If he takes the ride he'll be on time, if he walks with Alan he'll be late. What should Fred do?

Marilyn promised Jennifer to meet her at the bus stop, 2:00 p.m., Saturday. They were going to a show. On the way Marilyn sees a little boy crying because he is lost. Should Marilyn keep her promise to Jennifer or miss the bus and the show to help the little boy?

You've promised your mother you'll clean your room after school. During school your teacher asks for volunteers to construct a six foot rocket for the school play. You offer and are chosen. After school you suddenly remember your first promise. What should you do?

Mrs. Black has two sons, John and Jake. John is good at everything he does, Jake isn't very good at the things he has tried and does not think very positively about his own talents. Mrs. Black wins a prize of a year's piano lessons. John is interested and shows talent, Jake doesn't. Who should Mrs. Black give the lessons to?

Suppose you are coach of a baseball team that has to play a championship game. All you can muster is four gloves. But, as you know, there are nine players on your team. Who should get the gloves?

You are a teacher and to decide what type of field trip to go on you ask the children in your class. There are twenty children, eighteen want to go to a circus, the other two want to go to the opening of a new library that is putting on an art show and classical concert for school children. Who should the teacher listen to in making her decision?