This paper describes a research project in which a moral education curriculum was incorporated into primary and secondary school classrooms in four schools in the Toronto area. The background theory which is presented is developmental in perspective. The interactionist viewpoint, an important aspect of the theory, states that development is jointly determined by the interaction of internal and external factors. Two conceptual schemes of the stages of moral development are presented as formulated by Piaget and Kohlberg. A theoretical model is described and explained as it relates to the moral education programming used in the study. Two general educational approaches were employed: (1) mini-courses on values issues in which the determination of course content and structure revolved around teacher and student learning, and (2) an "event" approach in which the researchers provided a variety of learning activities based on evidence of the students' stage of development. Pre- and posttests used to determine the stage at which each child was thinking were analyzed statistically. The results, presented in table form, are discussed in terms of the stages of moral development. (SDH)
A Developmental-Interactionist Perspective to
Moral Values: Some Results with Exploratory
Studies in Primary and Secondary
School Years

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Introduction

To give a paper on the development of moral values means that a
psychologist must reflect on some of the value dimensions of his own
discipline. One of the problems which educators encounter when looking
for guidelines in this area is that of a vacuum. With the exception of the
work of Lawrence Kohlberg, it may be safely said that during the past three
decades or more, psychology -- the so called science of behavior -- has
attempted to evade coming to terms with ethics, the science of ends, norms,
good, right and choice. David Ausubel and I have argued elsewhere (Ausubel
& Sullivan, 1970) that the focus of psychological concern has been an
adjustment as an end in itself, the contention being that moral values are
subjective and unverifiable. According to this view moral judgments are

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of Ontario. I would also like to acknowledge the cooperation of my colleagues
in this area, Dr. Clive Beck, Ms. Maureen Joy and Mrs. Susan Panliuso.
matters of arbitrary preference and opinion beyond the pale of science; no objective psychological criterion is possible. Behavior may be appraised as constructive or anti-social, but never as good or evil. The purpose of psychology is to explain conduct, not to judge it; questions of accountability are held to be irrelevant in the light of psychological determinism, and hence the proper concern of only jurists and philosophers (Ausubel & Sullivan, 1970). In short, this general orientation may be referred to as "value free social science."

The line of argument that this paper will assume is that to ignore ethical considerations is to overlook one of the most significant components of human conduct. Whether the psychologist chooses to recognize it or not, most purposeful behavior in human beings has a moral aspect, the psychological reality cannot be ignored. When the educator in the schools ignores this aspect, values become part of the "hidden curriculum". The goals of human development, insofar as they are determined by man and culture, are always predicated upon certain moral assumptions. These assumptions are pervasive in all socializing institutions, whether they be the family or the wider educational institutions like the schools.

Psychologists have not been alone in espousing a "value neutral" position. Many educators, in the recent past, have insisted that schools should not be concerned with character and moral education, arguing that parents should have the sole responsibility for this important function. Few would disagree that parents play a significant part in their children's character and moral upbringing. On the other hand, it is naive to think that the school is uninvolved in this process.
Martin Buber talks specifically to this issue in a chapter on the "Education of Character" (Buber, 1947.)

"Does it follow that one should keep silent about one's intention of educating character, and act by ruse and subterfuge? No; I have just said that the difficulty lies deeper. It is not enough to see that education of character is not introduced into a lesson in class; neither may one conceal it in cleverly arranged intervals. Education cannot tolerate such polite action. Even if the pupil does not notice it the hidden motive will have its negative effect on the actions of the teacher himself by depriving him of the directness which is his strength...For educating characters you do not need moral genius, but you do need a man who is wholly alive and able to communicate himself directly to his fellow beings. (p. 133-134)"

Now in North American education, probably one of the most pervasive figures to write on the direct role of the educator in the moral education of the child has been John Dewey (Dewey, 1959). For Dewey moral education was an intricate part of reflective intelligence. To quote him:

"We have associated the term ethical with certain special acts which are labelled virtues and are set off from the mass of other acts....Moral instruction is thus associated with teaching about these particular virtues, or with instilling certain sentiments in regard to them. The moral has been concerned in too goody-goody a way. Ultimate moral motives and forces are nothing more or less than social intelligence...There is no fact which throws light upon the constitution of society, there is no power whose training adds to social resourcefulness that is not moral. (Dewey, 1959, p. 42)"

Dewey lamented the separation of intellectual and moral training, since it was indicative of a failure to conceive of the school as a social institution with responsibility for character and moral education. In Democracy and Education Dewey made note of a paradox which often accompanies discussion of morals. On the one hand, morality is identified with rationality, where reason is the faculty for critical deliberation of moral choices. On
the other hand, morality is often thought of as an area in which ordinary knowledge and intellectual skills have no place. Dewey saw this separation as having a special significance for moral education in the schools, since, if valid, the acquisition of knowledge and understanding would be treated as something separate from character development. The ultimate outcome of this separation would be the reduction of moral education to a form of catechetical instruction, or to lessons about morals. An alternative outcome would be to leave this problem of moral character education to the child's parents and delude oneself into believing that schools have nothing to do with this matter.

Now it is apparent from the writings of Montessori, that she was most sensitive to the moral and religious dimensions of education. In fact in most of her works that I have read, there is an implicit moral fervor. Nevertheless, it was clear in her mind that she had not dealt adequately with the moral dimensions of the curriculum. At the end of her chapter on "Imagination" (Montessori, 1965); a chapter which, as you are probably aware of, deals with moral issues, she concludes:

"The moral question is barely indicated. Such a work, indeed represents an experimental contribution to the education of the intelligence...I cannot foresee whether I and my colleagues will be able to bring such a heavy task to a successful conclusion. (p. 355)."

Now I am not aware of the literature of the Montessori schools outside of its foundress. With this fact in mind, I would hope that the ideas that will be developed henceforth will be somewhat of a contribution to the Montessori literature on the topic of moral education without repeating efforts already made by others without my knowledge.
A Developmental Perspective

David Hunt and I have argued (Hunt and Sullivan, 1974) that to regard a child in developmental perspective is to see his present behavior in relation to past changes and to future growth. Thus, “a characteristic is said to be developmental if it can be related to age in an orderly or lawful way” (Kessen, 1960, p. 36). Attempts to conceptualize these changes over age have led to the use of stage descriptions, or as Kessen (1962) puts it:

“Men seem always to have felt a need to impose segmentation on the complicated course of human development. Although it has usually been argued that development is continuous and without discrete shifts, more often than not the arguer has early called on the notion of stage or level to help him understand the speed and fluidity of change in children. (p. 55).”

Dewey (1902) has stated the value of developmental stages most eloquently:

“Of what use, educationally speaking, is it to be able to see the end in the beginning? How does it assist us in dealing with the early stages of growth to be able to anticipate its later phases...? To see the outcome is to know in what direction the present experience is moving, provided it moves normally and soundly. The far-away point, which is of no significance to us simply as far away, becomes of huge importance the moment we take it as defining a present direction of movement. Taken in this way it is no remote and distant result to be achieved, but a guiding method in dealing with the present....

Interests in reality are but attitudes toward possible experiences, they are not achievements, their worth is in the leverage they afford, not in the accomplishment they represent. To take the phenomena presented at a given age as in any way self-explanatory or self-contained is inevitably to result in indulgence and snirling... Its genuine meaning is in the propulsion it affords toward a higher level. It is just something to do with. (pp. 12-15).”
Conceptions of Growth

The question of how persons develop is one aspect of one's conception of human nature, and a psychologist's conception of development and change is probably the most central feature in his theoretical outlook.

Conceptions of development may be considered in relation to their emphasis on person, environment, or the interaction of person and environment (Ausubel and Sullivan, 1970). If the major factors in development are the person (internal) and the environment (external), the various concepts of growth and development may be seen as (1) theories that locate the source of development within the person, (2) theories that locate the source of development outside the person in the environment, and (3) theories that view development as jointly determined by the interaction of internal and external factors.

These three concepts are not categorically distinct, because no internal conceptions completely disregard external factors, but they do differ in the emphasis placed on one or both factors (Hunt & Sullivan, 1974). For our purposes we will dwell on an interactionist conception of growth since it best serves the interests of the present topic.

Interactive Concepts of Development

Most interactive concepts are stage theories that specify different environments to facilitate development, depending on the person's present stage of development (Ausubel and Sullivan, 1970; Hunt and Sullivan, 1974). A comprehensive theory of development should specify the sequence of the stages of development as well as the transition rules (that is, stage-specific environmental prescriptions) producing developmental growth (Kessen, 1962).
Just as person-environment combinations may be considered matched for certain behavioral purposes, the relation between person and environment may also be considered matched or mismatched for purposes of developmental progression, or as Joyce and Well (1972) put it:

"In other words, if the growth of the individual is a product of his environment, then teaching becomes a process of matching environments to individuals. (p. 164)."

If there are few interactive concepts in psychology, there are even fewer in education. The most articulate example of an interactive concept is Montessori's postulation (1939) of "sensitive periods" in the development of the child that call for certain forms of specific stimulation from the educational environment.

"Children pass through definite periods in which they reveal psychic aptitudes and possibilities which afterwards disappear. That is why, at a particular epoch of their life, they reveal an intense and extraordinary interest in certain objects and exercises, which one might look for in vain at a later age. During such a period the child is endowed with a special sensibility which urges him to focus his attention on certain aspects of the environment to the exclusion of others. (p. 252)."

Montessori postulated sensitive periods for language, order, refinement of the senses, and so on. These periods bear some relation to the concepts of critical periods proposed by the ethologists. It is not entirely clear from Montessori's description whether the child's failure to receive adequate, specific stimulation during a sensitive period merely limits the child's behavioral repertory or places irreversible restrictions on subsequent development.
Now when Montessori wrote she had very few empirically derived developmental theories to draw on. Had she known of the work of Piaget and Kohlberg she, no doubt, would have applied her conception of "sensitive periods" more directly to the area of value development in children. Since our own work on moral education has been informed by these theories, it seems appropriate, and I hope not repetitious for some, to summarize their theoretical positions in order to develop our own position on the importance of a developmental perspective.

Developmental Theories of Moral Reasoning

Piaget in Switzerland and Lawrence Kohlberg in the United States, have achieved wide recognition for their research and theorizing on moral development. Kohlberg's research is largely an outgrowth of Piaget's pioneering work in the field.

Piaget (1932) presented children with a series of paired stories centering on a moral issue and asked the children to make judgements as to the naughtier action and the extent of culpability. The following is an example.

a) There was once a little girl who was called Marie. She wanted to give her mother a nice surprise, and cut out a piece of sewing for her. But she didn't know how to use the scissors properly and cut a big hole in her dress.

b) A little girl called Margaret went and took her mother's scissors one day when her mother was out. She played with them for a bit, and then, as she didn't know how to use them properly, cut a little hole in her dress.
Younger children judged Marjorie the naughtier child because she had done the most damage, whereas older children judged Margaret naughtier because of her intentions. On the basis of these age differences in response to this and other stories, Piaget formulated a two-stage theory of moral development.

A heteronomous (objective) stage (approximately four to eight years) is based on an ethic of authority. The child views moral rules and restraints as laid down from above. Rules have a literal interpretation, are sacred, and cannot be changed. An act is morally wrong because it is defined in terms of adult sanctions (i.e., an act is wrong if it is punished by an adult). The child believes in "imminent justice" in which the punishment follows invariably upon a violation; its severity varies directly with the magnitude of the consequences of the action, and ignores the motive which inspired it. Because of the child's intellectual limitations, moral rules are considered external; this lack of an internalized rule system encourages adherence to external punishment by superordinate adults. Thus, moral duty is simply seen as obedience to adult authority.

Piaget calls the second stage autonomous (subjective) morality (approximately eight years and above). This type of morality is egalitarian and democratic; the child operates on his "own moral rules" inspired by mutual respect and cooperation with others. Piaget (1932) maintains that autonomous morality arises from the child's interaction with his peers. The movement away from unilateral respect for adults and the increasing development of mutual respect and solidarity with peers helps the child realize that rules are compacts, arrived at and maintained by equals, in the common interest. Rules are no longer sacred and can be changed by mutual
consent and in extenuating circumstances. Punishment is not an absolute necessity and, in place of being expiatory, it is now specific to the infraction. Moreover, when punishment is deemed necessary, it is aimed at reciprocity or restitution, and is guided by a principle of equity which takes into consideration the motive underlying the act and the circumstances under which the transgression was committed.

Kohlberg's (1971) work is a more sophisticated extension of Piaget. Unlike Piaget, whose research is based on the young child, Kohlberg's normative model is derived from late elementary school students to adults. He presented students with 10 moral dilemma situations and asked them to judge the morality of conduct described in the stories. The following is an illustration of the conflict stories presented for evaluation.

In Europe, a woman was near death from a special kind of cancer. There was one drug that the doctors thought might save her; it was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost him to make. He paid $200 for the radium and charged $2,000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about $1,000 which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money from it." So Heinz got desperate and broke into the man's store to steal the drug for his wife.

Should Heinz have done that? Was it actually wrong or right? Why?

Kohlberg identifies six stages and to some extent they are his descriptions of moral character. There are three levels of morality
which encompass the six stages. The lower stages are seen in the elementary school years, the middle stages are seen in most high school students with a smattering of the later stages in the later high school years. The stages and levels of moral maturity are described briefly as follows:

**Level I - Pre-moral.** Responses at Level I are similar to Piaget's heteronomous orientation. Moral value resides outside the individual in external, quasi-physical happenings, i.e., bad acts or in quasi-physical needs, rather than in internalized standards. There are two stages within Level I.

Stage 1 responses are based upon an obedience and punishment orientation. An individual must act in a certain way to avoid punishing consequences. There is an egocentric deference to a superior authority that is external to the self. For example, a Stage 1 response to the Heinz dilemma is that Heinz should steal the drug because "if you let your wife die, you will get in trouble. You'll be blamed for not spending the money to save her, and there'll be an investigation of you for your wife's death." In this example, the respondent would act only out of fear of punishment to himself. Or similarly, "you shouldn't steal the drug, because you'll get caught and be sent to jail if you do". Again, there is no internalized sense of right or wrong -- only a fear of the consequences.

Stage 2 responses are also pre-moral, insofar as individual responsibility is defined in a hedonistic, instrumental manner. The individual has surpassed a point of total deference to authority and rules, and is better able to evaluate an act's consequences. However, right and wrong are viewed very egocentrically in terms of the pleasure that one will derive
from the act. For example, "If you do happen to get caught you could give the drug back and you wouldn't get much of a sentence. It wouldn't bother you much to serve a little jail term if you have your wife when you get out." Or, "He may not get much of a jail term if he steals the drug, but his wife will probably die before he gets out, so it won't do him much good?" The Stage 2 respondent has no moral commitment, and would act in terms of personal pleasure only.

Level 2 respondents are similar to Piaget's autonomous orientation. Individuals operate from internalized rules that base moral decisions upon performing good or right roles, or maintaining the conventional order and expectations of others. Within the Conventional Role Conformity Level there are two distinct stages.

Stage 3, the most common response orientation in our society, is based upon directing one's actions toward pleasing and helping others. There is an emphasis upon conforming to roles prescribed by the majority, and an individual's intentions are the basis of right-wrong judgements. Examples of Stage 3 responses are as follows: "No one will think you're bad if you steal the drug, but your family will think you're an inhuman husband if you don't. If you let your wife die you'll never be able to look anybody in the face again." Or, "It isn't only the druggist who will think that you're a criminal; everyone else will too. If you steal knowing that, you'll dishonour your family and yourself."

Stage 4 responses are also of a conventional form; however, they are motivated by an internalized sense of respect for law and authority rather than
peer group pressures. The respondent is preoccupied with maintaining the social order and right or wrong are judged in relation to that objective. Stage 4 respondents have an internalized sense of duty, but it is very rigid, and motivated by the expectation of dishonour when one's duty is not fulfilled. "Man's primary duty is to uphold the laws of society. If Heinz steals the drug, he will set an example that could cause anarchy and the destruction of more lives than his wife." Or, "If you have any sense of honour, you won't let your wife die. You'll always feel guilty that you caused her death, if you don't do your duty to her."

Level 3 in Kohlberg's classification scheme, is Self-Accepted Moral Principles. Respondents functioning at this level are able to understand the premises underlying conventional morality, and can examine the arbitrary nature of conventions and laws. There are two stages within the Level 3 post-conventional orientation.

Stage 5 respondents define duty in contractual terms. Something should be done because free men have agreed to it, and breaking an agreement is incompatible with your welfare as well as the welfare of others. A social order must be based on consent, but consent must be respected. Respondents at this stage differ from those at the conventional level insofar as they do not view convention or law as fixed. Conventional obligations must be maintained only as part of a shared agreement. For example, "Although Heinz would be breaking the law to steal the drug, what good is the law if it prevents his wife from living. The druggist's actions are totally immoral, and Heinz has no choice but to steal the drugs."
At Stage 6 respondents view their duty in terms of internalized universal principles. Social rules can be justified if they are compatible with moral principles; however, the individual is obliged to disobey immoral rules. For example, "Heinz must steal the drugs if his actions are to save a human life. A law that permits his wife to die is an immoral one, because it violates the universal principle that everyone has an equal right to life. Heinz must disobey this law because it is incompatible with the well-being of mankind."

Coordinating a Person-Environment Matching Model in a Moral Education Context

In a broader educational context, David Hunt and I have developed a heuristic model that we call the B-P-E (Hunt and Sullivan, 1974). The B-P-E model was designed to explore the complex relationship of person (P), environment (E), interactions and how this effects educational outcomes or behaviors (B). The following diagram is an example of the general form of a B-P-E interaction

<table>
<thead>
<tr>
<th>Person</th>
<th>Environment</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>X</td>
<td>I</td>
</tr>
<tr>
<td>B</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1. Taken from Hunt and Sullivan, 1974, p. 119.
The diagram is shorthand for the statement, "For Person A, Environment X is likely to produce Behavior 1, while for Person B, Environment Y is likely to produce Behavior 1." The diagram may also be translated into environmental terms to read, "Environment X is more likely to produce Behavior 1 in Person A than in Person B, while Environment Y is more likely to produce Behavior 1 in Person B than in Person A."

Statements of person-environment interaction can thus be phrased in different forms for different purposes (Hunt and Sullivan, 1974).

In order to utilize the model within the context of moral education, we need to consider how we know that Person A and Environment X and Person B and Environment Y are matched. Here we cite the work of Kohlberg, and colleagues Kohlberg and colleagues (Kohlberg, 1971; Turiel, 1969) to elucidate a potential matching procedure. Referring back to Kohlberg's stage breakdown these investigators cite research which indicates that an individual accepts moral arguments one stage above his own dominant position more readily than he accepts those two stages above, or one stage below the dominant stage. Hunt (1971) diagrams this matching procedure as follows:

| Moral Maturity Matching Model
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Stage level of environmental stimulation</td>
</tr>
<tr>
<td>Stage of person's</td>
</tr>
<tr>
<td>moral maturity</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>Stage 2</td>
</tr>
<tr>
<td>Stage 3</td>
</tr>
<tr>
<td>Stage 4</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

Table 1. Moral Maturity Matching Model (+ = matched; 0 = mismatched)
Taken from Hunt, 1971, p. 745.
The above table is to simply show the potential of the B-P-E model in the context of research in moral development. A more sustained analysis of this model in a moral education context will now be developed. For this we will be citing, in summary form, our work completed in the last four years at the Ontario Institute for Studies in Education (Sullivan and Beck, 1972; Sullivan, Beck, Joy and Pagliuso, 1974).

Application of the B-P-E Model

In Moral Education Programming

In order to see our work within the B-P-E framework it is necessary to break our analysis down and clarify the conceptualization of persons (P), the conceptualization of the environment (E), and the conceptualization of educational goals (B) and their interaction (B-P-E).

Conception of the Person (P)

Let me say at the outset that I share with Montessori the sense of mystery about human "personhood" (i.e., the Absorbent Mind). It is patently clear at this point that no psychological conceptualization of the person exhausts our understanding of the human personality. Thus, in conceptualizing the person it is clear that any categorization will have its limiting conditions. For our purposes we will be conceptualizing the person in "stage developmental" terms; specifically using Kohlberg's structural analysis. The choice has arbitrary components about it, but it is safe to say, at this point in time, that anyone involved in moral and value education must think twice before ignoring Kohlberg's analysis (Kohlberg, 1971). Our own specific use of Kohlberg's stage framework stems from the fact that it specifies the person...
In developmental terms, 2) aids the specification of types of environments that need to be radiated at different age levels (Hunt and Sullivan, 1974) and; 3) helps in the specification of educational goals. Let me briefly schematize here the stages already discussed.

**Level I: Premoral**

- Stage 1 - obedience and punishment orientation
- Stage 2 - Naive egocentric orientation

**Level II: Conventional Role Conformity**

- Stage 3 - Good boy - nice girl orientation
- Stage 4 - Authority and social order maintenance orientation

**Level III: Autonomous Morality of Principles**

- Stage 5 - Contractual legalistic orientation
- Stage 6 - Conscience or principle orientation

Normative cross-sectional data in Canada indicate a stage developmental sequence in moral judgement capacities as postulated by Kohlberg and colleagues (Kohlberg, 1971) (See Figures 2, 3, and 4). Figure 2 is analyzed in quantitative rather than quantitative stage terms but the essential findings by Sullivan, Stager and McCullough, 1970, indicate a general movement from pre-conventional to conventional stages between the ages of 12 and 17 years. This sample also shows some small indications of post-conventional thinking in the 17 year old sample. Figures 3 and 4 are from mixed samples which we have accumulated over several years. The latter figures are in stage specific terms. From figures 2, 3, and 4 we have come to the tentative conclusion that the early elementary is characterized by pre-conventional stage 1 and stage 2 thinking. In Piagetian
terms, a heteronomous moral orientation. Throughout the late elementary school years there is a general movement to conventional stage 3 and 4 thinking and there is some indication in the late high school years of some post-conventional thinking in a small number of students.

Conception of the Environment (E)

The teacher must create an environment, or teaching method, and the educational decision maker must select among environments, or educational approaches (Hunt and Sullivan, 1974). Here we consider such activities as teaching methods and instructional programs as well as school climate to be features of the educational environment (Hunt and Sullivan, 1974).

"If we state the B-P-E formula from the teachers' standpoint, it becomes E : P B (or, an environment radiated toward a Person produces a Behavior). The E : P B formulation emphasizes that central nature of the environment. Since the environment is the major component over which the teacher has some control, a language for describing the environment would provide a basis for describing what the teacher does (Hunt and Sullivan, 1974, p. 85)."

The conceptualization of an environment should give some indication of the critical features of that environment that have potential educational relevance; in this case relevance for moral education. Table 2 exemplifies the range of critical features in which environments (E) can be conceptualized.

### Table 2

(Taken from Hunt and Sullivan, 1974, p. 90).

<table>
<thead>
<tr>
<th>Environmental Unit</th>
<th>Size of Unit</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cultural setting</td>
<td>Large</td>
<td>Remote</td>
</tr>
<tr>
<td>2. School setting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. School characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. School organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Teacher personality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Teacher attitude</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Teacher behavior</td>
<td>Small</td>
<td>Immediate</td>
</tr>
</tbody>
</table>

Table 2. (Taken from Hunt and Sullivan, 1974, p. 90).
In many of Montessori's writings, she implicitly has addressed both the macrosocial (i.e., Cultural settings) and microsocial (i.e., teacher behavior) aspects of the environment. In her chapter on the "Imagination" she shows herself sensitive to the wider social structure variables that influence the course of development (Montessori, 1965).

For the most part however, she dwells on the more specific features of the environment which center on independence training, autonomy and effectance (Montessori, 1964). Here, a considerable emphasis is put on the development of a "competent child" (cf., M. Brewster-Smith, 1968). In this context she criticizes environments which discourage the development of competence and autonomy:

"If the spontaneous forms of organization we have just described could be admitted to the ordinary schools this would work wonders. Instead, teachers do not believe that students are active learners. They drive or encourage, or give punishments and rewards to stimulate work. They use competition to arouse effort. One may say that all are forced into a hunt for evil for the sake of combating it, and a typical attitude of the adult is to be always looking for vice in order to suppress it. But the correction of errors is often humiliating and discouraging and since education rests on this basis, there follows a lowering in the general quality of social life. In the schools of today no one may copy another's work, and to help someone else is regarded as a crime. To accept help is as guilty as to give it, so the union we spoke of fails to be formed. Normal standards are debased by a rule arbitrarily imposed. At every turn, one hears: 'Don't play about', 'Don't make a noise', 'Don't help others with their work', 'Don't speak unless you are spoken to'. Always the injunction is negative (Montessori, 19, p. 240)."

It is clear from the above quote that Montessori had some strong admonitions against external forms of praise and blame. As I interpret her, she would be clearly critical of environments which en-
encourage a moral orientation tantamount to Kohlberg's level one. Moreover, I detect an encouragement of a school atmosphere which facilitates a stage 3 good boy-nice girl orientation:

"The liberty of the child should have as its limit the collective interest; as its form what we universally consider good breeding. We must therefore check in the child whatever offends or annoys others, or whatever tends toward rough or ill-bred acts. But all the rest, - every manifestation having a useful scope, - whatever it be, and under whatever form it expresses itself, must not only be permitted, but must be observed by the teacher (Montessori, 1964, p. 87)."

The Montessori environment places a strong emphasis on intellectual development in relation to the child's moral development:

"To respond to the intellectual needs of man in such a manner as to satisfy them is to make an important contribution to morality. Indeed our children, when they have been able to occupy themselves freely with intelligent work, and have also been free to respond to their internal wants, to occupy themselves, for a long time with chosen stimuli, to perform abstract operations when they were sufficiently mature, to concentrate their minds in meditation, have shown that order and serenity have been evolved within them; and after this, grace of movement, the capacity for enjoyment of the beautiful sensibility to music, and finally, amenity in their relations to each other, have sprung up like a jet of water from an internal fount (Montessori, 1965, pp. 333-334)."

This is not the place to criticize individual statements out of context, although I would have a number of questions and criticisms of the moral atmosphere of Montessori schools as I interpret them. The statements on Montessori were quoted in order to show how one might focus on critical features of an educational environment in the context to moral education. At this point it's
appropriate to look at some environmental features that seem to be operating in our own work. For the most part we will be discussing our work in the elementary schools, since this part of our efforts seems of most interest for the age levels covered in the Montessori schools. My brief discussion into our secondary school studies will be to amplify my emphasis on the importance of a "developmental perspective."

Moral Education in the Elementary School

A major consideration in trying our hand at moral education in the elementary school years stemmed from our desire to understand children's thinking on value issues during the middle years of childhood. As already indicated, our normative data indicated a movement from Kohlberg's pre-moral level of thinking to the conventional level during the elementary school years. Our research and development was partly guided by this developmental perspective and at the outset we chose fifth graders with a view to following these students for at least three years (Sullivan, et al, 1974). Initially, education officers of a neighboring county encouraged and authorized our work. Assessment of students' moral judgment stage was made in four schools of this county. Two of the project members ran pilot courses in two of the schools. Thus, a central component of our work with the elementary schools has included a research (assessment) and development (teaching) focus. In the second year of the project we were also able to teach classes in three Toronto schools. Our comments on teaching strategies represent a composite of experiences.
As children begin to live in more structured school societies, they need and deserve assistance in examining rules, roles and rights of the school community. In fact, the school, as a miniature society, is a powerful resource for the child's introduction into the larger world. The socializing power of the school has long been recognized and has a hidden-agenda which promotes conformity. Following cognitive developmental theory, school authorities are the main distributors of punishment and reward for conformity and compliance. Indeed, one can make the case the marking system successfully engages the pupil in the system. The school can also encourage fellowship, law, and order and lead the student to conventional levels of morality.

Rationale for Teaching Approaches

Our general criteria for selection of teaching approaches for middle school students were these (Sullivan, et al., 1974):

1) Selection of topics relevant to students' life situations. We have used a contextual rather than an individualistic approach. We sought to deal with issues that ought to be termed "the individual and society." Our work cannot be termed 'guidance' or sensitivity training.

2) Selection of topics readily adaptable to different approaches based on the background, interest, concerns of different groups of students. (i.e., a matching perspective)

3) Selection of methods that stimulate cognitive moral development. Initial testing and evidence of other investigators showed that fifth grade students are at a pre-conventional level of moral reasoning. We did not confine ourselves to a single moral dilemma approach. Instead we experimented with a variety of methods—all designed to stimulate analysis, discussion and response to value issues.

4) Selection of methods that would draw on student resources,
on their own power to help each other work through problems and issues.

Beck's suggestions for a teaching approach that gives students a sense of structure and order is labelled the "theoretical discussion" method (Beck, 1971, 1974). Beck has outlined topics for fifth and sixth graders under the broad heading "Human Relations" (Beck, 1971). For each of the topics he offers a basic principle and guiding questions for the discussion. At first glance this structure seems rigid, but in fact, it allows ideas to be examined within a broad framework. The usefulness of his method is largely a function of teaching style. Teachers who prefer a disciplined (in the best sense of the word) approach to learning how to examine issues find this structure very helpful.

In the second and third years of the project we have worked with teachers who themselves have expanded, modified, provided alternate structures for dealing with "Human Relations".

Description of Students, School Settings

We have introduced programs of moral education into two county schools and two Toronto Schools. Our county work has included yearly assessment of students' level of moral development combined with an experimental teaching program. The Toronto work has focused primarily on experimental approaches and in-service education of teachers.

The county schools, (Stonebridges and Water House - Highbrook) located about forty miles from Toronto*. Stonebridges is a "traditional" school, the other an "open plan" school. The terms refer to architectural structure. Students in both schools belong to a suburban farm community setting. It is impossible to give the label "middle class" "rural". We did find however that the Stonebridges classes seemed a clearer unit than classes at Waterhouse-Highbrook. This seems largely due to the

*School names are disguised.
fact that Stonebridges is in the downtown area. All children live close
to the school (most within walking distance) and share out of school
experiences. Waterhouse Highbrook is a remote section of a nearby town.
Ninety-five percent of the four hundred students are bused to the school.

We selected two city schools in the second year of teaching--
again one "traditional" school and one "open plan" architecturally. Both
schools draw students from middle class residential areas. Again, it is
impossible to stereotype the students. The mix is ethnic: Canadian,
Chinese, British, Indian children are students in these classes.

It is of real significance that no schools in the elementary aspect
of the project are in low income areas.

Teaching Format: Issues and Problems

As noted above we designed mini-courses that would encourage
reasoning on value issues. The first year of the project emphasized the
"theoretical discussion" method. It was very clearly a deductive approach.
The second and third years might be termed "event study", an inductive
approach designed to stimulate involvement, response and unfolding of
principles. We use the term "event study" in its broadest sense--current
events, hypothetical situations, personal or school vignettes, etc. Both
approaches are dynamic in that they require close attention on the part
of the teacher to content, structure, pace, and range (Sullivan, et al,
1974).

Decisions on specific content, structure, pace, and range,
revolved around maximizing both teacher learning and student learning.
A comparison of the two approaches focusing on these four points reveals the advantages of both and the broad issues and questions that emerge in elementary school moral education programs.


Children were given study notes on each of these topics. They thus had a structure—a sense of direction for the learning session or sessions. The following is a sample of discussion material for the first topic "Rules people give us"!
Principle for Discussion

Rules and principles given to us by other people are not always good. Often we should take no notice of them at all. Sometimes we should change them a bit to make them better. Sometimes we should make up our own rules.

Possible Examples

1. In some schools, children are given the rule: "Never talk to another child in the classroom." Is this a good rule? Why?

2. In some families children are told: "Never break a promise." What do you think about that rule?

3. Often children are taught by others to follow the rule: "If someone pushes or hits you, always hit him back." Is that a good principle?

4. Some parents tell their children: "Always read what your teacher tells you to read." Do you feel that is right?

5. On television, we might be told: "Always use Nodelay toothpaste." Should we follow this rule?

Some Ideas and Theories

(a) Some people believe that all rules are good. They feel that if there is a rule in society, it must be a good one, because otherwise why is it there? Do you agree with this way of thinking?

(b) It may be, however, that a bad rule is made because of a mistake. For example, in the old days, doctors used to follow the rule of taking blood from people when they were ill so as to make them better. But this was a mistake. In most cases it was the wrong thing to do. Also, in the old days, people used to burn women to death if they thought they were witches. But this, too, was a mistake, as there is no such thing as a witch. Do you think that bad rules are still sometimes made today because of mistakes?

(c) Sometimes, perhaps, bad rules are given to us for self-centered reasons. People want us to do something which is good for them; so they persuade us to follow a rule which will help them, without really caring about us. For example, commercials on television and in the newspaper are often like that. The person who makes the toothpaste or ballpoint pen or chocolate bar may be more concerned with selling his product and making money than with satisfying us. Or again, sometimes when adults give children rules of behavior, they are more concerned with their own comfort and convenience than with the happiness of the children. Of course, adults should look after themselves. But sometimes, perhaps, they go too far. What do you think?

(d) Some people think that it is best to follow all the rules you are given because, although some of them may be bad, it will work out best overall. You get so much work and trouble trying to make up
your own rules, they say, that it is not worth it. It is best just to accept all the rules and principles given to you by your family, church, government, and society. What do you think of this opinion?

Some Further Subjects for Study

1. How many different kinds of rules can you think of (health rules, school rules, etc.) which are given to you by others. Draw up a list of kinds.

2. How many different kinds of people and groups give rules to you? Again make up a list. (This list may contain some of the same items as the first list.)

3. Under each kind of rule (from list 1) find examples (a) of rules which you think are good ones, and (b) of rules which you think are bad ones (if any).

These study notes allow the teacher to follow student pace and to examine a range of issues relating to a topic. Undoubtedly the topics chosen are ones of concern to the teacher. One can see however, that they are designed to raise questions in the student's mind and to give the teacher the opportunity to respond once he perceives the student's own level of understanding. A major feature of the "theoretical discussion approach" is the importance of the teacher taking a strong leader role. The teacher controls both content and line of discussion in the pure theoretical discussion form.

The importance of responding directly to each group of children became even more evident in the use of the "event approach". Unlike the theoretic discussion, we organized a variety of learning activities based on evidence of students' stage of development. We knew from normative data previously discussed, that the sixth grade classes hovered most generally at stages 2 and 3. We therefore highlighted episodes that would stimulate discussion at stages three and four. We also selected structures that would encourage
dialogue among peers. Since there a 3 "mixed" stages, we felt that peer response was an effective resource available in any group. Whether or not students are more credible to each other than the teacher-authority, we felt that discussion of any question would possibly be more open and free if the importance and legitimacy of student comment and questions were honored.

Thus in the "event approach" attention to structure is central. We used this approach in four schools with sixth, seventh and eighth graders (eight different groups of students in all.) The first session with each group was instruction in the town meeting method: simple parliamentary rules, rotating chairman's role, etc. Children volunteered at each session for "chairman", "board person". It was the board person's responsibility to put initials of anyone who wanted to speak on the board. We had some fear at first that the town meeting might be too structured. In fact, in six of the eight groups it became highly flexible, it allowed high protection, low risk for all students to participate in discussions. As students gained control of the structure, teacher dominance decreased. The teacher followed rules about name on the board, etc. The teacher had major responsibility for selection of topic--but students were encouraged to set the meeting agenda.

Student response to this method in six of the groups was overwhelmingly positive. Two groups, the country free school (Waterhouse) and one city traditional responded "poorly" to the method. The free school children needed and wanted even tighter structures. The courtroom examination of events pleased them most. They would arrange the room, select judge, prosecutor, defense, witnesses, jury. The traditional
group were accustomed to regular, sophisticated discussions. They quickly adapted the town meeting style to a serious debate format.

With all groups current event content was most regularly introduced. At first the teacher controlled this aspect of the work. Gradually students themselves selected events.

In summary the "event study," approach does free the teacher to learn what and how students are thinking. He or she can use this knowledge to pace and expand student thinking. The event study approach we suggest is both "tighter" and "looser" than the "theoretical discussion" approach. In the final analysis teachers will select the one that is most appropriate for their own style, the school environment and the students' needs (see Hunt and Sullivan, 1974).

The types of moral education programmes we have worked with in the secondary schools, illustrates our developmental focus (Beck, Sullivan and Taylor, 1972; Sullivan et al, 1974). Our use of textual materials (see Beck, 1972) and classroom procedures were oriented to what Kohlberg would call a post-conventional orientation. In other words, the type of environment radiated in the secondary schools was pitched to developing more autonomous modes of moral orientation, whereas the elementary school environment was structured to encourage conventional reasoning in predominantly pre-conventional children (see Figure ).

Conception of Behavior (Outcome)

What are the goals of a moral education programme and how are they evaluated or assessed.

"Of the three B-P-E components, behavior would seem to be the simplest to understand. Persons vary almost infinitely, environments seem very difficult to define, but with behavior, at least you can see what you are
talking about. Or so it would seem. Behavior is observable and can be objectively measured. Many psychologists have therefore proposed that student behavior, such as making a correct response on a test or raising one's hand be the basis for measuring educational outcomes, communicating with teachers and making recommendations to them (Hunt and Sullivan, 1974, p. 56)."

Now in the context of moral education how are we to define our goals and evaluate them? It is clear that the outcome measures will reflect the preoccupations of the particular educator involved. From the previous quotes of Montessori on moral education, one can see the emphasis on independence, autonomy self-regulation, effectance, etc. One would expect that her interests in moral education would be related to broader personality changes and thus evaluation would probably be embedded in measures of competence (cf., M. Brewster-Smith, 1968). Her disdain for short-term achievement goals would probably find her quite sympathetic to the developmental orientation I have been emphasizing. Although we could have tried other modes of assessment, we have used Kohlberg's (1971) stage formulation scale. The fact that his work is specifically related to the area of moral values and stresses a developmental perspective makes his work quite compatible with our efforts (Sullivan et al, 1974). We are aware of the problems related to a "developmental" perspective:

"A major appeal of educational behaviorism is its objective statement of criterion measures. It is much more difficult to specify criterion measures for developmental growth than for the immediate acquisition of specific, correct responses. Not only is it difficult to specify criteria for developmental change, but teachers rarely work with a student long enough to observe a significant change in development....Developmental change is difficult to detect, especially in age-graded classes. With the exception of some nongraded schools, few schools are organized to highlight developmental change....One does not measure a child's developmental stage every day, but one uses
I would now like to turn to concrete examples of this developmental perspective within the context of the moral education project (Sullivan et al., 1974). Specifically, in relation to our work carried out in the elementary schools, we interviewed 42 students, 22 Pinewoods Hill students (the Control group) and 20 Stonridges (the Experimental group) on Kohlberg's moral dilemmas. The pre-test was given to all students before the "experimental group" started to work with value issues*. The first post-test was given at the end of the semester and the second post-test or follow-up was given to both groups one year after the completion of the course. The questionnaires were scored in order to determine the stage(s) at which each child was thinking.

Statistical analysis showed the following general results (see Figures 5 and 6).

First of all, the two groups were the same at the beginning (Pre-Test). In other words, there was no statistically significant differences in stage between the experimental and control group on the pre-test. At the end of the first year (Post-Test) both Pinewoods Hill (Control) and Stonebridges (Experimental Discussion) students responded to the test at a significantly higher level than on the initial pre-test. Note however, that there is no significant difference between the groups at the end of the first year (Post-Test). Finally, at the end of the second year both groups of students had responded at an even higher level but the Stonebridges students had progressed significantly more than the Pinewoods Hill students.

*The control group did not explicitly work on value issues.
Looking at the results more descriptively, the difference between the group which developed without help Pinewoods Hill and the group which participated in the twice weekly discussions Stonebridges can be seen in Figures 5 and 6. These figures show the percentage of students responding at Stage 1 and 4. The general trend for both classes reveals a change from predominantly stage 1 responses on the Pre-Test to predominately stage 3 on the Post-Test. The differences between the two classes are seen in: (1) The emergence of stage 4 responses in both the Post-Test and Follow-Up for Stonebridges while no stage 4 responses appeared from Pinewoods Hill; and (2) After the first year Stonebridges students no longer responded at stage 1 (external authority-avoid punishment) but began thinking more at stages 2 and 3; Pinewoods Hill students on the other hand did not drop stage 1 thinking as drastically.

These profiles show that the class with no discussions about ethics began, in Grade 5, by responding to dilemmas in terms of obeying authorities (or rules) to avoid punishment or get reward (i.e., Kohlberg's preconventional). At the end of Grade 6 the class had incorporated the rules of the authorities and was responding largely on that basis (i.e., conventional). The profile for the class which had discussed ethics begins with the same reliance on external authority. At the end of the first year, however, the students had definitely swung to an orientation in which they began thinking more independently, using ideas of fairness, reciprocity and equal sharing. At the same time a few students began thinking in larger context of society. Let me now briefly discuss one of the findings from our secondary school studies.

Figure 7 is a comparison of an experimental and control group of
eleventh grade students in a Toronto suburb school. As with the elementary school work we did a pre-test post-test and a year after follow up. The experimental class had 2 sessions a week with my colleague Clive Beck who prepared textual material which eventually developed into a textbook on "Ethics" for secondary school students (Beck, 1972). As already indicated the orientation was post-conventional without the conviction which comes from a long-term developmental perspective we would have said that our efforts had failed. I call your attention to the sleeper effect on the follow up a year later.

Turning to figure 7, it would seem that the increase in moral reasoning level at the Follow-Up for the Experimental Group was the result of an increase in stage 5 thinking. In fact a simple head count of students who had stage 5 thinking at all showed that while only 4 students used stage 5 at the Pre Test (2 Experimental, 2 control), two-thirds of the students in the Experimental class used some stage 5 thinking at the Follow-Up as compared to about one-tenth of the Control Group. (The Post Test counts differed little from those of the Pre Test).

I would conjecture that relatively few people in our present culture attain a thoroughgoing postconventional orientation in moral matters. On the one hand, as we have said, postconventional moral principles and thought patterns are very complex, requiring us to range across a large number of considerations in a controlled manner to arrive at a sound moral decision. But, on the other hand, quite apart from the sheer extent of the task of acquiring such principles and thought patterns, we rarely have a chance to see a piece of postconventional moral thinking laid out before us in all its complexity. The necessary environmental stimulation is difficult to achieve. Even if there are people in our environment who tackle moral problems in a consistently postconventional manner, we are seldom aware of all the considerations that they take into account since their deliberations extend over a period of time and in different contexts. We can easily observe a person responding sympathetic-
ally to a stereotypical figure (Stage 3) or strictly applying a rule to a particular action (Stage 4), but it is difficult to observe a person with a postconventional orientation thinking through all the complexities of a moral problem as he perceives it. What a classroom teacher must do is to ensure that, cumulatively, over a period of time, the postconventional style of thinking is exhibited in a variety of theoretical systems and case studies. Then, in turn, the individual student must attempt to use this style of thinking in a variety of situations in order to determine whether or not in fact it is more functional for him than his previous approach.

In this and other studies associated with the Moral Education Project, we have found it impossible to separate three major areas of research: moral philosophy, moral psychology, and moral education. The nature of postconventional morality, for example, is a problem of moral philosophy as well as of moral psychology, and one's conception of the nature of the respective levels of morality is crucial in determining one's approach to the practice of moral education with students as particular levels. Nor is the line of implication merely in one direction. We have found that our experiences in practical classroom situations have often led to substantial modifications in our psychological and philosophical theories. This overlap in fields of research has been reflected in our publications: for example, we have developed a teacher handbook that contains practical suggestions concerning moral education in the schools coupled with observations on moral development and moral theory (Beck, 1971), and an introduction to ethics (Beck, 1972) that takes up some basic moral and
It seems appropriate at this point to put the work of Kohlberg and colleagues (Kohlberg, 1971) in perspective insofar as this theory has contributed to our efforts. Kohlberg (1971) has argued for the primacy of Justice as the overriding principle for the moral point of view. Along with this he posits that his stages and their end point (i.e., Justice) are universal to all cultures. There is a tendency in Kohlberg's writing to over-extend the claims for his stage theory. I am not here arguing against the validity of his stages; rather, I am questioning the lengths to which he extends the principle of Justice as the overriding superordinate principle. Without denying the possibility of his stages, we wonder if he has captured only one facet of the moral reasoning process, albeit compelling one. It is important to keep in mind that Kohlberg is exploring a particular aspect of the moral world which is reflected by certain historical moral philosophical positions to the relative exclusion of others (Sullivan et al, 1974). Although other perspectives are present, one cannot help but see the strong influence of Kant, liberal social contract theory and contemporary English analytic philosophy to the exclusion of most systems of ethics that have, as their basis, a transcendent religious perspective. In view of the reservations we are making about Kohlberg's theory, it seems necessary to explain the context in which he has influenced our work (Sullivan et al, 1974). First of all, Kohlberg's instrument for the assess-
ment of moral judgment is the most sophisticated and reliable instrument that psychological assessment devices have to offer. The instrument can be reliably scored and its validity is argued within the perspective of cognitive developmental theory. Although its major focus is on moral reasoning, this limitation may be an advantage. I would argue that the school should be interested in the processes of the students' moral reasoning, notwithstanding other important factors. Secondly, because of the broad age spans with which we have worked we find that Kohlberg's developmental perspective has been most helpful in its orientation. His developmental stage norms have given the whole area of moral philosophy a new slant which incorporates and improves the seminal contributions of Piaget's original work on moral judgment. In other words, our objectives varied because we are developmentally oriented and we use in our evaluative framework a developmental theory (see Hunt and Sullivan, 1973).
References


Figure 2. Distribution by age of scores on Kohlberg's questionnaire (Sullivan, et al, 1970).

Figure 3. Kohlberg's stages of moral reasoning between the ages of 9 and 13. (Sullivan et al, 1974).
Figure 4. Profile of stage usage of students at ages 15-18 (Control Groups: Alderwood, Pickering, Ecole Secondaire Thériault).

Figure 5. Change in level of major stage from pre-test to follow-up (Control Group). (Sullivan et al., 1974).
Figure 6. Change in level of major stage from pre-test to post-test to follow-up (discussion group).

Figure 7. Mean percentage of stage 5 usage for each group at each test time. (Beck, Sullivan and Taylor, 1972).