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An exploratory study of developmental education and its potential as an educational treatment for delinquent youth.

John Aitken Rattray

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AN EXPLORATORY STUDY OF DEVELOPMENTAL EDUCATION AND ITS POTENTIAL AS AN EDUCATIONAL TREATMENT FOR DELINQUENT YOUTH

A Dissertation Presented

By

JOHN AITKEN RATTRAY

Submitted to the Graduate School of the University of Massachusetts in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

July 1974

Occupational Education
AN EXPLORATORY STUDY OF DEVELOPMENTAL EDUCATION AND ITS POTENTIAL AS AN EDUCATIONAL TREATMENT FOR DELINQUENT YOUTH

A Dissertation for Doctor of Education

by

John Aitken Rattray

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ABSTRACT

Few delinquents have successfully negotiated the public school system. Unfortunately, delinquents adjudicated because of their behavior appear to have fared little better in most correctional institutions either from an educational or rehabilitative perspective. The study explored ways of reconciling these youths with the educational process, within and without the institution. Developmental education, which compels attention to the interactions of person characteristics, behavior and environment, was selected as the most potent means. Literature reviews included developed the proposition that the other major ideologies—behaviorism and romanticism, could be more effectively utilized within developmental constructs and with the likelihood of improving the school's performance with delinquent children.

Constituting the second part of the study, a descriptive and exploratory study was detailed, involving fifteen adjudicated delinquent youth. The D.E. Hunt conceptual paradigm was implemented as an educational treatment for low conceptual, egocentric, impulsive students. This was an attempt to delineate an educational treatment to complement the rehabilitation of youngsters clinically diagnosed as 'immature conformists' within a typology developed by Sullivan, Grant and Grant (1957). The other major goal of the field project was to develop a case study which examined the institutional environment with a view of analyzing problems, and shortcomings within the environment, which could have implications to other researchers and research projects. This was considered a significant issue at a time when funding agencies were demanding increased program accountability.
The learning environments created by project teachers showed ambivalence, and subsequent findings were ambiguous and inconclusive. Project teachers exhibited difficulty in relating to the paradigm and translating the theory to relevant educational practices. Study recommendations included the need for clearer specification of D.E. Hunt's 'matched' environments; a possible avenue being the studies and analysis of classroom interaction (N. Flanders, 1970). The efficacy of self-reporting paper and pencil instruments as effective measures of behavioral change was the subject of serious question.

Case study findings indicated a need for further staff education and greater commitment toward research. Certain organizational structures of the institution appeared to impede research development and were examined in detail. The abilities of all teachers and counselors to modulate appropriate environments to different student 'types' was not adequately proven within the study context.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Acknowledgements</th>
<th>iii</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>iv</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>vi</td>
</tr>
<tr>
<td>List of Tables and Figures</td>
<td>viii</td>
</tr>
</tbody>
</table>

## CHAPTER I
**An Overview**

## CHAPTER II
**The Influence of School as a Variable of Delinquent and Deviant Behavior**
- Theories of delinquency: 10
- The school environment and delinquency: 13

## CHAPTER III
**Developmental Education and Delinquency**
- Developmental education: 22
- Theories, models and research: 24
- Cultural transmission/or behavioral approaches: 36
- Romanticism/or humanistic education: 43
- Conclusion: 45

## CHAPTER IV
**A Descriptive Project Using an Interactive Educational Paradigm with Adjudicated Delinquent Boys**
- The problem: 47
- Related literature: 50

## CHAPTER V
**Study Design**
- Objectives of study: 57
- The setting: 58
- The subjects: 59
- Procedures: 61
Staff training 64
Limitations of the study 65

CHAPTER VI  IMPLEMENTATION OF THE STUDY  66
Classroom curricula overview 67
Objective and subjective observations of project classroom environment 72
Case study No. 1 77
Case study No. 2 80
Case study No. 3 84
Case study No. 4 87
Case study No. 5 91
Test data 94

CHAPTER VII  CONCLUSIONS AND RECOMMENDATIONS  109

REFERENCES  125

APPENDIX A  THE INTERPERSONAL MATURITY TYPOLOGY  132

B  A DESCRIPTION OF OPTIMAL TRAINING ENVIRONMENTS ACCORDING TO HARVEY, HUNT AND SCHRODER'S CONCEPTUAL MODEL  142
C  COTTAGE ACTION PLAN FOR THE COMPARISON GROUP 146
D  COTTAGE ACTION PLAN FOR THE PROJECT GROUP 157
# LIST OF TABLES AND FIGURES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Grade point average by track position, controlled by father's occupation, I.Q., and ninth grade</td>
<td>14</td>
</tr>
<tr>
<td>2</td>
<td>Misconduct in school by track position</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>Recorded delinquency by track position</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>Conceptual level characteristics</td>
<td>30</td>
</tr>
<tr>
<td>5</td>
<td>Optimal agent style according to I Level sub-type</td>
<td>35</td>
</tr>
<tr>
<td>6</td>
<td>Two factor classroom environment scale</td>
<td>74</td>
</tr>
<tr>
<td>7</td>
<td>Lorge Thorndike intelligence test, pre-test only, project and comparison groups</td>
<td>95</td>
</tr>
<tr>
<td>8</td>
<td>Conceptual level measures, pre-test only, project and comparison groups</td>
<td>96</td>
</tr>
<tr>
<td>9</td>
<td>Stanford achievement test, pre-post tests, project and comparison groups</td>
<td>97</td>
</tr>
<tr>
<td>10</td>
<td>Gates MacGinitie reading test, pre-post tests, project and comparison groups</td>
<td>99</td>
</tr>
<tr>
<td>11</td>
<td>Classroom behavior inventory. Item, 'Indices of acceptable behavior', pre-post tests, project and comparison groups</td>
<td>101</td>
</tr>
<tr>
<td>12</td>
<td>Classroom behavior inventory. Item, 'Indices of disturbance', pre-post tests, project and comparison groups</td>
<td>102</td>
</tr>
<tr>
<td>13</td>
<td>Classroom behavior inventory. Item, 'Thoughtfulness for others', pre-post tests, project group</td>
<td>103</td>
</tr>
<tr>
<td>14</td>
<td>Classroom behavior inventory. Item, 'Self-confidence', pre-post tests, project group</td>
<td>104</td>
</tr>
<tr>
<td>15</td>
<td>Classroom behavior inventory. Item, 'Aggressivity', pre-post tests, project group</td>
<td>105</td>
</tr>
<tr>
<td>16</td>
<td>Classroom behavior inventory. Item, 'Inadequacy and inferiority', pre-post tests, project group</td>
<td>106</td>
</tr>
</tbody>
</table>
17 Classroom behavior inventory. Item, 'Resistance to controls', pre-post tests, project group

Figure

1 Conceptual level and the self actualization process. A hypothetical relationship
CHAPTER I
AN OVERVIEW

Although delinquent youth differ a good deal individually, a majority have one thing in common—a distaste for school. With few exceptions schools have failed to contain their delinquent populations, let alone provide for their differing and individual needs.

Primarily this study focuses upon the educational environment and learning process and its influence upon alienated and delinquent youth. Several important factors are isolated and various paradigms are reviewed and analyzed. These are seen as having the capacity to reduce the high attrition rate of delinquent students, and the potential of reducing the frequency of delinquent acts.

The study is constructed in two distinctive, although related sections. Chapters II and III are components of the first section. These are theoretical in nature and include extensive literature reviews. The thesis developed supports a developmental perspective of education. Various and related paradigms are discussed. These are considered to have implications to preventative, or pre-delinquent educational treatment, and also to tertiary treatment; that is, educational treatment for the adjudicated delinquent.

Remaining chapters are the subject of a field study with adjudicated delinquent boys. This field study is developed in two dimensions. The first details a descriptive study implemented at Boys' Farm and Training School, Shawbridge, Quebec. The study explores the effectiveness of an educational treatment which is both interactive and developmental and
selected as a result of the thesis explicated in Chapters II and III.
The second dimension can be classified as a 'case-study', and is primarily concerned with isolating and analyzing problems encountered during the study implementation. The case-study is both useful and necessary to the Boys' Farm at a time when its funding sources are requiring increased documentation of program validity.

Form of dissertation

Section I

Chapter II proposes that a relationship exists between delinquency and adverse school experience. Research does not provide clear evidence of one-to-one correlation. In consequence, the chapter offers definitions of the term 'delinquent', and explores various theories of delinquency. These are seen as having implications to the problem. Their interactions with the school environment provide a basis for inferring that the school does not offer rehabilitative support for the delinquent and potential delinquent. Indeed, various researches serve to illustrate that the very structure of the school can exacerbate delinquent attitude and subsequent behavior.

Chapter III contains the basic thesis that education has the potential to assist in the rehabilitative process. However, means must be found to avoid the trend of 'blanket prescription'. This is epitomized by researchers who tend to pose the question, 'which approach is better?', with an assumption that a given educational experience produces the same effect for all children. It is hardly surprising that ambiguous findings often result from such studies. This view of education is antithet-
ical to the varying needs of all children, and particularly delinquent children.

Paradigms analyzed describe human development as an integrated process of personality growth. Thus, the affective domain, often ignored or given only 'lip service' to within the public school system, becomes an integral part of the educational process.

Within most developmental paradigms, the interaction between student behavior, his level of personality development and the nature of the learning experience, is given careful consideration. This makes allowance for a differential perspective.

Later pages of Chapter III give attention to the other two major ideologies of western education. These are known as 'Cultural Transmission', which is behavioral, and 'Romanticism' which is humanistic education. Besides an analysis of the relative utility of these ideologies, it is conjectured that the application of developmental constructs within the ideologies can enhance their value. It is also proposed that such a union goes some way toward avoiding the 'one best way' syndrome.

Section II

As a logical corollary to Section I, the remaining chapters detail a field study with a group of adjudicated delinquent boys. An attempt is made to reinforce the clinical treatment of the students via the medium of the D.E. Hunt (1971) conceptual paradigm. The latter is essentially educational and is both interactive and developmental. The major goal of the paradigm is to nurture student conceptual level. Although the paradigm is discussed at length elsewhere within the dissertation, briefly, conceptual level can be described as a dimension of interpersonal matur-
ity, and indicates a person's ability to process information effectively. Those persons at a higher conceptual level have more alternatives available and are better able to evaluate these alternatives.

Within the Hunt paradigm, educational environments are matched to student conceptual level in terms of structure. Low conceptual students are said to function better in a highly structured, teacher directed environment, and high conceptual students in a low structured, non-directive environment. The paradigm is selected as the educational treatment because it appeared congruent to the interactive clinical paradigm already in operation at the Institution.

The problem. The failure of most delinquent youth to negotiate the public school system is well documented in Chapter II. Unfortunately, delinquents appear to fare little better in most correctional institutions, either from an educational or rehabilitative point of view. The Institution which is the subject of this study is atypical, and more progressive than most. Unfortunately, problems exist because of its very progressivism.

Derived from a theory of interpersonal development (Sullivan, Grant and Grant, 1957) a developmental paradigm is currently in operation. Within the context of the paradigm is a belief that delinquents differ in the reasons for, and manifestations of, their delinquency. Youth are classified into one of nine integrative levels. According to diagnosis, they are assigned to treatment regarded as optimally effective for that particular sub-type.

Unfortunately, treatment aspects of the paradigm have lacked clear and explicit definition. With regard to educational application, defin-
ition is almost totally lacking. The field study explores ways and means of developing clearly delineated educational prescriptions which will complement the clinical treatment of youth diagnosed as being of a low interpersonal maturity and classified within the typology as "Immature Conformists". (See Appendix A). A study goal is to illustrate that correctional institutions do have the capacity to assist students educationally within the process of rehabilitation.

**Hypothesis.** This refers to the application of the D.E. Hunt conceptual paradigm, (see Appendix B) and states:-

An educational environment matched in terms of structure to student conceptual level will better facilitate the learning process and concomitantly, student attitude toward school.

**Study design.** The field study contains two elements. The first is a descriptive study, which explores the validity of integrating education into the treatment milieu, and the prospects of nurturing alienated students back to the learning process. This aspect has already been described in the present chapter.

The second element of the field study is more speculative and takes the form of a case-study. Facets of the Institutional environment which hinder, or prevent research, are of particular interest to the Agency at this time. Boys' Farm and Training School is funded from Provincial Government sources. Increasingly, the funding sources are requiring proof of program effectiveness. In consequence it is important for Boys' Farm to be aware of the nature of problems which may be encountered during research projects. The case-study is an important part of the field study as a whole, and is given extensive treatment in Chapter VII. Some
problems isolated are endemic to institutions generally; others are peculiar to the Boys' Farm, which has several novel organizational features. A detailed examination of these may serve to assist the expedition of further studies within the Institution, whether of an educational or clinical nature.

**Limitations of the study.** The study does not attempt to incorporate the many variables involved in social failure. This could only lead to a loss of direction and an inability to isolate a particular and identifiable part of the problem. For this reason only one social institution will be considered; namely the school. To delineate further, delinquency will be the aspect of social failure focused upon, and then only where it intersects with the school institution.

The target population is extremely small and not a random sample. Any statistical inference can only apply to the students involved, which make generalizations less than scientific, and in consequence place a severe limitation upon the study.

The treatment effect and educational effect are not dichotomized. The control of this variable is attempted by using instruments applicable specifically to the classroom situation. Further, the 'high structure' associated with the study was congruent to both cottage life, and classroom. Included in Appendix D is the 'treatment action plan', for the project unit; this underlines the congruency.

There is a relationship with I.Q. and conceptual level. Hunt has found this to be fairly constant, but of a relatively low order - .30- .35. However, the study is not intended to measure conceptual growth because of the short period of time involved. While it is hoped that the educa-
tional environment will better facilitate this growth, this may be seen indirectly from various scales utilized within the study, and notably, the Classroom Behavior Inventory. (See Chapter V for details of instrumentation).

The Classroom Behavior Inventory has not been researched with a view of measuring its internal consistency reliability. However, it has been considered an effective instrument by Palmer and Warren (1967). In addition, Hamilton (1971) has found that self-ratings in the affective domain perform as well as other methods of measurement, such as peer nomination and empirically derived scales, in terms of their convergent and discriminant validity.

Student attitude toward paper and pencil testing is another major variable within the study, and is one reason for the case study component, as at the present, the Institution relies quite heavily upon information thus gleaned. The case study will give close attention to this area.

Teacher effectiveness and value orientation are powerful mediating variables. Until the study implementation the educational counsellors had utilized non-directive approaches which included the negotiation of individual contracts with students. Often inordinate amounts of time were spent in this process. Basically, students were responsible for developing their own educational prescriptions. These processes were antithetical to the objectives of the study, and it remained uncertain whether or not the educational counsellors were convinced of the need for the structured environment, when the study was implemented. The effects of previous Boys' Farm education programs on the subjects has been considered. Unfortunately, to obtain an adequate number of subjects with
'cultural conformist' characteristics 'fresh' to the institution is almost impossible. Previous programs for youth within the project were very different from the present study. Bearing this in mind, it is posited that the study begins 'clean', albeit with some expected resistance from students at the sudden withdrawal of their 'freedom'.

There is a conceptual variance between the project and comparison groups. Hunt (1963) in a study over a four year period, found that through the ages of 12-16, a relatively orderly, though not large conceptual development takes place. The variance of conceptual level is not large and the environment matched to the comparison group is not that as defined congruent by Hunt. In fact it is more compatible to very high conceptual students, which the comparison group is not.

The case study component findings can only be applied to the Boys' Farm and Training School. However, it is hoped that some inferences may be drawn, which may apply to other institutions taking the 'differential' route.
CHAPTER II
THE INFLUENCE OF SCHOOL AS A VARIABLE
OF DELINQUENT AND DEVIANT BEHAVIOR

This study is concerned with one social institution, namely the school. Focus is placed upon delinquent and deviant student behavior, and its possible relationship with the school environment.

It is suggested here that the school as a social agency presently does not initiate major social change. Without change and re-engineering, its social intervention capacity will remain limited. However, as it is the only agency having some contact with all of the population, it may not be fallacious to postulate that education can become an increasingly important component. It is further proposed that delinquency and adverse school experience are related.

Articulate critics such as Holt (1965) and Illich (1971) would have us believe the school is defunct and should be eliminated in favor of other institutions or reduced in significance. In the same vein considerable evidence from a variety of sources indicates that I.Q. and school achievement are poorly correlated with job success (Jensen, 1970; Kohlberg and Mayer, 1971). Ambiguities and contradictions abound within the realm of educational research, and subsequent assumptions are often little better than guesses.

In an effort to encapsule differential research findings, Martin Deutsch (1967, p. 5) points to the impact of school contact from group to group. He believes the variance can be accounted for by the following:

1. Child's preparation for his parents for entry into school.
2. The general meaning of the school to the economic substance of the community.

3. Various expectations of the school and the appropriateness of its curriculum for the child.

There is no doubt that these differences and their interactions with social attitudes, stability of community, social class and ethnic membership of family, will all effect and influence student behavior and attitude.

Although the above will be borne in mind, thorough and particular scrutiny will be given only to number 3 above. Various theories and researches to be explored suggest that delinquency and negative school experience are sometimes related.

The basic position taken here is that the school has the potential to at least alleviate the pressures created outside of the school by family, community, etc., but has not presently realized this potential.

Theories of delinquency

Theories of delinquency proliferate and range from the Freudian view to Glueck and Glueck's, "Bodybuild in the Prediction of Delinquency", (1964, pp. 146-150). Possibly one of the few things that writers agree upon is that delinquents are not all alike and differ in the reasons for, and the manifestations of, their delinquency. Polk and Schafer (1972, pp. 6-7) define delinquency as consisting "of acts which can be roughly divided into two parts: a) behavior which comes to be defined as deviant, and b) the process of reaction to the act which gives rise to the label of delinquency." This is suitably wide and encapsules the general trend
of most definitions relating to delinquency.

The theories and researches selected are concerned with deviant behavior as it relates to the school environment. The latter's structure may be such that the young troublemaker has few options other than making trouble.

R. Cloward and L. Ohlin's (1960) Theory of Delinquency Causation hypothesizes that the negative commitments of deviant youth are caused because of "blockages" in the attainment of highly valued success goals. They believe that most young people internalize the goals of educational achievement but that subsequent opportunities are not always equal, neither are young people equally endowed to achieve the goals. As a result of the interaction of many variables (inside and outside of school), some youths perceive their failure or potential failure and its implications for their prospective future. Rebellion of some sort or other is a possible reaction, especially if internal controls are weak and accessibility to alternative routes is available. These may appear more attractive although illegitimate, and serve to compensate and offer a chance to strike back at the middle class world which created the goal frustration in the first place.

Poor school performance is one variable which immediately suggests a linkage between school and delinquency. The second possibility here is that if the theory holds true it may not be confined, although it is more likely to be manifest among disadvantaged and lower class students.

Karacki and Toby's (1962) researches suggest that lack of commitment can be linked with imperfect socialization. Kenniston (1960, pp. 30-32) too, in his study of middle class alienated youth offers compelling evi-
idence that lack of commitment is sometimes caused by the very structure of the middle class American home. Here, father is largely absent. The lack of a male "model" with whom the boy can identify may be one reason for imperfect socialization.

Subsequent attitudes may well be at loggerheads with school expectations. Deprivation has many facets, and is not a monopoly of the poor. Miller (1958) takes the position that many inner-city children become delinquent as a simple reflection of lower class culture. In a way of life which is often concerned with trouble, toughness, smartness, excitement, etc., these youngsters are unlikely to be comfortable in a public school system with its attendant conventional standards.

Martin Deutsch (1967, p. 55) has pointed out that most lower class children probably begin school neutrally. It is their negative experiences within the institution which begin the process of school alienation, and final rejection. This is at variance with Miller's theory but consistent with the findings of Cloward and Ohlin. It is probable that Miller's theory fits certain ethnic and lower working class groups, while Cloward and Ohlin's refer to other working class groups.

Many other theories of delinquency have been posited. These include a contention that delinquency often arises out of plain boredom. Ferdinand (1966) has a theory which is linked to that of Kenniston. He maintains that the need to assert masculinity among delinquents often results in illegal acts. The interactive view suggests that delinquency is sometimes caused as a reaction against those who enforce social standards of behavior. All of these theories have implications to the statement at the beginning of this text - that delinquency and adverse
school experiences are related.

The school environment and delinquency

Cicourel and Kituse (1963, pp. 58-69) have shown that the role of school counsellors is vitally important in the assignment of students to "tracks", which are a feature of most American high schools. These writers also found that, regardless of evaluative criteria employed, socioeconomic and racial background had an influence independent of other factors such as achievement and measured ability. As the track assigned to a student has a pervasive influence on his future school and community career, and if we are to believe the "blocked goal theories", then an exploration of the implications of tracking appears relevant.

Schafer and Polk (1972, pp. 37-38) in a recent study, illustrated clearly some of the inequities of high school tracking. In the two schools studied, a majority of students were tracked in college preparation. Students of blue collar workers represented only 43% of all students of this class, whereas 83% of students from white collar workers were assigned to college track. Race apparently has an even stronger effect, as only 30% of black students were assigned to the college preparation. These figures were obtained after control of the variables by a device known as "test factor standardization".

Table 1 illustrates grade point average by track position and shows clearly a discrepancy between college and non-college preparation. While some would argue that this is to be expected, and caused largely by conditions outside of school, Folk and Schafer have controlled the results of parent occupation, I.Q., and ninth grade point average. Their findings
indicate that the independent effect of a tracked position is greater than the independent effect of parent occupation, I.Q., or previous G.P.A. (Ibid., p. 39).

Table 1: Grade point average by track position, controlling for father's occupation, I.Q., and ninth grade.

G.P.A.

<table>
<thead>
<tr>
<th>Student population</th>
<th>College Prep.</th>
<th>Non-College Prep.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Quarter of Class</td>
<td>30%</td>
<td>4%</td>
</tr>
<tr>
<td>Second Quarter of Class</td>
<td>31%</td>
<td>23%</td>
</tr>
<tr>
<td>Third Quarter of Class</td>
<td>27%</td>
<td>33%</td>
</tr>
<tr>
<td>Bottom Quarter of Class</td>
<td>12%</td>
<td>35%</td>
</tr>
<tr>
<td>Total</td>
<td>N=681</td>
<td>N=326</td>
</tr>
</tbody>
</table>

One could hypothesize a number of reasons for these findings. Self-esteem, teacher expectancies, and the self-fulfilling prophecy immediately come to mind. Rosenthal and Jacobson (1964, pp. 19-25) have underlined the importance of these. Although their findings were at the positive end of the continuum, the thesis being offered here maintains that the self-fulfilling prophecy and teacher expectancies can all too easily have the opposite and negative effect. Table 1 appears to bear out this thesis.

The frustrations and ego damaging experiences associated with track
position have implications to both the block goal and lack of commitment theories. Resultant behavior may be a reaction to, and rebellion against the school. Polk and Schafer (ibid., p. 43) have detailed misconduct by track position in the two schools they studied, as shown below:

Table 2: Misconduct in school by track position.

<table>
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<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. 1 or more recorded violations</td>
<td>36%</td>
<td>53%</td>
<td>11%</td>
<td>100%(220)</td>
</tr>
<tr>
<td>B. 3 or more recorded violations</td>
<td>19%</td>
<td>70%</td>
<td>11%</td>
<td>100%(37)</td>
</tr>
<tr>
<td>C. Suspended</td>
<td>37%</td>
<td>51%</td>
<td>12%</td>
<td>100%(65)</td>
</tr>
<tr>
<td>D. Age of all students in each track</td>
<td>71%</td>
<td>29%</td>
<td>0%</td>
<td>100%(753)</td>
</tr>
</tbody>
</table>

The recorded delinquency rates in the two schools (Table 3) offers further evidence that a relationship exists between track and deviant behavior.

Table 3: Recorded delinquency by track position.

<table>
<thead>
<tr>
<th>Total delinquency rates</th>
<th>Non-Delinquent</th>
<th>Delinquent</th>
<th>N.</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Prep.</td>
<td>94%</td>
<td>6%</td>
<td>100%(752)</td>
</tr>
<tr>
<td>Non-College Prep.</td>
<td>84%</td>
<td>16%</td>
<td>100%(405)</td>
</tr>
</tbody>
</table>
Admittedly, controversy exists as to whether the schools have any influence on future occupational status.

If we are to believe I. Berg (1971, pp. 61-34) young people are being squeezed by education requirements and by the achievements of those already in the workforce. He sees a general escalation in credential requirements. Apparently it matters little whether these credentials have a relationship to the job skill. He maintains that the efficacy of this practice has little justification, and will often lead to job alienation on the part of the worker.

Despite the dubious rationale behind this requirement of paper credentials, young people have to negotiate the school institutions in order to gain some prospect of occupational success. While it is acknowledged here that success at school is no guarantee of later adult success, the prospect for those who fail may be grim indeed. Cohen (1955, p. 132) has found that those who fail academically usually fail in the social and other dimensions of the school community. He points to evidence that suggests that the isolated and alienated tend to draw together in their efforts to contend with failure. This often results in the generation of sub-cultures with a value system very different than that of the school. Negative commitment is only once removed from real delinquency.

Doxey Wilkerson (1969) has found within his researches that 95% of delinquents have records of serious or persistent misconduct in the school. In addition he notes that a very large proportion of delinquent students, that is, 30 to 95% are school drop-outs. As Wilkerson further states (p. 108) "A substantial majority of delinquents express violent dislike of school, and at least one fourth more express indifference
toward school".

It should be remembered of course, that many students perform badly at school and only a small percentage of these can be classified as delinquent. To infer a direct relationship therefore would be unwise. Nevertheless the public school system appears to do quite badly in the area of disadvantaged and delinquent youth. This fact is borne out by the researches of Martin Deutsch (1967), Shulman (1961), Wilkerson (1965) et al. The views of these and other writers are well expressed by Wilkerson (p. 112) in the following: "Most evaluative studies of compensatory education, including some cited here, are characterized by serious technical weaknesses. They afford scant information, if any about children's affective and social development..."

While it would be simplistic and unfair to indict the public school system as totally inadequate, it does seem that the following statements are true:

a) At the present, schools do not play a useful role in the rehabilitation of delinquent youth.

b) Negative school experience exacerbates delinquent behavior.

It is further suggested here that education has the potential to assist in the rehabilitation of delinquent youth. An exploration of this notion is the major purpose of this study. "Affective" and "process" education, so often ignored in the studies reviewed by M. Deutsch, et al., will be examined. Differential and developmental models which describe human development as an integrated process of personality growth will receive particularly scrutiny. The validity of these approaches has been demonstrated by Palmer and Warren (1969), Piaget (1971), Kohlberg (1966),
et al. Hunt's (1971) research has not been confined to delinquency, and has utilized much broader populations. His findings are provocative and imply that many students in our public schools are mismatched both in environment and content areas.
CHAPTER III
DEVELOPMENTAL EDUCATION AND DELINQUENCY

Curriculum reform has accelerated during the past decade. Innovations have been numerous and diverse in their application. However, Joyce and Weil (1972, Chap. 1) draw attention to the contradictory findings which often result once the research is disseminated. For every thesis, there appears to be the antithesis.

In his book "Rethinking Urban Education" (1972) Walberg surveys a dazzling range of experimental programs for the disadvantaged. For most of these he comes to similar conclusions. While there is no intention of duplicating Walberg's review here, three propositions emerge which bear examination and are related to this paper.

1. Most studies tend to pose the question, "Which approach is better?" with an assumption that a given educational experience produces the same effect for all children.

2. Most studies measure improvement by I.Q. increase, and attempt to push this towards the norm, thereby eliminating individual differences. It is recognized here that differences in ability are by no means the only individual differences but often considered in this light in the schools.

3. Benefits derived from experimental programs diminish with passage of time and when subjects return to "normal" school.

Fortunately a growing number of researchers are calling for a different approach to both education and research. Bloom (1966, 3, pp. 211-221) voices their view when he points to the need to map educa-
tional research using three "land form" descriptors - a) predictability of human characteristics, b) effects of school environment, and c) instructional strategies.

To take these a stage further, I feel that these variables should receive close attention in the development of all curricula. Too often individualization simply means that all students receive the same work, only at different speeds. It is possible that the benefits derived from experimental programs diminish in normal schools because of a lack of attention to these factors. It may also be true that less experimental programs would be necessary if real efforts were made by schools to recognize the subtleties of human differences and the need for differential environments and forms of instruction.

This study is concerned with better education for delinquent youngsters, and while it is gratifying to read of so many states attempting to abolish reformatory institutions, public schools do not appear to do very well with delinquent children. The primary purpose is to explore means of improving this poor performance both within and without the institution.

While developmental education is selected as the means, implementation of new models needs to be treated with caution, and no claim is made that a panacea to the problems and ramifications of delinquency has been found. It is suggested that certain researches to be reviewed illustrate that developmental models are constructed in such a way that can call attention to, and make some provision for, personality characteristics, school environment, and instructional strategies. This is not to say that all other educational models are without merit. This would
be a hyperbolical statement, tantamount to a claim of the "one best way", and this is not what the study is about.

Kohlberg and Mayer (1972, Vol. 42, No. 4) classify western education ideology into three broad streams, Romanticism, referred to in a derogatory way as "bag of tricks", and which is really humanistic education. Next is Cultural Transmission, which is Skinnerian in outlook, and lastly Progressivism, which had its origins in John Dewey, and is developmental. While the text concentrates on the latter, the other two ideologies will be considered. Besides an exploration of the relative utility of the two, hypotheses are offered which propose that similarities exist within all three ideologies. They are not so different that a marriage (at least of convenience) cannot be arranged. With this review an attempt is made to apply developmental constructs to the Romantic and Cultural Transmission ideologies. Subsequent paradigms will not be the results of sound research, but inferential and intuitively based, and largely in the realm of conjecture.

Two levels of delinquent programs are envisaged, namely secondary prevention and tertiary prevention. Deliberately the inclusion of primary prevention has been omitted. This implies the development of a perfect society where social ills have been eliminated. Presently this is impractical for realistic consideration.

Secondary prevention hypothesizes that schools can be partially responsible for deviant behavior and that more meaningful curricula would go some way towards removing goal frustration, ego damaging experiences and negative response. The task here would be to identify potential delinquents and provide some supportive measures to prevent later incar-
eration and the more difficult task of rehabilitation. Tertiary prevention applies to the adjudicated delinquent, and it is proposed that many youngsters can receive a more valid education within an institution. It is further proposed that some youngsters can be treated in special community schools. Researches appear to show that these are cheaper and possibly more effective.

Developmental education

(The basic premise of developmental theorists is that human behavior is built on the foundations of personality.) Although various related theories exhibit diversity there is a degree of unanimity on basic concepts. Perception, cognition, motivation, social relations and development are recognized as being important elements of personality. The most influential of the theories do not create a dichotomy between cognitive and affective behaviors. Rather, they describe human development as an integrated process which can be observed in terms of intellectual, social and personality growth. Information processing characterizes the ways in which an individual uses information in adapting to various facets of his world.

Concomitant to the holistic view, stage development is the keystone to the operational models. As Kohlberg and Mayer (Vol. 42, No. 4, Nov. 1972) state:

"The educational goal is the eventual attainment of a higher stage level of development in adulthood, not merely the healthy functioning of the child at the present level."

The authors emphasize that no attempt should be made to accelerate
stage development. Interventions are intended to prevent fixation at the particular level. As Dewey and Mclellan said in 1895:

"Only knowledge of the order and connections in the development of psychical functions can insure the full maturing of the psychical powers. Education is the work of supplying the conditions which will enable the psychical functions, as they successively arise, to mature and pass into higher functions in the freest. and fullest manner." (p. 207)

Intrinsic to the models is the central notion that different stages of integrative complexity define different ways of processing information with consequent variance in human response and reaction (Schroder and Suedfeld, 1971, p. 240).

Integration describes consolidation at an attained level. Piaget calls it "decalage", or horizontal growth to all of the personality factors to which the stage potentially applies.

Although developmental theories relate to information processing, the theorists discussed are not greatly concerned with I.Q. and do not subscribe to the testing movement which became an important element of western education from the 1920s (Cronbach, Suppes, 1969, p. 77). They are more interested in thought processes. For Piaget a child's wrong answer is as important as a correct response because it provides clues to the underlying thought processes. Developmentalists generally ignore genetic differences in favor of environmental explanations.

Schroder and Suedfeld (1971, p. 10) see development as: "the interaction between assimilation of new information and accommodation of the existing cognitive structure to the new input, leading to the increased complexity and abstractness."
Implicit in the theories of Piaget, Hunt, Kohlberg and others is a belief that it is bad to be cognitively simple, rigid, authoritarian, concrete and hedonistic. There is also a view that the various stages ordered within the models are not necessarily achievable as a natural series of events.

This is thought to be possible if the environment is adequate. Unfortunately in society today environmental factors which influence child development are often abnormal. Parental care may not measure up to the norm and may cause arrestation in any of the many dimensions of the child's personality development. Kohlberg and Mayer (1972, p. 486-487) make the provocative statement that only half of the American population has achieved Piaget's highest level of formal operations and only 5% of the population has achieved the highest moral stage of the Kohlberg scale.

The implications to education are difficult to ignore and raise the question, can public schools improve the situation, and if so, how? Hunt, Kohlberg and Warren believe that education has the capability of promoting growth. Hunt and Warren's studies offer pervasive evidence that both delinquent and normal children benefit from developmental approaches. The following sections explicate related theories and underscore the interactive and differential characteristics of the models.

Theories, models and research. Martin Deutsch (1967, Preface) while stressing the importance of early childhood programs for disadvantaged children, cautions that assumptions should not be made that interventions at later points in the child's life are a waste of time and resources. This writer believes this to be no less true when considering education
for potentially delinquent, and delinquent children. Theories, models and research to be surveyed will be on a broad spectrum and range from k to twelfth grade.

Developmental education had its origins in the work and writings of John Dewey and was closely aligned to the theories of William James and the Gestaltists, notably Kofker, Kohler and Wertheimer. Unfortunately the impact of Dewey in this area was limited, and apart from his own experimental school very little practical work was expedited. This was probably due to the lack of a theoretical frame of reference. Not until comparatively recently has an interest revived in the idea. Piaget (1960), Lewin (1936), Cronbach (1967), Snow (1968, pp. 475-489), et.al. are modern proponents of the differential and developmental approach. It is considered here that Piaget, Hunt and Warren have developed more operational theories and models and these will be the main subject of this section. Each will be examined in relation to its possible utility as secondary and tertiary educational treatments.

Piaget. Piaget's theory defines cognitive development in terms of stages. Under normal circumstances changes occur and the structures (or stages) change as the individual grows older. As defined by Inhelder (1962, pp. 19-33), each structure involves a period of formation, attainment and then further change. During consolidation, structures are said to be stable, while at the same time some parts are becoming transitional. Ideally during the decalage stage movement towards the next highest stage is occurring. Each stage is a necessary framework for more advanced stages; the lower stages coordinated and integrated into the next highest stage. As will be seen if this theory holds true, it is impos-
sible to jump a stage, and this is consistent with all other stage theory.

According to Piaget, growth takes place as a result of the child's interaction with his or her environment. As a problem is encountered, the stability of the stage is effected, creating disequilibrium, thus moving into transition and ultimate growth. Piaget's stages, defined only very approximately by age, are, according to E.V. Sullivan (1972):

1) Sensorimotor stage (birth to approximately 2 years). Definition - simple structures which mark the beginning of space, time, causality and intentionality concepts.

2) Preconceptional stage (2 to 6 years). Definition - Comprehension of functional relations, symbolic play.

3) Concrete operational stage (6 to 11 years). Definition - Invariant structures of classes, relations, and numbers.

4) Formal operational stage (11 years on). Definition - Propositional and hypothetical thinking.

Piaget has never claimed to be an educational psychologist, and largely he has left others to interpret learning environments thought to be congruent to the stages. Furth (1970) contends that the elementary school curriculum should be matched to stage development. This means that verbal exposition should be underplayed at the earlier stages. The environment should give the child opportunity to manipulate, investigate and question. In contrast to some developmentalists, Piaget is not too concerned with the importance of the teacher, except as a collaborator and learning facilitator. He is more interested in peer group interaction, which he believes helps the child progress from egocentric, concrete modes of thought to more sociocentric, abstract modes.
The British infant school movement has been strongly influenced by Piaget. Isaacs (1965) in evidence to the Plowden Committee, cited Piaget's work as the main justification for the "integrated day". Family grouping, heterogeneous by age, and the learning environments which are a feature of the "integrated day" certainly reflect Piaget's influence. However, British education tends to be somewhat eclectic. Terrence Davis (1970, pp. 57-65) has pointed out that the process has not been the subject of any research in its country of origin. He made the statement after spending time with the various educational indexes and eventually after direct contact with the Foundations, all to no avail. Thus it is left to the opinion of experts to indicate the validity or otherwise of the open educational approach as practiced within the "integrated day" and the viability of Piaget's theories.

If we are to believe Silberman, Furth, Salt, Featherstone, and others, the "integrated day" is very significant indeed. All of these writers are eloquent in their praise of the system. As Silberman (1971, p. 262) puts it:

"For three hundred years or more, schools have been denounced for their capacity to destroy children's spontaneity, curiosity, and love of learning, and for their tendency to mutilate childhood itself. To create and operate schools that cultivate and nurture all these qualities without reducing children's academic attainment, this is a magnificent achievement."

Despite the rhetoric many problems inherent in the "integrated day" beg solution. At best it is an imperfect panacea. We cannot be sure that environments can be created which match the needs of individual students. How good are teachers as diagnosticians? According to David Ausubel (1968) available evidence indicates that teachers are not
very successful in assessing the personality and adjustment of their students. Other questions remain and recent researches seem to show that some subject areas are more amenable than others to Piagetian approaches. The cliche ridden phrase "more research is needed" is, unfortunately, applicable.

These comments are not made in any way to derogate the "integrated day". Perfection is a rare commodity. I believe open education concepts appear to have implications to primary and elementary education and seem an improvement on traditional methodology.

From the school's point of view the starting point for delinquent education is the reduction of tensions. Activities and relationships which help the student gain self-esteem and acceptance lay a useful foundation for rational and (hopefully) altruistic behavior. In the early years, the application of Piaget's theories, as exemplified in the "integrated day", appear to have this potential.

I see the "integrated day" as a secondary treatment, and admittedly without a great deal of supportive evidence, goal frustration and alienation seem incongruent to the system.

David Hunt. Hunt and his associates Schroder and Harvey (1961) have developed a personality theory which does not differentiate between cognitive and affective behavior. Hunt's "Matching Models in Education" (1971) was a specific attempt to develop the theory in an educational framework. Derived from Kurt Lewin's (1935) formula B-P-E, Hunt's model is vitally concerned with the three variables -- behavior, person and environment. Growth is seen as taking place as a result of the interaction between the person, his level of personality development, and
the environment in which he is involved.

Conceptual Complexity and Interpersonal Maturity are seen as one broad dimension of personality and indicate a person's ability to process information effectively.

Hunt's model is a guide for working towards the educational goal of higher conceptual level. He emphasizes that the goal is not intended to accomplish increased student scores on achievement examinations. To underline this a recent study by Claunch (1964) clearly distinguished between these two outcomes. Comparing the performance of two groups of college students, equal in intelligence but varying in conceptual level, he found no difference between groups on traditional objective test performance. However, in an essay examination requiring critical thinking, the higher conceptual group performed significantly better than the lower conceptual group. "As Hunt (1971, p. 24) states: 'The person at a higher stage of conceptual development has more alternatives available, is better able to tolerate stress and so is likely to be able to cope with situations in which he makes honest mistakes.'"

At its simplest the model describes educational environments which are matched to student conceptual level in such a way that movement to higher conceptual level is encouraged. In contrast to Piaget, Hunt sees the teacher as a crucial part of the environment. As a result of research (1971, p. 30) he has specified differential student characteristics to optimal educational environments which can be seen below.
Table 4: Conceptual level characteristics.

<table>
<thead>
<tr>
<th>Expected characteristics of stage group</th>
<th>Sub I group</th>
<th>Stage I group</th>
<th>Stage II group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epocentric, very negative, impulsive, low tolerance for frustration</td>
<td>Concerned with rules, dependent on authority, categorical thinking</td>
<td>Independent, inquiring, self-assertive, more alternatives available</td>
<td></td>
</tr>
<tr>
<td>Expected optimal environment for group</td>
<td>Highly structured, consistent environment providing many concrete specific experiences</td>
<td>Encouraging autonomy within normative standards</td>
<td>Highly autonomous with opportunity for self-selected individual activities and projects</td>
</tr>
<tr>
<td>What teachers found worked best with group</td>
<td>&quot;More visual things, showing the actual thing by demonstration rather than having them show me.&quot; &quot;Drilling exercises get them busy right away.&quot;</td>
<td>&quot;Since they are so competitive I put them in seats according to order of scores on tests.&quot;</td>
<td>&quot;I let them know how I feel about something and they listen, evaluate, and discuss it.&quot;</td>
</tr>
</tbody>
</table>

While Piaget is content to allow children to explore and create their own disequilibrium, Hunt tailors environments deliberately for this purpose. His 'optimal' match is illustrated in a study by Turiel (1966) who predicted that 'moral' development occurs only when the child is exposed primarily to environment and content at the next stage, and secondarily at the child's present stage. Results confirmed the hypothesis.

Hunt's learning environments are basically in terms of 'structure', which might be seen on a continuum which begins with lecture (teacher directed, low student participation), and ends with T. group (non-directive leader, high student participation). Students of low conceptual level are said to function better in more structured situations and
conversely students of high conceptual level in low structured situations.

Various studies have confirmed these concepts and include a study with Project Upward Bound (1967) which considered student gains in attitude and motivation for possible differential effects. The pattern was exactly as predicted by the model: when the majority of students in a program were low in conceptual level, they gained more when the approach was structured than when the approach was flexible, and when the majority of students in a program were high in conceptual level, they showed the opposite pattern.

Other conceptual level studies include those of Suedfeld (1964), Schroder (1971), Pohl and Pervin (1968), Noy and Hunt (1972), et al. The various and extensive studies appear to show the construct validity of the model. However, Hunt himself is very cautious and points to an urgent need for methods which describe educational environments in terms which are theoretically relevant, objective and meaningful to teachers. The recent work of Joyce and Weil (1972) has implications to Hunt's model. Here educational environments have been coded in theoretical, instructional and structural terms. It is interesting that many of the modern innovative methods are, according to Joyce and Weil, better suited to high conceptual level students.

Hunt himself is in the process of refining the model to include cognitive, motivational, value and sensory orientations, with appropriate forms of presentation.

Hunt's early studies in conceptual level were largely concerned with delinquent and disadvantaged youth (1965). In developing construct
validity, he referred to complementary research by Carr (1965), who investigated the pattern of 'self-other' relatedness at various stages in a male college population by use of a specially designed inter-personal discrimination test. He found that self-delineation was significantly greater in persons at Stage II than those at Stage I of Hunt's scale. The capacity to distinguish between other people was significantly greater in persons at Stage III than for the other stage groups.

In keeping with these findings, Hunt and Hardt (1965) have shown that delinquency is more likely to occur in the low conceptual level category, and that socialization and conceptual level are related. If we are to accept the validity of Hunt's model, it seems possible that the environmental and developmental aspects may be therapeutic for delinquent and potentially delinquent students. Early recognition and treatment of deviant behavior appear possible within the model's framework.

I take the position that the model may become a very useful secondary treatment device, both at elementary and high school level, and as it is free of content, theoretically it can be applied to most educational situations. As Joyce and Weil (1972, p. 309) state, it is "a frontal approach to personality development,... aimed at the generic behavior", instead of more traditional approaches which usually aim at specific behaviors. I take the further position that its utility to the general school population may not be without merit.

Note:
Measurement of conceptual level is by means of the Paragraph Completion Test (1965) which is now used as standard. There are six general topics, e.g., "What I think about rules", "When I am criticized", etc. Each response is coded and conceptual level is indicated by the
average of the highest three scores. Protocols are scored by two raters with a consideration of responses on which raters disagree. Inter-rater reliability for the manual ranges from .80 to .90.

Specific examples are given for responses of each paragraph. Hunt cautions users of the manual that they should judge the underlying conceptual structure which generates the response rather than the actual content.

The C.T.P. model. The Californian Community Treatment Project has been the subject of an extensive 10 year research program in the field of Juvenile Delinquency. The project approach to the problem is based on the premise that delinquents are not alike and differ both in the reasons for, and manifestations of their delinquency. The major treatment instrument "The Interpersonal Naturity Level Typology" prescribes differential treatment according to diagnosis. The program is community based and features many sub-research projects which include community schools.

The model is based upon a theory of interpersonal development (Sullivan, Grant and Grant, 1957) which posits seven developmental levels of integration or interpersonal maturity. These are delineated in terms of perceptual differentiation. Level one describes a very low perception of one's place in the environment and one's relationship to others. The theory posits that under 'normal' circumstances, integration progresses through the various stages and leads to a constantly growing awareness of one's place in the universe and one's relationship to others. Thus at level seven a person is characterized by a high level of empathy. As the authors of the theory state:
"With this frame of reference he no longer seeks absolute realities, but sees a variety of ways of perceiving and integrating... This development greatly enhances his capacity for understanding and dealing with people who may be functioning at integration levels other than his own." (1957, p. 384)

The theory further postulates that delinquent behavior is manifest at three integrative levels only. Within these, namely levels 2, 3, and 4, further classification is made in terms of delinquent 'sub-type', which is based on the youngster's behavior. The low level of 'interpersonal maturity' associated with delinquency is consistent with the findings of Hunt and McNam (1968) and reflect a relationship between the models. (They found a general although not point to point relationship.)

Sub-type characteristics are outlined below:

Level 2. Sub-type (AA) Asocial, Aggressive. Responds with active demands and open hostility when frustrated.

Sub-type (AP) Asocial, Passive. Responds with whining, complaining and withdrawal when frustrated.

Level 3. Sub-type (CFM) Immature Conformist. Responds with immediate compliance to whomever seems to have the power at the moment.

Sub-type (CFC) Cultural Conformist. Responds with conformity to specific reference group, delinquent peers.

Sub-type (MP) Manipulator. Operates by attempting to undermine the power of authority and/or usurp the power role for himself.

Level 4  Sub-type (NX) Neurotic, Anxious. Responds with symptoms of emotional disturbance to conflict produced by feelings of inadequacy and guilt.

Sub-type (SE) Situational Emotional Reaction. Responds to identification with a deviant value system by living out his delinquent beliefs.

The principle of 'matching' is fundamental to the C.T.P. model.

The table below summarizes the optimal agent styles thought to match with different sub-types (ibid.).

<table>
<thead>
<tr>
<th>Level and Sub-Type</th>
<th>Agent Styles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2 (AA) (AP)</td>
<td>Tolerant, supportive, protective,</td>
</tr>
<tr>
<td></td>
<td>instructive, dependable.</td>
</tr>
<tr>
<td>Level 3 (CFM)</td>
<td>Firm, 'conwise', alert, powerful, self assured,</td>
</tr>
<tr>
<td></td>
<td>honest and willing to punish.</td>
</tr>
<tr>
<td>Level 3 (CFC) (MP)</td>
<td>Wise, accepting, understanding, warm, interpretive, questioning.</td>
</tr>
<tr>
<td>Level 4 (NA) (NX)</td>
<td>Open, 'man to man', controlling, model-setting, friendly.</td>
</tr>
<tr>
<td>Level 4 (SE)</td>
<td></td>
</tr>
</tbody>
</table>

The 'matching' has been tested in a series of C.T.P. investigations, the earliest of which compared an experimental group of delinquents who were treated according to the C.T.P. model with a comparable control group,
who were institutionalized. The failure rate, which included all revocations of parole, recommitments from the courts, and unfavorable discharges after 15 months of community exposure was 52% for the control group as compared to only 28% for the experimental group (Grant, Warren and Turner, 1966).

Warren, the C.T.P. Director, has claimed that of the experimental population, all of whom were placed in experimental day schools, a majority completed school, and many continued to adult education (Warren, Palmer, Neto and Turner, 1966).

The C.T.P. is another B-P-E paradigm, which has both contemporaneous and developmental overtones. Contemporaneous objectives aim at stopping delinquent behavior, while the long term goals view interpersonal development as the real 'cure' for delinquency.

Obviously the school was only one factor within the C.T.P. treatment milieu. Social workers outside of the school played important roles in the process of rehabilitation. It is suggested here that the C.T.P. has demonstrated that community treatment for delinquent children, using B-P-E is superior to the more expensive and more traditional institutional approaches.

Cultural transmission/or behavioral approaches

The developmental perspectives as advocated by Piaget, Hunt and others, besides considering contemporaneous objectives, involve a long term view which lacks the specificity required by behaviorists. In contemporary education, there can be no doubt that the behaviorists are in the ascendency. Partially this can be accounted for by the present
and popular demand for 'accountability'. The factory employee is judged by the quality of the finished product and increasingly so is the teacher's adequacy judged by the performance criteria of his behavioral objectives. Performance contracting, merit pay and voucher plans are further ramifications of the trend.

Probably the wastage, inefficiency and ineffectiveness of some past educational practices has led to the present emphasis. Further, it is posited here that behavioral approaches are thought by some to be 'The Panacea'. The trouble is, specific behavioral objectives sometimes have certain limitations. They may be susceptible to value judgements, and used with an excess of enthusiasm, may create a situation where the 'wood cannot be seen for the trees'. The more complex aspects of human growth are very difficult to measure and often disregarded for this reason. The various taxonomies cannot be blamed. The hierarchical ordering of objectives within the taxonomies of Bloom (1956), Krathwohl, Bloom and Kasia (1964) certainly give consideration to higher order process objectives.

I share the view of Hunt and Sullivan (1974) that it is largely unnecessary to adopt a particular ideology as 'the one best way'. This section explores some facets of the behavioral ideology. As a result, and largely on a speculative basis, it is suggested that the B-P-E paradigm is not incompatible and may be a guide toward a more effective use of behavioral constructs.

Skinner, Thorndike, and more recently Skinner, have been influential psychologists of the behaviorist school. Skinner's (1938) theories are based upon a Stimulus-Response construct, and can be equated to the
developmental view of: Environment — Behavior. A major difference between the two ideologies is the view taken of 'the Person', or as Skinner would say 'the Organism'. While developmentalists are primarily concerned with the diversity of 'Person' characteristics, Skinner is much more interested in the relationship of behavior and the varying stimuli which are responsible for the behavior manifested.

Briefly, Skinner's concepts define two types of learning. 'Type S' is based on conditioning and is closely related to the work of Pavlov. The second, 'Type R' is operant conditioning. This is interactive, and dependent upon the organism acting upon the environment. 'Reinforcement' defines the means of strengthening a response. While it is not a purpose of this text to examine in detail either of the two types enumerated, the theories have been touched upon because of their significance and influence in educational practices. They are clearly related to the 'behavioral objective' movement where prediction and control of behavior must be in specific and observable terms. Skinner's influence is also apparent in the use of programmed instruction, teaching machines and behavior modification.

Paradoxically, although Skinner is not concerned with individual differences, subsequent developments in programmed instruction and the like have served to accommodate individualized instruction. Coit Butler (1972) and others have taken instructional systems to a sophisticated degree which begin with 'specific response' and 'specific stimulus' and progress to a high level problem solving situation with combinatorial rules. Absolutely in keeping with the developmentalists, Butler summarizes his learning philosophy: "...instructional method must be responsive to the
specific kind of learning involved. Blanket application of the 'lecture method', 'demonstration method', etc. to an entire course of even single lesson is grossly inefficient and ineffective... (1972, p. 33).

In seeming contradiction to the above, he earlier makes the statement that some evidence shows that the more self-direction there is in the problem solving process, the better the learning (p. 37). This prompts the question, "for whom"? This has some overtones of the one best way and does not differentiate individuals. To be sure, Butler details a "Skinnerian" methodology whereby students can move up a hierarchical ladder which begins with structure and culminates in self-direction. There is no conflict of ideologies there between the developmentalists and behaviorists, although Butler does not define how tasks can be assigned differentially. I am not too familiar with his instructional systems, but would guess that most schools utilizing the systems would have all students start on the bottom 'rung' and work up. As a mode of instruction within a developmental model, such as Hunt's, they may be much more effective, when they could be matched to student conceptual level.

Piaget (1971) and Hunt and Sullivan (1974) are of the opinion that programmed learning methodology is more appropriate for low conceptual level students. Piaget considers the possibility that children may be tracked too narrowly and that initiative may be thwarted.

In any event, the 'differential effect' appears an important mediating variable. Skinner (1968) emphasizes immediate feedback as the reinforcement, and step by step procedures as reinforcement to more complex behaviors. Probably the developmentalists would argue that
different students respond to stimulus in different ways. Hunt's (1971) study of accessibility channels which includes motivation, value orientation, feedback and sensory orientation, offers further evidence of differential response.

A comprehensive ERIC search called for this study, details numerous studies, and includes workstudy, instructional systems, and behavior modification. Many of the results are inconclusive, and one reason may be a lack of consideration of 'differential effect'. Typical is a behavior modification approach reported by J. Burchard (1971), — it worked for some boys, but had little effect upon others.

One study reported in the ERIC search appears more interesting than the others inasmuch as it attempted a differential approach. Wotkiewicz and Minor (1969) describe a project, utilizing operant conditioning for delinquent youths. Here previously 'intractable' youths were given treatment in a differential operant treatment program. Behavior categories were measured by scales developed by Quay and others and were as follows:

1. Inadequate and immature
2. Neurotic
3. Sociopath, subcultural

Each unit was designed to meet the needs of the student according to category. Motivation for completing the program requirements was provided by a Class Level System, — placing tangible rewards into a ranked, three level system, with the fewest rewards for the lowest group, more for the middle group, and all that was available for the highest level. The basic program strategy was the application of behavior modification principles derived from operant conditioning theory.
Apparenty students were advanced academically two years in the one year they spent as participants in the program.

This study illustrates what may be the desired route of behaviorism. The fact that Skinner has defined various types of reinforcement offers a clue to prospective researchers in 'differential approaches'. These are:

1. Fixed-interval Reinforcement (given at standard intervals).
2. Variable-interval Reinforcement (given at variable intervals gauged around an average).
3. Fixed-Ratio Reinforcement (given for a fixed rate of response).
4. Variable-Ratio Reinforcement (given around an average rate of response — reinforcement occurs to an average of 16 responses more or less).

Obviously to find if these differential reinforcements can be linked with personality characteristics demands research which has not been ventured at this time. Nevertheless it is needed and may well enhance and better define the behavior movement.

Without the related research, it would be folly to draw hard and fast rules about differential and developmental constructs to behavioral approaches. However, attention is drawn to two possible avenues: — one from Hunt and Sullivan (1973), and another from Havighurst (1972). The constructs define possible schema which may ultimately create a more effective ideology, and are listed below:

Hunt and Sullivan (1973, p. 174)

Stage 1 Anomy — The lowest stage characterized by instinctive behavior where conduct is modified by pleasure and pain.

Stage 2 Heteronomy — The child is ruled by others, and is dominated
by their imposition of rules.

Stage 3 Socionomy -- Increasing control on conduct through the use of social praise and social opinion.

Stage 4 Autonomy -- Inner ideals of conduct which are internalized and no longer dependent on "authority" or public opinion.

Havighurst (1972, pp. 312-316)

1. Satisfaction or deprivation of physiological appetites.
2. Approval-disapproval from other persons.

Havighurst (ibid.) reiterates the following six propositions which are closely related to the above:

1. Different subcultures prepare their children in different ways along this evolutionary path.
2. Differences exist between ethnic subcultures in their reward systems to teach their children.
3. External rewards have positive value for disadvantaged or failing children.
4. Effective reward systems must be based on a strong ego.
5. A strongly developed ego gives a sense of control and personal responsibility for important developments in one's life.
6. People, by the time they reach adolescence, learn to operate at all the several levels of reward; and the level they operate varies with the action area.

Although the constructs are largely theoretical and in the realm of conjecture, they seem to underline the possibilities inherent in
"Skinnerianism". In conclusion, the review of research and literature suggest the following:

(a) Behavioral approaches are susceptible to differential effects.
(b) Various researchers are aware of, and are devising ways and means of coping with, differential effects.
(c) A tacit recognition of personality differences may allow a more rational and effective utilization of behavioral models.
(d) Behavioral models, within a developmental framework have implications to delinquent treatment at the secondary and tertiary level.

Romanticism/or humanistic education

Based upon the work of Rousseau and his naturalist movement, humanistic models are quite diverse. A common ingredient to most is a belief in the goodness of human nature and the freedom afforded the child within the educational environment.

I have found it very difficult to obtain research in the area. The actualization processes seem in tune with contemporary youth and no doubt will be a continuing feature of the seventies. However, as Cicirella (1972, p. 40) points out, most of the programs have to be accepted on faith. He too finds little evidence of research. He emphasizes the need for this, particularly in the area of stage development.

Although Maslow (1968) can be associated with the humanistic movement, little attention seems to have been given to his developmental schema. Possible the most famous illustration of this neglect can be seen in A.S. Neil's "Summerhill". Here, all children are given the same
prescription: -- freedom. To developmentalists this is an extremely narrow and inflexible environment, because of the lack of differentiation. To underline this, Bernstein (1968, pp. 37-41) has found that gregarious, aggressive students apparently benefit more than the quiet introverted students. Karl Rogers (1968), too, comments that not all children seem to be ready for his non-directive environment. The main difficulty inherent in humanistic approaches seems to be the belief that an educational environment that is warm, accepting, loving and tolerant is suitable for all children. In this writer's view, many delinquent children would simply manipulate this situation to their own advantage. To 'care' for some students is to confront them with their obnoxious behavior. The C.T.P. model has shown the efficacy of differential approaches, and which seem ignored by the humanists.

This is not to say that humanistic approaches are without merit. In the early school years they may be very important indeed. Within a conceptual framework they show promise. It is interesting that Joyce and Weil (1972, p. 305) in their coding of teaching models rate most of the humanistic models as being more appropriate for high conceptual level students. Certainly the "being-values" of Maslow (1968) can be associated with high interpersonal maturity and it may well be that the process of self-actualization can be correlated with the scales of Kohlberg, Piaget, Warren and Hunt. Figure 1 below illustrates this possible relationship:
Figure 1: Conceptual level and the self actualization process. A hypothetical relationship.

Conclusion

It is somewhat surprising to read persons of the calibre of Sandra Warden (1968, pp. 53-67) stating categorically that stage theory is not theoretically adequate. She cites Piaget as being influenced by Thorndike's conceptions of stimulus-response. Warden is correct in stating that stage theories are presently inadequate; a point reiterated by D.E. Hunt throughout his writings, and readily conceded by other stage theorists. By the same token, similar statements can be made about most other education theories. Warden's comments citing Thorndike's influence on Piaget serve to underscore the inconsistent way experts perceive developmental approaches.

Preceding pages have attempted to clarify differences between ideologies, but primarily have tried to illustrate how developmental approaches may help catalyze a general educational improvement within
all ideologies.

Admittedly, developmental approaches pose as many questions as they answer. Little is known of the ability of teachers to modulate differential styles, or their ability to transform complex theory into effective classroom organization and environment. Teacher training as we know it needs scrutiny and probably modification. It may also be true that developmental methodology may have relevance to teacher growth, which leads to the question, are teacher trainers capable of modulating their style? One could go on! Joyce and Weil (1972b, pp. 48-63) are already advocating the concepts, but for the present, dynamic changes are still some way in the future. Time only will tell, regardless of developmental education's potential value as to whether it will gain more general acceptance. It has to match the 'fads' of the teachers, and this is not always easy.

The last two chapters have spread a 'wide net', and to an extent have explored potential educational prescriptions in the secondary and tertiary treatment areas. Better education both in community schools and closed institutions has been hypothesized as possible.

Basically this study can be considered to be in two sections. This paragraph concludes what is intended as an exploratory and theoretical overview. Following chapters are more specific and contain a descriptive study which illustrates the developmental paradigm and its application to a small population of adjudicated delinquent boys. It is hoped that some positive inferences may be drawn for future implementors of education programs within a closed setting.
CHAPTER IV

A DESCRIPTIVE PROJECT USING AN INTERACTIVE EDUCATIONAL PARADIGM WITH ADJUDICATED DELINQUENT BOYS

The Problem

While this project is concerned with the development of more effective educational treatment for adjudicated delinquent boys, as reiterated in Chapter I, no attempt is made to incorporate the many variables involved in social failure. One social institution only will be considered; in this case a residential treatment center for delinquent youth, Boys' Farm and Training School, Shawbridge, P.Q. The educational treatment component will be the subject of focus and this is intended to reinforce the major goal of the institution - rehabilitation.

The failure of most delinquent youth to negotiate the public school system has been well documented in Chapter II and also by Rosenberg and Silberstein (1969), Glueck and Glueck (1964), Polk and Schafer (1972), et al.

Unfortunately, delinquents appear to fare little better in most correctional institutions either from an educational or rehabilitative point of view. Ohmart (1968) expresses the extreme of this position in suggesting that there is a growing consensus that institutions deter rather than assist in rehabilitation.

Although Ohmart's pessimism is widely shared, a survey of abstracts within the ERIC FILE reveals that not all institutions are reactionary in outlook. Innovations are being attempted across the nation. Unfortunately a majority have provided inconclusive evidence as to the validity of the treatment implemented.
Other researchers, notable D.E. Hunt (1971), Jesness (1971), Joyce and Weil (1972), et.al., have found that most studies tend to pose the question..."Which approach is better?", with an assumption that a given educational experience produces the same effect for all children. Walberg (1971) decisively confirms this after a massive review of research for disadvantaged youth.

Cronbach (1957, p. 679) underlines the problem in his distinction between the two disciplines of scientific psychology - the correlational and the experimental. Correlational psychologists emphasize individual differences, whereas an experimental psychologist emphasizes environmental differences or treatment variations. Individual - environment interaction, although not new in psychology is, according to Pervin (1971, p. 548), generally neglected. This neglect is probably epitomized by those studies which asked such questions as "Which approach is better?", "What are the characteristics of good students?", (...good teachers?", "...good curricula?").

D.E. Hunt takes a jaundiced view of this type of research which he considers a waste of time and research. I share Hunt's view that only the interactive paradigm makes some provision for individual differences and differential learning environments. This view is given extensive treatment and analysis in Chapter III of this text.

Derived from a theory of interpersonal development, (Sullivan, Grant and Grant, 1957, pp. 373-385) an individual - environment interaction paradigm is currently in operation at the institution which is the subject of this study proposal. Within the context of the paradigm is a belief that delinquents differ in the reasons for, and manifestations
of, their delinquency. Youth are classified into one of nine personality integrative levels, I Level as it is called. (See Chapter III). According to the diagnosis they are assigned to treatment regarded as optimally effective for wards of that particular subtype.

The first major study using I Level in an institutional setting, (I Level originated from the Californian Community Project) was the Preston Typology study (Jeness, 1971). The objectives were ambitious and included the development and evaluation of differential treatment. The findings were promising but inconclusive, largely due to an absence in the theory of an explicit conceptualization of how behavior is modified (Jeness, DeRisi, McCormick and Wedge, 1972, p. 4).

In addition, and of significance to this proposal, little research is currently available which clearly validates educational models which can be fitted to I Level paradigms. To conclude this statement of the problem, this is seen as thus:

Institutions have not been notably successful in either the education or rehabilitation of delinquent youth. Because of the largely oversimplistic approach to research, most findings from various studies appear inconclusive, if not ambiguous.

The individual - environment interaction paradigm is selected here as a more logical approach, although this too is not without problems. If the educational component is to complement the treatment at Boys' Farm, it needs to be interactive in nature. Unfortunately as has been pointed out, even the treatment aspect of I Level lacks clear definition. With regards to educational application, definition is vaguer still. A major purpose of this study proposal will be to
delineate educational prescriptions into the I Level paradigm.

In order that a hypothesis may be formed, the following sections review related literature and research. Due attention is given to differential and interactive paradigms, and their utility or potential utility as educational treatment modes.

Related literature

The I Level paradigm has been clearly defined in Chapter III of this text and further information is provided in Appendix A. While it is not a purpose to repeat this information, some other comments appear necessary.

Within the defined nine I Level delinquent subtypes an attempt has been made within the CTP program at "treater matching"; that is, a particular staff style, an approach or treatment modality, has been recommended as most appropriate. The principle of matching treatment agent to client is probably the most significant aspect of I Level treatment. The I Level paradigm was originally developed specifically for the community project, and though findings have not been without ambiguity (Jesness, DeRisi, McCormick and Wedge, 1972), (Pecker and Heyman, 1971), the feasibility of community treatment as an alternative to incarceration appears to have been clearly demonstrated.

Jesness and his colleagues believe that the power of the model to elicit change has come mainly from the ability of the agent to influence his client by the nature and quality of his relationship with him. However, as Jesness has put it: "Knowledge of I Level does not provide strategies for behavioral change, or a theoretical based system for
arriving at them." (p. 4)

Explicit conceptualized treatments, matched on a differential basis to subtype characteristics have not, at this time, been either defined or validated. In addition, research into educational application of the I Level model has been confined to one institution only (Andre and Mahan, 1972). Results here were largely inconclusive, doubtlessly due to the application of a clinical paradigm to a totally different setting containing many unknowns.

These comments are not made to derogate I Level, but simply to underline the difficulties inherent in the union of an integrative clinical approach with educational treatment. It is necessary to move to the field of educational research to isolate a paradigm which may facilitate education congruent to I Level theory and practice.

The essential ingredients of an educational approach which compliment the I Level treatment paradigm appear to be:

a) a developmental perspective.
b) a personality oriented approach.
c) an interactive approach.
d) a differential approach.

The A.T.I. (Aptitude-Treatment-Interaction) paradigm appeared initially an interesting avenue of related educational research. However, as Cronbach and Snow (1969) have shown in their extensive review of A.T.I.s, most studies were concerned with highly specific aptitudes, skills and learning strategies. Few are developmental, and fewer seem to have useful applicability to the educational process of adjudicated delinquent boys.
D.E. Hunt has emphasized the need for the interactive paradigm to be viewed within a developmental perspective, a perspective which recognizes changing characteristics and a need for differential treatment. While these constructs may be seen in I Level, they are something of a rarity within educational models. Only developmental education appears to encapsulate the vital features detailed above in (a), (b), (c) and (d).

Lewin (1936), Piaget (1960), Kohlberg (1972), Cronbach (1967), Snow (1968) and Hunt (1971) are some of the more articulate proponents of developmental education. As has been previously outlined, Hunt's researches have been extensive and to a large extent incorporate the desired features as stated above. His model, which has already been reviewed, is proposed as the most likely match to the I Level paradigm. This further review of the Hunt paradigm is made in order that the socialization aspects can be further defined and its implications to educational treatment for delinquent boys underscored.

Hunt and Hardt (1968, p. 21) describe the conceptual systems view thus:

"The socialization process is a continuous one which under optimal conditions, proceeds in a given order from lower to higher conceptual levels. We analyzed this continuous process in stages as one might represent a motion picture sequence by selecting representative still shots from the sequence. These developmental stages characterize the persons interpersonal orientation, and the major characteristics at a given stage deal with the conceptual work occurring at that stage. This developmental theory emphasizes those aspects of socialization pertaining to learning about oneself and about others, the various forms the relation between self and others may take, and to structural organization. We assigned Roman numerals to each developmental stage to indicate increasing conceptual level."
The major developmental work of Stage I is that of defining the external boundaries and learning the generalized standards which apply to both self and others. This learning of "ground rules" is the assimilation of basic cultural norms and expectations. When a child is articulating Stage I, he manifests features of the moral realism described by Piaget (1932) in his literal concern with rules and compliance to them. Events are interpreted categorically as either "good" or "bad".

The generalized standards assimilated in Stage I serves as the anchoring basis for self delineation, the major work of Stage II which occurs through a process of "breaking away" from the standard. To learn about how one is distinctively oneself is the beginning of acceptance of individual responsibility for outcomes. The initial expression of such independence may appear an exaggerated form, but nonetheless this stage marks the first awareness of one's feelings as cues for differential action.

The self understanding acquired in Stage II serves as the empathic basis for perceiving the feelings and experiences of others as similar to or different from one's own feelings and experiences. This empathic matching in Stage III generates a more highly differentiated interpersonal orientation. Although the person may have discriminated between others in the more concrete terms of expected roles at an earlier stage, the first awareness of others in terms of their own personal feelings and values appears at Stage III."

The authors further state that:

"When environmental conditions are not optimal, the developmental process will be arrested at any particular level, and the specific interpersonal orientation associated with that level will become a relatively pervasive item for the person." (Ibid., p. 23)

Carr (Jan. 1965, pp. 159-76) and Wolf (March 1963, pp. 103-123), and Hunt and Dopyera (1964), have shown that youth at a higher conceptual level have available more differentiated dimensions with which to view themselves and other persons. This is totally in keeping with the I Level paradigm which posits that persons above I_A (that is, persons more empathically aware of their interactions with others) are less likely to manifest delinquent tendencies. The relationship between the models appears pervasive. This has been investigated by
France (1968). Although he confirms a general relationship, surprisingly enough this is not point to point. Hunt and McManus (Jan. 1968) confirm that the sub-I level (the lowest conceptual level of the Hunt paradigm) correlates with the I\textsubscript{3} subtype of the C.T.P. paradigm. However, the I\textsubscript{3} subtype ranges from the sub-I level through the Stage I level of the Hunt scale. Hunt and Hardt (Jan. 1965) have also found a relationship between delinquent behavior and the sub-I scale, and that delinquent behavior is much more likely to occur at sub-I than at the other and higher stages of the Hunt paradigm. Similarly Matza (1964) has shown that delinquents usually fail to assume responsibility for their acts, -"A man's fortune is not his fault" - using a scale developed by Strodtbeck (1958, Chap. 4, p. 169). His testing indicated that the lowest prevalence of "self mastery" is found in the sub-I group.

In contrast to the I Level paradigm which was specifically developed to reduce delinquent behavior, the conceptual paradigm attempts to characterize the socialization process and is concerned with the planning of differential education environments. Currently there is little research available which can indicate the efficacy of the conceptual paradigm as an educational and treatment means for delinquent students. Perhaps the only relevant evidence comes from the study of Hunt and Dopyera (1964). Here the conceptual model was applied to a culturally deprived population. Results were promising and may indicate the viability of the paradigm as it applies to delinquent students.
A further clue if indirect, is provided within the study of Jesness, DeRisi, McCormick and Wedge (1972). In this comparative study, the effects of transactional analysis, and behavior modification, were measured among a variety of I Level subtypes. The findings indicated that for I₃ Cfms students, behavior modification was the more effective treatment mode. As a relationship between low conceptual children and I₃ has been shown to exist, it may be postulated that the high structure associated with behavior modification was the real reason for treatment effectiveness. As was pointed out in Chapter III, Hunt's learning environments are basically stated in terms of structure and appear compatible to the findings referred to above, at least in terms of low conceptual students. These findings are pertinent to the study proposal enumerated in Chapter V of this text, as the target population is specifically low conceptual students further diagnosed as I₃ Cfms.

As may be seen by this review, D.E. Hunt, in common with Sullivan, Grant and Grant, sees education in terms of personality development. Educational goals may differ from treatment goals but probably only in degree. The terminal objectives of both Hunt and the I Level model are vitally concerned with increased awareness. This is totally congruent to all other developmental theorists. Hunt does not seek to accelerate stage development, "the American fallacy" as Piaget has called it, but to prevent fixation at a particular level. The implications to delinquent education in general, and to the I Level paradigm in particular, seem difficult to ignore. As a result of this review, the following hypothesis has been formulated: "An educational environment matched
in terms of structure to student conceptual level, will better facilitate the learning process and student attitude toward education."

Although there is a temptation to formulate further hypotheses concerning the likelihood of changes in conceptual level and delinquent behavior as a result of the matched environment, the time parameters of the study largely preclude this. However, within the study design, various instruments are itemized and which are utilized on a speculative basis. If changes in conceptual level and delinquency traits occur, as a result of the treatment, this should be recognizable and to an extent measurable.

The study design is thus that only one I Level subtype - the "Cultural Conformist" (I₃ Cf₃) receives the treatment. Although the Hunt paradigm may be appropriate for all I Level subtypes, it is beyond the scope of this study to investigate this. However, if as a result of the present study, the educational treatment is seen to work for Cf₃s at least within the Boys' Farm and Training School, the information may be useful; as according to Palmer (1969) the I₃ Cf₃ constitutes at least 20% of all delinquents.
As has been stated, the study design contains two dimensions. The second dimension is intended as a case-study and evaluates various facets of the environment to ascertain whether research at the Institution can be a realistic proposition. Environmental factors which create problems during the research aspect of the study will receive serious examination in the final chapter.

Meanwhile this present chapter sets out to describe the first dimension of the study, which is seen as a descriptive and exploratory model. As a pilot project, results may influence the direction of other unit education programs within the Agency.

One of the major difficulties encountered within the Institution is attempting to develop educational program for highly unmotivated students, entirely 'turned off' school. The hypothesis stated here is an attempt to deal with this situation and states:

An educational environment matched in terms of structure to student conceptual level will better facilitate the learning process and concomitantly, student attitude toward school.

Dependent Variable: Conceptual Level.
Independent Variable: Educational Environment.

Objectives of study

1. To implement a highly structured learning environment in terms of
(a) teacher direction and (b) educational prescription, for low
conceptual students. The environment to be checked out regularly by informed observers and various environmental instruments (enumerated under sub-heading 'Instrumentation').

2. To begin study on January 1st, 1974 and terminate June 14th, 1974.

3. To validate the Conceptual Paradigm as an appropriate educational treatment for I Level 3 CfM students in terms of (a) attitude toward school, as measured by the Classroom Behavior Inventory, (b) attainment in vocabulary and comprehension level, as measured by the Gates MacGinitie Instrument, (c) attainment in math concepts, computation, and application, as measured by the Stanford Achievement Instrument.

4. To explore the effect of the learning environment on conceptual level. The time parameters are such that no change is expected here.

5. To investigate the effects of the learning environment on disruptive behavior, as measured by the Classroom Behavior Inventory. Indirectly this gives some inference as to delinquent tendencies.

The setting

The study has been implemented at the Boys' Farm and Training School. Situated in the foothills of the Laurentians, the residential center for adjudicated delinquent boys adopted the I Level typology and differential treatment model some five years ago. Seven living units, each designed to house some fifteen boys, are a feature of the campus. According to diagnosis, a boy is assigned to a specific unit and treatment team which has an approach considered optimally effective for his
particular subtype. Each unit team, which consists of co-ordinator, child care workers and educational counsellors, has a considerable degree of autonomy in the area of program planning and organization. Consultative services in the areas of psychology, recreation, education, and health are available on site. Recent building additions include a modern learning center and extensive recreational facilities.

The subjects

Currently two living units are responsible for the treatment of some twenty plus boys. The population varies for several reasons of attrition, notable discharge, A.W.O.L. (absent without leave) and the rate of new referrals. Boys are heterogeneously grouped by age, academic performance, I.Q., but homogeneously grouped by I Level and diagnosed within the typology as "Immature Conformists", (T, Cfms). (See Appendix A for further information).

To ascertain student conceptual level the Paragraph Completion Test (Hunt & Associates, 1963) was administered to the students last year. Results indicated that there were roughly equal numbers of boys at two different stages of conceptual development, Sub I and Stage I of Hunt's scale. These stages have been described elsewhere (Appendix B) but briefly are seen as follows:
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Optimal Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub I Egocentric, very</td>
<td>Highly structured, consistent environment</td>
</tr>
<tr>
<td>negative, impulsive,</td>
<td>providing many concrete experiences.</td>
</tr>
<tr>
<td>low tolerance for</td>
<td></td>
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</tbody>
</table>
| frustration.            | Encouraging autonomy within normative standards.
| Stage I Concerned with  |                                                 |
| rules, dependent on     |                                                 |
| authority, categorical  |                                                 |
| thinking.               |                                                 |

As can be seen from Appendix A, both similarities and differences exist between CfM characteristics/environment and Sub I, Stage I characteristics/environment. The I Level environment is more concerned with the quality of interpersonal relations and typically the Hunt environment is more interested with the level of 'structure'.

It seems that conceptual measure differentiates two levels of Cultural Conformists, a fact recognized within this institution as having treatment as well as educational implications, and congruent to the findings of Hunt and McManus (1968).

For the purposes of this study, wards at Sub I were homogeneously grouped and assigned to the educational 'treatment'. Those students at Stage I did not participate in an educational 'treatment' congruent to the Hunt paradigm. Their treatment, which included an educational component, seemed more appropriate to high conceptual children. It is best described as non-directive, allowing students to 'act out' then attempting to catalyze treatment by working through the 'acting out' using intensive counselling techniques. This was the theory (see Appendix C). It did not always work out in practice, and will be discussed again during the analysis of findings in Chapter VI.
In addition to the grouping enumerated, a further comparison was afforded because of the inclusion of a few boys at Stage I within the project group. This was only partially deliberate, but largely contingent on the availability of beds within the two living units.

Procedures

(I) Target Population:

Fourteen adjudicated delinquent boys with an age range 12-16 years. Diagnosis according to I Level typology: I Level 3 'Immature Conformists'. Diagnosis according to Conceptual Level: Low-Sub I of Hunt's scale. (Included within this population is a 20% distribution of students at higher conceptual level for purposes of comparison).

(II) Data Collection:

Pre-testing and post-testing for the project and comparison groups included:

(a) The Paragraph Completion Test (Hunt & Associates, 1968) has six general topics, - 'What I think about rules', 'When I am criticized', 'What I think about parents', 'When someone does not agree with me', 'When I am not sure', and, 'When I am told what to do'. Each response is coded and conceptual level is indicated by the average of the highest three scores. Protocols are normally scored by two raters with a consideration of responses on which raters disagree. Inter-rater reliability for the manual ranges from .30 to .90 (Hunt, 1971, p. 37). Specific examplex are given for responses for each paragraph
and Hunt has cautioned users of the manual that they should judge the underlying conceptual structure which generates the response rather than the actual content.

(b) Classroom Behavior Inventory (Schafer, Aaronson and Burgoon, 1969).

This scale provides a basis for assessing student behavior relative to 12 areas which include: thoughtfulness for others, participation with others, self confidence, general enthusiasm, lack of environmental awareness or gross disorientation, manifest anxiety, aggressivity, hypersensitivity, over-competitiveness, resistance to classroom procedures and controls, over-dependency and feelings of inferiority, withdrawal and non-involvement. The protocol is in the form of a questionnaire in which the student responds by circling one of the following: almost never, not often, sometimes, fairly often, very often. There are two forms of protocol, one for student use, and the other for an observer of student behavior.

(c) Two-Factor Classroom Environment Scale (Ferdun, 1972).

This scale was used by observers to rate the classroom environment in terms of structure and class management; and interaction. High structure with low interaction will be considered a satisfactory rating, with hopefully a movement towards increased interaction as time goes by. The protocol is marked on a 'true' or 'false' basis and responses are made to such statements as: "Students are almost always quiet in this class"..."This class is pretty disorganized"..."The teacher
explains what the rules are", etc.

(d) Gates MacGinitie Reading Test.

This is a well-standardized instrument which measures grade level average in vocabulary and comprehension.

(e) The Stanford Arithmetic Achievement Test.

This instrument evaluates in terms of grade level the following areas: computation, concepts, applications.

In addition, and used only on a pre-test basis, was the Lorge Thorndike I.Q. test, and a semi-structured interview to diagnose I Level sub-type. The latter interview follows a theme which can be seem thus:

(a) Offence - Interviewer looks for boy's perception of cause and reason for delinquency.

(b) Relations with peers - To what sort of group does he belong? Who are the leaders? How are they chosen?

(c) Parents - Probe for boy's feelings towards parents.

(d) Ask how student feels about school. Ask him to describe two teachers, one he likes, one he dislikes. Find his attitude toward rules.

(e) Self - Ask the boy how a friend might describe him, how a teacher would. Ask him to describe himself. Future plans. Does he expect to change?

(f) Police - What are they like?

(g) People - What kinds does he like/dislike?

The interview is taped and second rated by another interviewer. A paper and pencil instrument, the Jesness Inventory (1966) is used to correlate with interviewers' findings before a classification decision.
is made. Jesness (1969) reported a 65% reliability in diagnosis. Palmer (1969) confirmed this, but claimed follow-up interviews raised reliability to over 75%.

It should be pointed out that the Lorge Thorndike I.Q. test and the interview referred to above were not administered as part of this study, but as student referral to the Agency, which in most cases was some time before the beginning of the study. This fact is underlined so that the reader may be dissuaded from the view that students were inundated with testing.

Staff training

Prior to the study, training took the form of weekly meetings with the two educational counsellors (who would be largely responsible for the program), the treatment supervisor of the project group, the psychologist and the writer. These meetings began in November, 1973, and were intended to 'sell' the idea of the project, and acquaint the educational counsellors and the treatment supervisor with the conceptual paradigm. Relevant papers and readings were distributed to these persons at regular intervals. Although micro-teaching was to be a part of the training, for one reason or another this went by default. Reasons for this will be discussed in the final chapter of this work during the critical analysis of the study. In retrospect it seems essential that micro-teaching, or some form of simulation, be an integral part of the training.
Limitations of the study

Limitations of the study are already listed in Chapter I and will not be reiterated within this section.
The following procedures were developed with a view to developing a learning environment for the project group 'matched' to their low conceptual level. (See Appendix B).

(a) To implement a clearly delineated daily program based upon highly specific performance objectives, which provided immediate feedback to student.

(b) The development of a modified 'operant conditioning' system of reinforcement. This was on a three scale basis of reward. The first scale provided the student with an afternoon for model making and was contingent upon his achieving forty 'reds' (points) over a period of four weeks. Red points were awarded for 'assignment completed'. Green points (negatives) were awarded for 'time wasted'. The system allowed for a maximum of two 'reds' per day. The second scale was based upon the same scoring system. Students achieving this level were given the added privilege of earning money — to a maximum of $1.00 per week. The final scale permitted successful students to have 'project' time. Here they selected project cards which essentially were performance objectives allowing some decision-making on the part of the student. The third level was deliberately placed on top of the hierarchical ladder, stressing the importance of independent study, and hopefully providing motivation for conceptual growth.

(c) To utilize various programmed texts and kits which provided immediate feedback to student besides individualizing the program.
(d) Development of short term vocational projects to include auto-
mechanics, welding and carpentry. These were intended to facilitate some occupational awareness and exploration, besides integrating the mathematics, language arts and library usage.

(e) The developing use of assignment cards stated in performance terms allowing limited choice and decision making (to nurture students to more independent behavior within the library and multi-media center).

(f) Emphasis within the learning environment upon visual and auditory media. This was an attempt to 'hook up' with students' 'accessibility channels'. The Institution is extremely well equipped with a wide variety of modern media and it was felt that these should be exploited to the full.

(g) To consider the use of the 'closed' unit for limited time periods for students with extreme behavior problems. This was intended as a negative reinforcement as the closed unit is considered as 'jail' by the boys, even though it was (and is) far from being so.

Classroom curricula overview

This sub-section describes briefly the type of learning experiences which resulted once the study had been implemented. The overview is by no means complete but is illustrative and may give a generalized picture of the nature of the program.

Structure was developed in two dimensions. First the educational counsellors had to modulate a style specified by Hunt as congruent to low conceptual students, and included clear definition of the rule-base for the class, and consistency in dealing with rule infringement.
There was also an expectation that all students participated in school five days per week. The 'star' system was a support system, and provided quick feedback to students, as to teacher expectancies and their own behavior. The sub-section headed "Objective and Subjective Observations of Classroom Environment" analyzes more closely this dimension of structure. The other dimension was the actual learning experience which needed specificity, immediate feedback, good probability of success (matched to student performance level), and in keeping with the short attention span which characterized the majority. Following the recommendations of Joyce and Weil (1972) operant conditioning in the form of programmed learning kits was utilized. This also made easier the task of individualization - seen as mandatory if students were to achieve any sort of success. Listed below under subject headings are descriptions of material used and methods of presentation.

**Mathematics.** Most students were two to three years behind expected grade level for their age. To improve this, individualization was essential and was expedited via the media of the S.R.A. Computational Skills kit. To supplement this Mathex was occasionally used. Experiential activities included the making of geometrical shapes, weighing and measuring, use of clinometers and simple survey. To an extent the mathematical needs of more advanced students were not fully met until (during the final month of the project) they used the "Saskatchewan Newstart Program". This latter is an operant conditioning program based upon highly specific performance objectives and criterion reference tests, and developed originally for illiterate adults.
Language arts. The S.R.A. Reading Laboratory and S.R.A. Manpower kit provided a structured nucleus for the program. These were supplemented by the texts 'English Through Experience' (Coop Clark), 'Starting Points in Language' (Ginn), the use of taped stories, Super 3 Loop films, picture cards, etc. Class discussion was kept to a minimum as this only ended in chaos. Assignments were given, and with a minimum of dialogue, students were expected to begin work. Without exception, 30 minutes was the maximum time for completion. At the latter end of the study, assignment cards stated in performance terms, led to a better level of creative writing. Performance objectives were never developed in any sort of hierarchical ordering and had little, if any, developmental aspects.

Social studies. The lessons bore little resemblance to provincial curricula and were intended to be 'high interest' with some common denominator for fifteen students with a wide heterogeneity apart from I Level and conceptual level. These were lecture based and supplemented with the various media including slides, and 16mm. movies. 'Medieval Times', 'Aircraft of the Second World War', 'Marijuana and You', 'India', and other topics illustrate the range covered. No systematic curricula could be seen, and to an extent reflected expediency on the part of the teachers, who tended to work month by month. A difficulty inherent was the lack of adequate planning time for the teachers who were responsible for student supervision from 9:00 a.m. to 3:00 p.m.

Occupational education. The development of occupational education presented problems. Teachers (educational counsellors) employed by the Institution were an intrinsic part of a cottage team, and were responsible
for the education of students based within that cottage only. Apart from one art specialist and one vocational specialist centrally based within the learning center, the two cottage based educational counsellors were left much to their own resources. These resources included interested child care counsellors from the same team. However, with one exception, this help never amounted to much during the day program. Input from child care counsellors was contingent upon shift times, available skill, etc.

In order that some provision could be made, at least to the level of occupational exploration, assistance was provided by the experienced centrally based vocational specialist. He instructed the project educational counsellors on the use of performance objective design, and guided them towards simple, short term projects, never longer than one week. The design of these projects was an attempt to link 'so called' academics with the occupational shop. The central specialist supervised the project educational counsellors during the shop sessions. This he found difficult, especially in the area of shop safety.

The most notable occupational education occurred midway through the project when a 'peer teaching' system was introduced. Here, older and more mature boys were responsible for the one to one teaching of project students. These older 'peers' were from another cottage unit. In turn they were supervised by the two competent educators from that unit (which treated I_x N_x boys). Shop safety improved. Interestingly enough, a self-esteem measure administered to the 'peer teachers' at the end of the program showed an improvement in this affective area, in some cases notable.
Career education, based upon the cluster-system with hierarchical objective format was begun to a small extent. However, because of the diverse range of students and the limited teaching skills available, it never amounted to very much. A spin-off resulted, though, from the discussions around the concept. During September, 1974 two other units intend implementing a total integrated career education program which will be partially based upon the Saskatchewan Newstart program previously referred to.

A few of the older students from the project who were scheduled for discharge by the end of the project participated in a 'career' project which was basically concerned with 'Orientation to School'. As has been said, delinquent students are not enamored by the public school system, but it is often vital to their rehabilitation process to return and succeed within the system. Various topics were covered and included:

'What does education mean?'
'What are the aims of the school?'
'Why have schools been criticized?'
'What is the value of education?'

Some independent and related study was attempted but was not notable successful. Other assignments in social studies, based upon limited choice, were tried late in the project and similarly (at least in this observer's view) were only moderately successful.

* The text 'Career Exploration and Planning', Shertzer (1973), Houghton Mifflin, was found useful.
To conclude this section a list of book publications is enumerated below. These proved effective to the reading motivation of the project group:

Longman's Simplified English Series, Longman's, London.
Hardy Boys Mystery Stories, Author: Franklin W. Dixon, Grosset & Dunlop, New York.

Pocketbooks.

Objective and subjective observations
of project classroom environment

To gain some measure of the quality of the classroom environment of the project group, observers completed the "Two-Factor Classroom Environment Scale" on a pre, mid and post basis. Two observers remained constant and a third (not always the same person but extremely familiar with the group) made a gross total of five observers. Before an examination of the results, the scale is briefly explicated in order that the reader may better evaluate the results.

The Two Factor Scale originated from a scale developed by Moos (1963) which was designed specifically for the Paso Robles Project (Mahan, 1971a, 1971b). The Moos scale examined the environment in terms of: Involvement, Teacher Involvement, Task Orientation, Rule Clarity, Order and Organization. The second factor measured: Participation, Affiliation, Student Influence, and Innovation.
Unfortunately the scale proved too complex, and observers were only able to correctly label 7.27 of the thirteen scales (K. Corano, 1970). The Two Factor Scale utilized in this study was a derivation of the Moos scale, developed and researched by G.S. Ferdun (Feb. 1972). He reduced the number of items, the number of subscales, and the correlation between subscales. The completed new scale was short, easy to administer, and proved useful as a tool for administrators to evaluate staff performance within the Paso Robles study.

Ferdun (ibid.) posits four basic types of classroom environment:

1. a high organization and order and high classroom interaction,
2. a high organization and order but low classroom interaction,
3. low organization and order and high classroom interaction, and
4. low organization and low classroom interaction. A score on scale A (order and organization) of 19 or over represents a highly organized and ordered classroom, while a score of less than 14 would be expected for a classroom with little order or organization. A classroom with a large amount of interaction would score 11 or more on scale B while a classroom with little interaction would score less than 7.

Within the present study the goal was to achieve a high score on scale A (order and organization) and it was expected that because of the conceptually concrete students involved, scale B (interaction) would score low. On a developmental basis, there would be an expectation for higher scores on scale B, but this was not a goal of the study due to the narrow time parameters.

The project educational counsellors proved somewhat reluctant to have visits from observers, because of the effect upon students and
suggested very narrow time slots as being appropriate. Rather than be tracked this way, the observers who were appointed all had occasion to work directly and frequently with the project class and educational counsellors. Unobtrusive observation was the method used. Results were as follows:

Table 6: Two factor classroom environment scale

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<tr>
<th></th>
<th>PRE-TEST</th>
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<th>MID-TEST</th>
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<tr>
<td></td>
<td>Factor A</td>
<td>Factor B</td>
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<td>12</td>
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<td>9</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Observer 3</td>
<td>10</td>
<td>9</td>
<td>13</td>
<td>8</td>
<td>6</td>
</tr>
</tbody>
</table>

As can be seen, the results were contrary to the objectives named as being congruent to a 'match' educational environment. The improved scores only applied to Factor B. The scoring for Factor A identified an environment with little order or organization.

Within the questionnaire only one observer stated 'false' to the item 'This class is often in an uproar.' No observer stated 'true' to the item 'Students don't give the teacher a hard time in this class.' Only one observer stated 'true' to the item 'This is an orderly class.' Selection of these items exemplifies the trend of observer responses. To be fair to the project educational counsellors, they worked hard in preparation for their classes and from a subjective point of view appeared to be moving toward a more structured environment during the latter stages of the study. The post-testing administered by the writer present-
ed few problems from the point of view of student cooperation, entirely different from the pre-test situation, and is perhaps indicative of an improvement. Unfortunately, the educational counsellors were caught in the 'horns of a dilemma'. Prior to the project, their non-direct methods had laid the seeds for a poorly controlled and structured environment. This they found difficult to change and throughout the period of the project one of the educational counsellors had an insipid 'control' problem. This was manifest in students arguing with her over assignments, verbally abusing her and provoking her into loss of temper.

The attitudes of students is maybe reflected in observer 3's evaluation in post-testing. The day he scored the protocol he had had a trying experience in the occupational facility supervising the project class and educational counsellor. Apparently the performance objectives specified for the period fell largely into abeyance; students being allowed to opt out of their assignments and start other jobs such as bicycle repairs, etc. Safety rules within the facility were largely ignored, and the vocational specialist had literally to be in three places at once to make sure that students were not at risk.

Student needs and student desires are not necessarily the same especially with low conceptual students. Whether this was ever really understood by the project educational counsellors is problematic. Their use of programmed learning materials appears to underline this. The S.R.A. reading kits need to be used according to the makers' instructions, otherwise they don't work. Students in the project class never completed profiles of their progress within the kit, and this task is essential to provide immediate feedback. The reason provided for this omission was
to the effect that students didn't 'like' to do it. Furthermore the project educational counsellors demonstrated little interest in the Newstart Program, probably the most effective operant conditioning package within the Institution. To a greater or lesser degree this ambivalence was apparent throughout the project, and must be considered a major variable within the Two Factor Classroom Environment Scale results.

Whether the educational environment created was congruent to low conceptual students, must be considered doubtful. According to Hunt's writings, a 'mismatched' environment leads to 'fixation' at a particular level or stage. This aspect will again receive analysis in the final chapter of the study.

Before the other various test data are presented in written and diagrammatic form the following section details five 'case studies' of CfM students from the Institution. All of these students were in one or other of the groups involved with the project. The case studies are in keeping with the descriptive nature of this work and provide a more graphic picture of the subjects. Because of the difficulties in pre- and post-testing the Institution's total CfM population, the case studies were chosen as being representative and serve to illustrate that the population was indeed similar. All came from homes with one or both parents absent. All had suffered some form of deprivation. All fell below the level of 'average intelligence', most were of low intelligence. Most, but not all, had their origins in low socio-economic groups. All were of low conceptual level and cognitively concrete. All were two or more years behind academically.
Care Study No. 1

Name: D.G.
Age: 12 years
Date of Birth: February 14, 1961
Home: Montreal

Background. Mrs. G. is separated from her husband and supports six siblings via the media of welfare. According to her caseworker, family environment appears stable. Mrs. G. is easy going with positive attitudes toward her children especially young D. Mrs. G. has given the impression that she has the ability to be extremely firm and at the same time kind and understanding when dealing with her children.

The relationship between D. and his mother appears one of mutual understanding. D.'s mother is concerned about the peer group with which he interacts. She feels this is largely the reason he had managed to get himself into trouble.

D.G. D.G. does not behave on the basis of an inner value system but rather on the basis of whatever the external code of the moment has the support behind it. For example, "it was my friend's idea to start the fire". Although D.G. is not happy when he gets into trouble, he has no internalized guilt about doing so. He is not aware of any internal conflicts. He does have some minimal insight into his behavior. For example when his siblings take his "stuff", he handles the situation by telling his mother; however, when he gets "mad" he takes their things. He has stated that if he had to go to Boys' Farm, he would be "a little bit mad" and he admits to being "a little bit afraid of questions" and
"a little bit uptight" knowing where he is coming. He is cognitively concrete. For example, he has difficulty placing himself within his siblings by order of age. In regard to planning for the future, his plans are idealistic and not thought through. He wants to be a train driver. He feels he would have to study hard but it will be easy. He would like to get married and have two children, a girl and a boy.

D. comes across as being childish, anxious, unsure of himself and lacking in confidence. He appears to be fearful and shy in the presence of an adult who has authority. He shows interest in adults who are "kind", eg. gods. Although he has not given up on establishing satisfying relationships with adults, he is too anxiety ridden to relate with openness and trust. If he could feel comfortable with an adult, it would be likely that he would develop a strong dependency relationship with the adult. With regards to his peers although he says he knows "all the guys" he has no good friends.

D.G. is not comfortable with the delinquent label. He claims that although he gets into "lots" of trouble, he is not a juvenile delinquent. He does say that some of his friends are juvenile delinquents. Since it was his friend's idea, it seems that he feels he becomes involved in delinquencies as a result of external forces. It seems that he commits delinquencies as an attempt to gain peer approval.

D.G. describes himself in favorable terms. He says that he is a "good guy" and "likes to help people". It seems that he withdraws from stressful situations.

Education. D.G. went through comprehensive evaluation regarding his educational potential when he arrived at the Institution. Although
he appears to have an auditory discrimination problem, this is not considered overly serious. His poor spelling may be partially due to his eyesight and he was fitted with new glasses on coming to the Institution. The recommendations given were that D.G. should be given the opportunity to pursue his studies in a structured environment. His class program should be laid out in steps, with clear expectations stated. Periods should be divided up, eg. 20 minutes reading, 20 minutes math, etc.

To raise his reading level it was recommended that high interest low vocabulary books be used in addition to a phonics program (eg. "cracking the code") at an intermediate level. He should constantly be encouraged to read. His keen interest in audio visual materials should be used to motivate in the areas of reading, writing and spelling.

Games of all sorts were recommended because he enjoyed competition at his own level (probe, junior scrabble, etc.). Unfortunately these comprehensive recommendations were not expedited. Various observers of the boy feel that during the school day he "hangs around" the library and appears to do very little in the way of educational study. No educational objectives specifically and concisely stated have been developed for this student since he left the diagnostic unit.

Educational test results:
I Level diagnosis - Level 3, Cfm.
Conceptual Level - 1.0 (Sub I of the Hunt scale).
Jorge Thorndike I.Q. Measures

Verbal

Grade equivalent - 6.4
Age equivalent - 11.6
I.Q. - 97

S.A.T.

Computation Concepts Application
Pre 2.9 4.0 4.6
Post 4.0 5.0 4.1

Gates MacGinitie

Vocabulary Comprehension
Pre 2.9 4.9
Post 4.0 4.5

As these results indicate, there is little room for optimism of D.C.'s educational progress within the Institution. The structured environment which was recommended in the early days was not enacted.

Case Study No. 2

Name: S.H.
Age: 15 years
Date of Birth: December 13, 1959

Background. S.H.'s mother has been separated from her husband for over ten years. Since she was unable to cope alone with all her children, she placed her three youngest, who were the most difficult to control, at Weredale (a correctional institution). The major problem S.H. presented at that time was truancy. Presently his brothers are at Weredale and a group home placement is being considered for the younger one. It may be important to note that the father, whose whereabouts were
unknown for many years, returned home temporarily at S.H.'s discharge and caused some problems with the family. S.H. was discharged home after doing very well under a 'behavior modification' program at Weredale. His behavior began to deteriorate since Mrs. H. was unable to assert direction and controls upon her son. S.H. was regularly truanting from school, stealing money and goods from his home and was consuming and passing Mandrix pills. As a result of his behavior, he was readmitted to Weredale. Recently S.H. gave two Mandrix pills out with strychnine to a boy at school. The boy was hospitalized and S.H. was expelled. The staff of Weredale felt that S.H. was a threat to the community and they have not succeeded in affecting long-term change in his attitude and behavior, thus they requested placement at Boys' Farm.

S.H. S.H. is an immature and childlike boy who has a good sense of humor. Initially he appeared pleasant on arriving at the Institution. He demonstrates the beginnings of self-awareness and to some extent can evaluate and give information about himself which goes beyond self definition. However, most of his self evaluation is in reference to his ability to criticize his acts. He also shows some ability to accept responsibility for his own actions. He is not aware of any internal conflicts and does not act on the basis of an inner value system. "I should have helped it (my life) way before I started to do these things (delinquencies). I could stop but I didn't know how I could, what place to start from. I say to myself that I'll be bad today and stop tomorrow again."

"If I keep on the way I am, I will (end up in jail when I'm 13)."
He points out that he has difficulty expressing himself. He feels that if he has to go to court, he would want to be escorted by a guard because he would run off if he had the chance and "I don't want to run away". (M.D. need for external controls.)

"I want to be wanted, everybody does (i.e. I want people to talk about me, e.g. "If he wants he can be really a good kid."") "I don't know of any bad things about me, if there are some I haven't done, I haven't brought it up to myself."

"I'm dumb, I'm not good in school (e.g. math)."

In general S.H. underestimates the personality and behavior differences among others. He is not aware of the complexity of others. His cognitive processes are concrete. He reports events without making personal interpretations. He has some understanding of reasons for behavior. "I like them all (Weredale staff), they all tried their best." "He (a friend) wants people to ask questions and talk about him, because if he talks to me and I turn away, he calls me back later." About his father - "I like his horse and bike. He's really funny, kind, and wouldn't hit us."

To summarize, S.H. is functioning at an I level of perception and has not yet internalized a set of values but he shows potential of perceptual growth as he has a beginning sense of self.

S.H. comes across as a very friendly and well intentioned boy. He has a childlike stance. He seems able to relate to adults with a fair amount of openness and trust. He has low self-esteem, especially in relation to his intellectual capacities. For example, he claims "I'm dumb, the Catholic Commissioner knows I'm no good and that I belong to
Boys' Farm."

Delinquency is a way of life. It is now congruent with his self-image. It seems that his involvement in drugs, theft, and anti-social behavior in school is related to his attempt to gain social approval and buy support from his peer group. "The guys say 'don't be chicken, take it, take it'." In fact his need for social approval from both adults and peers is a strong feature of his personality.

Education. S.H.'s low self concept and immaturity are clearly manifest in his demeanor around the school building. He cannot settle to a job for more than a few minutes and is often seen acting out, having hassles, and arguments with other boys. It is not apparent that a structured and well defined educational program has been developed for this student.

Educational test results:
I Level diagnosis - I Level 3 Immature Conformist
Conceptual Level - 1.4 (Stage 1 of the Hunt scale).

Lorge Thorndike I.Q. Measures

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S.A.T.

<table>
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<th>Concepts</th>
<th>Application</th>
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<td>4.3</td>
<td>3.3</td>
<td>3.0</td>
</tr>
<tr>
<td>Post</td>
<td>3.6</td>
<td>2.5</td>
<td>3.9</td>
</tr>
</tbody>
</table>
Vocabulary

Fre 3.2
Post 4.4

Comprehension

2.6
3.5

Again there can be no reason for optimism regarding S.H.'s progress through the educational milieu of this Institution. There appears to be a little ray of hope within the English area but in other areas he has regressed. The need for structure is clearly demonstrated within the evaluation of his personality and seem ignored at this point.

Case Study No. 3

Name: B.C.
Age: 13 years
Date of Birth: August 13, 1961

Background. B.C. is the younger of two children; the older brother is a Mongoloid. It has been reported that Mrs. C. gives most of her attention to her retarded son.

Mrs. C. has been separated from her husband for some years. Mr. C. resides in Montreal with another woman with whom he has had children. There is little contact between the father and his children of the first marriage.

B.C.'s delinquencies have included setting fires, stealing a bicycle and he has been placed under Article 20 JDA. B.C. was referred to Weredale House but was refused as a result of his fire-setting delinquencies.
Mrs. J's resources are taxed owing to her having to manage two children alone, her age 50 and the fact that she is a German immigrant, who even though she has been living in Canada for 15 years, has not really adjusted to Canadian life.

B.C. B.C. refers to his former teachers as "all of them". To the question "Is there any teacher you really liked?", B.C. responds "no". To the question "Are there any teachers you really hated?", he responds "no".

B.C. talks of the teacher he had this year as being "strict" and "tells us to get to work". It is evident that B.C. is seeking structure that the teacher provided in this classroom.

B.C. likes the police when he has not done something wrong. He does not like the police when he has done something wrong. It is evident that the police activities vis à vis B.C. dictate 'right' or 'wrong' and not an internal code that B.C. owns himself.

He believes that his fighting in school will cease if his classmates stop taking his shop materials and stop breaking his already finished clay ashtray. He is quite unable to empathize with others and when asked what kind of activities his retarded brother engages in, he responded "He doesn't know anything." It appears that B.C. cannot understand the individualized needs, feelings, and motives of another person who is different from himself. He is cognitively concrete. In response to the question "What makes people steal?", he responds "I don't know." It appears that B.C. has little motivation for integrating, interpreting, abstracting or absorbing information.
B.C. blames his friends for getting him into trouble and overestimates the powers of others. In discussing his current classroom teacher, he allows that the teacher's power is absolute. The rules are enforced through yelling. B.C. talked as if the teacher's yelling at the children dominated the day. His handling of crises appears to be emotional withdrawal and there is little indication of any meaningful relationship with adults within the Institution. In addition he cannot think of anything good to say about his friends. What was said appears to negate any sort of warm and intimate relationships.

**Education.** B.C. has an appallingly bad record of school attendance prior to coming to the Institution. Even though he respects "control", he is not cooperative toward classroom rules and management and will often get into arguments with teachers when directed to a specific task. He is a lonely boy with little or no interests in hobbies or pastimes. Further he is not a proponent of the educational process as he sees it. In the classroom B.C. appears mildly depressed, passive and withdrawn and will not get into a conversation very easily. There are obvious signs within his social history of cultural and emotional deprivation manifest in his demeanor around the school.

**Educational test results:**

I Level diagnosis - Level 3, CfM.

Conceptual Level - .6 (Sub 1 of the Hunt scale).
Longe Thorndike I.Q. Measures

Verbal

Grade equivalent - 4.3
Age equivalent - 9.9
I.Q. - 83

Non Verbal

S.A.T.

Computation Concepts Application
Pre 3.6 N.G. 4.0
Post 6.1 N.G. 4.9

Gates MacGinitie

Vocabulary Comprehension
Pre 3.2 3.6
Post 5.3 4.5

Case Study No. 4

Name: M.B.
Age: 16 years
Date of Birth: January 18, 1953

Background. M.B.'s parents are separated. Until his arrival at the Boys' Farm he lived with his mother. Father had a drinking problem for many years and has been hospitalized recently for treatment. Mrs. B. worked for a while to support the family as a wrapper, a cashier and latterly a file clerk. She now stays home to look after the children. There are three other siblings in the family, M.B. being the oldest.

M.B. is a boy who has suffered through a history of rejection. He was an illegitimate child and the cause of a very unhappy marriage, according to Mrs. B. Mrs. B. said that she felt that M.B. trapped her
into her unhappy marriage and she rejects him because of this. Mrs. R. appears to be a rather naive and inadequate mother. She seems to have been incapable of giving affection to either K.R. or her husband. K.R. has lacked a father figure, as Mr. R.'s job kept him away from home most of the time. Mr. R. did all the punishing around the house and it seems that at times he has beaten K.R. Mrs. R. related that once, after K.R. had stolen some money and lied about it, Mr. R. dealt with the situation by punching her son in the mouth and giving him a bleeding lip. M.B. appears to have little affection for either of his parents. He has been before a court on several occasions in the last two years on charges of stealing, for destroying school property, and has, in the last several months, run away from home on numerous occasions. There is some question that he may be involved in drugs, particularly LSD, but this has not become a definite problem.

M.B. M.B. appears to be quite concrete in his thinking. He does not look to long term goals and has very little understanding of cause-effect relationships in his life. He has been diagnosed as having only minimal social differentiation. He prefers to group people into a good-bad dichotomy. He is concerned with power and looks to others for cues of behavior. Although he has no great desire to remain at the Boys' Farm, he feels that perhaps the judge was justified in sending him here, because he has been getting into a great deal of trouble. He sees these difficulties beginning around six or seven years when he began hanging around with boys with whom he stole candies. He never committed delinquencies alone but does not blame his friends for his difficulties either.
M.B. takes the stance that "I didn't even know what I was doing", with regard to his delinquencies and the "classes were too long" with regard to his difficulties at school. This passive approach to his problems exemplifies his present level of perception. There are indications that he feels inferior or stupid as compared to most people except perhaps within the field of athletics. He is not turned off adults and indeed seems quite concerned that others care for him. M.B. is cognitively concrete. He has not yet developed an internalized value system nor insight into his own or others' interactions. He assumes that all people are the same as he, that is, having a concern for approval from "powerful" others. Much of his delinquency seems to have come from a need for peer approval. His destruction of school property may well have been an expression of hostility towards the institution which had been frustrating him. Given the question "If you could give your brothers or sisters any advice, what would that be?", he replied "Stay out of trouble of you'll end up like me in penitentiaries."

**Education.** M.B. now sees education as a way of solving his problems and is beginning to realize that school is necessary even though not always palatable. He tends to 'play the fool' a lot in class and is prone to making peculiar verbal noises which seems to be an effort on his part to gain the approval of his peers or the attention of the teachers. When he tries to relate on a serious vein, he becomes frustrated that his peers are reluctant to take him seriously.

His demeanor at school is beginning to show some improvement as reflected in the tests enumerated at the end of this case study. He is anxious now to do well in school although his plans for the future are
extremely vague, and at this point, a rapid return to the community and school may well prove disastrous. Reports from his cottage team indicate the general behavioral improvement. He feels good about the way he has been responsible about breaking up class 'clowning', encouraging people to stop 'bugging', and is helping to keep the cottage clean. It is possible that he will soon be transferred to the Halfway House near the city of Montreal, where he will attend a normal day school but still have the support of social workers in his living area.

Educational test results:

I Level diagnosis - Level 3, Cfm.
Conceptual Level - 1.1 (Stage 1 of the Hunt scale).

Lorge Thorndike I.Q. Measures

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<td>3.4</td>
</tr>
<tr>
<td>Age equivalent</td>
<td>16</td>
<td>13.2</td>
</tr>
<tr>
<td>I.Q.</td>
<td>100</td>
<td>87</td>
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</tbody>
</table>

S.A.T.

<table>
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<tr>
<th></th>
<th>Computation</th>
<th>Concepts</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
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<td>7.4</td>
<td>8.0</td>
<td>10.1</td>
</tr>
<tr>
<td>Post</td>
<td>7.1</td>
<td>9.9</td>
<td>9.5</td>
</tr>
</tbody>
</table>

Gates MacGinitie

<table>
<thead>
<tr>
<th></th>
<th>Vocabulary</th>
<th>Comprehension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>6.2</td>
<td>10.0</td>
</tr>
<tr>
<td>Post</td>
<td>8.0</td>
<td>12.0</td>
</tr>
</tbody>
</table>

K.B. has begun to respond to the structured environment in the project class and while there is no way of knowing what will become of him, signs are more favorable. At least he has begun the right road.
Case Study No. 5

Name: D.L.
Age: 14
Date of Birth: March 23, 1959

Background. The subject was brought before the court on a charge of poor behavior at home and at school. He was released home on parole and referred to various family and psychiatric clinics for assessment.

It appears that D.L.'s home situation ended in a traumatic experience. When he was seven years old, he witnessed his father drown. Since then the family has been unable to adjust. The mother has poor insight and very poor judgement into D.L.'s behavior. Generally D.L. is a bright boy and finding it difficult to adjust to the loss of his father. It was thought D.L. was in need of psychiatric treatment and he was referred to various psychiatric hospitals. While receiving treatment, D.L. continued to live at home but was soon involved in a "breaking and entering" into a vacant apartment in the same building in which he resided with his mother. It appears that he and his friend started a fire resulting in extensive damage to the approximate value of $6,000. D.L. claims he was smoking when the fire started and he was unable to control the blaze. D.L. was burned quite badly and was placed in hospital for a few days. He was then referred to this Agency.

D.L. D.L. is rather small for his age, but is otherwise fit and active. He shows no sleeping or eating difficulties. He has a minor slurring in his speech. He is talkative and quick, often commenting to others with a somewhat aggressive sarcasm. This effectively disguises the
fact that he sees himself as inferior and rejected, so that when confronted he becomes tearful and appears much younger. His delinquent chatter is for the benefit of his peers. He can be quite confident socially, with a sort of "rough diamond" charm, and sometimes is impulsively ruled by his need to impress others. Apart from the occasions that D.L. "fished in" someone more naive, he is not an initiator. Most commonly he joins in with others and once ran away in a group 'break-out'.

In group meetings he often talks to his neighbors while others are talking. When asked to contribute directly, he becomes embarrassed and quiet. He has not made particular friendships, but has remained fairly popular. He tends to seek out the more active, older and "powerful" members for companionship. D.L. has been well liked by the various adults with whom he has had contact, although he is sometimes exasperating. He is seen as requiring strong involvement with a man who will give him consistency of limits and encourage expression. He needs fathering. He is seen as being guarded but admitting to his low self-esteem feeling, and lacking any sense of belonging. He wants to set up good relations with adults and peers. He is anxious about his home and school but is situation-bound, perceiving others in undynamic and concrete ways.

D.L. appears to respond to the immediate structure and sees primarily in terms of rules and basic formula. His descriptions are quite concrete and undynamic and he sees people in stereotyped roles; his mother, his father, his teachers and his principal. He perceives much of his experiences and his involvement in them within "power fields". He has no comprehension of long-range goals. In his delinquencies he perceives other persons involved him and blames them for this. He still has
difficulty in differentiating people. Much of his anxiety seems to arise from his school and home situation. He believes that he was rejected by his teachers and finds difficulty in accepting his father's accidental death.

D.L. used to have violent outbursts of temper when slightly intimidated, either physically or mentally. Until recently he had to be physically controlled on an average of three to four times a week. This violent acting-out is now decreased to a point where it has been several months since his last outburst. He now seems more able to control his extreme emotions.

Education. D.L.'s counsellors are concerned about his educational deficiencies. At present, various remedial prescriptions are being developed with a view to enhancing the basic subjects. He still tends to "bad mouth" weaker peers in a rather unpleasant way. The young teacher who has been working with him this year has also received the brunt of his sarcasm. D.L. has an appalling record within the public school system. He blames much of his present situation on his teachers and especially on his principal who is the person in his eyes who "threw me out of school". He has still not accepted responsibility for the obnoxious behavior for which he is capable and no doubt contributed to his departure from the public school system. Recent developments within the classroom and the cottage seem to indicate that he has become more tolerant of his peer group and his value system is not as rigid. He is beginning to handle responsibilities designated to him. He has become more interested in sports and is putting effort into being a team member.
Educational test results:

I Level diagnosis - Level 3, Cfm.

Conceptual Level - 1.3 (Stage 1 of the Hunt scale).

Lorge Thorndike I.C. Measures

<table>
<thead>
<tr>
<th>Verbal</th>
<th>Non Verbal</th>
</tr>
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<tbody>
<tr>
<td>Grade equivalent -</td>
<td>Grade equivalent -</td>
</tr>
<tr>
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<td>4.9</td>
</tr>
<tr>
<td>Age equivalent -</td>
<td>Age equivalent -</td>
</tr>
<tr>
<td>12.4</td>
<td>12</td>
</tr>
<tr>
<td>I.Q.</td>
<td>I.Q.</td>
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<tr>
<td>86</td>
<td>68</td>
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S.A.T.

<table>
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<th>Concepts</th>
<th>Application</th>
</tr>
</thead>
<tbody>
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<td>6.1</td>
<td>4.9</td>
</tr>
<tr>
<td>Post 5.8</td>
<td>6.5</td>
<td>8.5</td>
</tr>
</tbody>
</table>

Gates MacGinitie

<table>
<thead>
<tr>
<th>Vocabulary</th>
<th>Comprehension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre 3.2</td>
<td>2.9</td>
</tr>
<tr>
<td>Post 3.6</td>
<td>4.7</td>
</tr>
</tbody>
</table>

Although some improvement has been indicated, D.L. has severe remedial difficulties within the basic subjects. Further, he has still not completely eliminated unacceptable behavior within his school situation. These areas need to be scrutinized closely within the next few months. The possibility is, he will have to remain with the Agency for some time as it has the capacity to provide for his remedial education needs.

Test data

The collection of test data was a more speculative aspect of the study, a main reservation being student attitude toward testing.
While this influenced results, an unexpected difficulty was an apparent lack of staff cooperation. Boys were often not sent to test appointments; some were discharged without prior notice, and therefore not post-tested. A.W.O.L.s and illness further diminished the population. As a result, final test results could not be analyzed with any statistical accuracy, as over thirty percent were excluded for the reasons outlined.

Although this factor reduced the value of the study, it was felt that the descriptive and case study format of the study contained useful information for the Boys' Farm. It is necessary to know if reliable studies can be implemented, and to be aware of problems which may hinder, or preclude implementation.

Within this section test data are presented in written and diagrammatic form. Given the shortcomings of this information, because of the incompletes, the data are examined to see if any trends are apparent.

Table 7: Lorge Thorndike Intelligence Test (Pre-Test Only)

<table>
<thead>
<tr>
<th>Project group</th>
<th>Name</th>
<th>RD</th>
<th>GZ</th>
<th>CH</th>
<th>DC</th>
<th>DJ</th>
<th>WP</th>
<th>MB</th>
<th>DL</th>
<th>JR</th>
<th>KO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal I.Q.</td>
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<td>67</td>
<td>83</td>
<td>83</td>
<td>74</td>
<td>87</td>
<td>100</td>
<td>36</td>
<td>61</td>
<td>37</td>
</tr>
<tr>
<td>Non-Verbal I.Q.</td>
<td></td>
<td>83</td>
<td>62</td>
<td>77</td>
<td>73</td>
<td>35</td>
<td>37</td>
<td>63</td>
<td>78</td>
<td>87</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comparison group</th>
<th>Name</th>
<th>SM</th>
<th>MB</th>
<th>GW</th>
<th>DA</th>
<th>TH</th>
<th>CC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal I.Q.</td>
<td></td>
<td>73</td>
<td>33</td>
<td>64</td>
<td>27</td>
<td>27</td>
<td>72</td>
</tr>
<tr>
<td>Non-Verbal I.Q.</td>
<td></td>
<td>64</td>
<td>35</td>
<td>73</td>
<td>76</td>
<td>93</td>
<td>78</td>
</tr>
</tbody>
</table>
It can easily be seen that attrition within the population of the comparison group was high and eliminated objective analysis of that group.

Of the students who did not complete the testing none had an I.Q. higher than 85. All students within the study, including incompletes, can be rated as of 'below average' intelligence. This correlates with I.Q. ratings of previous Cfm populations at this Institution over the past five years.

Table 8: Conceptual level measures (Pre-test only)

<table>
<thead>
<tr>
<th>Project group</th>
<th>Name</th>
<th>RD</th>
<th>GZ</th>
<th>CH</th>
<th>BC</th>
<th>DJ</th>
<th>WP</th>
<th>MB</th>
<th>DL</th>
<th>JR</th>
<th>MO</th>
</tr>
</thead>
<tbody>
<tr>
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<td>.5</td>
<td>.5</td>
<td>.6</td>
<td>.8</td>
<td>.9</td>
<td>1.1</td>
<td>1.3</td>
<td>1.3</td>
<td>1.2</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Comparison group</th>
<th>Name</th>
<th>SH</th>
<th>NB</th>
<th>GW</th>
<th>DG</th>
<th>TM</th>
<th>CC</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.L.</td>
<td></td>
<td>.4</td>
<td>.4</td>
<td>.8</td>
<td>1.0</td>
<td>1.0</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Conceptual level is measured on a scale of five. However, for all practical purposes the first three include most of the school population, inside and outside of the Institution. Any score less than one represents Sub I of the Hunt scale. A score of more than one but less than two represents Stage I of the Hunt scale. The lower part of the table labels individual students by initial.

Of the four incompletes in the project group not included within the table, all had a conceptual level of less than one. Of the eight incompletes within the comparison group, five had a conceptual level of more than one but less than two. Three had a conceptual level of less than
Theoretically, within the project group, the learning environment was matched to those students with a conceptual level of less than one, and those students should have shown the greater gain. As later tables demonstrate, this was not the case. Results were contradictory and ambiguous, with Sub I and Stage I students showing both gain and loss with no apparent trend emerging.

Within the comparison group, the learning environment was considered a mismatch for all of the students. Theoretically, results should have demonstrated no growth patterns. Because of the 'incompletes' any inference was largely precluded.

Table 9: Stanford Mathematics Achievement Test

(Pre- and post-test results)

<table>
<thead>
<tr>
<th>Name</th>
<th>C.L.</th>
<th>Computation</th>
<th>Concepts</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>GZ</td>
<td>.5</td>
<td>3.7</td>
<td>3.1</td>
<td>3.6</td>
</tr>
<tr>
<td>GH</td>
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<td>4.5</td>
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<td>DJ</td>
<td>.8</td>
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<td>4.3</td>
<td>4.6</td>
</tr>
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<td>WP</td>
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<td>3.9</td>
<td>4.1</td>
<td>3.3</td>
</tr>
<tr>
<td>MB</td>
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<td>7.4</td>
<td>7.1</td>
<td>8.0</td>
</tr>
<tr>
<td>DL</td>
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<td>5.4</td>
<td>5.8</td>
<td>6.1</td>
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<tr>
<td>JR</td>
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<td>4.6</td>
</tr>
<tr>
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<td>3.6</td>
<td>5.9 2.3+</td>
<td>7.6</td>
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</table>

Continued next page
<table>
<thead>
<tr>
<th>Name</th>
<th>C.L.</th>
<th>Computation</th>
<th>Concepts</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
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<td>3.3 2.5 .3-</td>
<td>3.0 2.9 .9+</td>
</tr>
<tr>
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<td>.4</td>
<td>4.5 4.0 .7-</td>
<td>4.0 4.1 .1+</td>
<td>4.3 4.0 .3-</td>
</tr>
<tr>
<td>GH</td>
<td>.0</td>
<td>3.9 5.4 1.5-</td>
<td>4.0 5.0 1.0+</td>
<td>4.6 4.1 .5-</td>
</tr>
<tr>
<td>DG</td>
<td>1.0</td>
<td>4.4 4.1 .3-</td>
<td>2.5 3.3 .8+</td>
<td>4.6 3.8 .8-</td>
</tr>
<tr>
<td>TM</td>
<td>1.0</td>
<td>3.4 3.7 1.7-</td>
<td>8.0 4.3 3.7-</td>
<td>7.2 3.6 3.6-</td>
</tr>
<tr>
<td>CC</td>
<td>1.1</td>
<td>5.1 4.3 .8-</td>
<td>5.9 5.7 .2-</td>
<td>6.1 5.1 1.0-</td>
</tr>
</tbody>
</table>

Within the table, measurements are shown in the areas of 'computation', 'concepts', and 'application'. Scores represent grade equivalent on a pre-post basis with the difference given in positive or negative notation. The initials on the left hand column represent individual students. For purposes of comparison conceptual level is also stated. This was intended to explore the relationship between conceptual level and performance variations.
Table 10: Gates MacGinitie Reading Test
(Pre- and Post-test results)

<table>
<thead>
<tr>
<th>Name</th>
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<th>Vocabulary</th>
<th>Comprehension</th>
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</thead>
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<td></td>
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<td>Pre Post Diff</td>
</tr>
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<td>2.8 5.2 2.4+</td>
</tr>
<tr>
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<td>2.9 3.4 .5+</td>
<td>3.4 4.1 .5+</td>
</tr>
<tr>
<td>GH</td>
<td>.5</td>
<td>7.3 8.4 1.1+</td>
<td>8.1 8.7 .6+</td>
</tr>
<tr>
<td>BC</td>
<td>.6</td>
<td>3.2 5.8 2.6+</td>
<td>3.6 4.5 .9+</td>
</tr>
<tr>
<td>DL</td>
<td>.8</td>
<td>4.9 4.5 .4-</td>
<td>4.5 4.7 .2+</td>
</tr>
<tr>
<td>WP</td>
<td>.9</td>
<td>3.7 2.0 1.7-</td>
<td>2.6 2.1 .5-</td>
</tr>
<tr>
<td>MB</td>
<td>1.1</td>
<td>6.2 8.0 1.8+</td>
<td>10.0 12.0 2.0+</td>
</tr>
<tr>
<td>DL</td>
<td>1.3</td>
<td>3.2 3.6 .4+</td>
<td>2.9 4.7 1.8+</td>
</tr>
<tr>
<td>JR</td>
<td>1.3</td>
<td>6.9 4.4 2.5-</td>
<td>6.2 7.0 .8+</td>
</tr>
<tr>
<td>MO</td>
<td>1.9</td>
<td>4.6 11.0 6.4+</td>
<td>3.4 6.7 .3+</td>
</tr>
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</table>

Comparison group

<table>
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<th>Vocabulary</th>
<th>Comprehension</th>
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<td></td>
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<td>Pre Post Diff</td>
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<td>2.6 3.5 .9+</td>
</tr>
<tr>
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<td>.4</td>
<td>6.0 6.6 .6+</td>
<td>5.2 6.6 1.4+</td>
</tr>
<tr>
<td>GW</td>
<td>.8</td>
<td>5.2 4.0 .2-</td>
<td>2.6 3.0 .4+</td>
</tr>
<tr>
<td>DG</td>
<td>1.0</td>
<td>2.9 4.0 1.1+</td>
<td>4.9 4.5 .4-</td>
</tr>
<tr>
<td>TM</td>
<td>1.0</td>
<td>12.9 5.8 7.1-</td>
<td>8.6 5.2 3.4-</td>
</tr>
<tr>
<td>CC</td>
<td>1.1</td>
<td>6.0 6.0 --</td>
<td>4.0 5.3 1.3+</td>
</tr>
</tbody>
</table>
The Gates-MacGinitie Reading Test measures vocabulary and comprehension in terms of grade equivalent. Within the table, pre- and post-test differences are given in positive or negative notation. The initials on the left hand column represent individual students. For purposes of comparison conceptual level is also stated. This was intended to explore the relationship between conceptual level and performance variations.

The Classroom Behavior Inventory

The Classroom Behavior Inventory can be considered in two parts -- 'indices of acceptable adjustment' which includes the individual items of 'thoughtfulness for others', 'participation with others', 'self-confidence', and 'general enthusiasm'. The second part of the inventory 'indices of disturbance' includes the individual items of 'gross disorientation', 'manifest anxiety', 'aggressivity', 'hypersensitivity', 'over-competitiveness', 'resistance to classroom procedures and controls', 'over-dependency and feelings of inferiority', and 'withdrawal and non-involvement'.

In the first part of the Inventory a score of five is maximum and a higher score at post-test signifies growth. Part two of the Inventory is also scored to five only in this case a lower score at post-test signifies growth. Within the tables growth is shown by a plus notation. This has been applied to both sections.
Table 11: Classroom Behavior Inventory

Item: 'Indices of Acceptable Behavior'

(Pre and post-test results)

<table>
<thead>
<tr>
<th>Name</th>
<th>C.L.</th>
<th>Self Inventory</th>
<th>Observer Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>RD</td>
<td>.3</td>
<td>2.4</td>
<td>3.0</td>
</tr>
<tr>
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<td>3.0</td>
</tr>
<tr>
<td>CM</td>
<td>.5</td>
<td>3.3</td>
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<td>2.4</td>
<td>2.9</td>
</tr>
<tr>
<td>DJ</td>
<td>.8</td>
<td>3.3</td>
<td>3.7</td>
</tr>
<tr>
<td>WP</td>
<td>.9</td>
<td>3.4</td>
<td>3.8</td>
</tr>
<tr>
<td>NB</td>
<td>1.1</td>
<td>3.5</td>
<td>3.8</td>
</tr>
<tr>
<td>DL</td>
<td>1.3</td>
<td>2.8</td>
<td>3.3</td>
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<td>JR</td>
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</tr>
<tr>
<td>MO</td>
<td>1.9</td>
<td>3.5</td>
<td>4.3</td>
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</tbody>
</table>

Comparison group

<table>
<thead>
<tr>
<th>Name</th>
<th>C.L.</th>
<th>Self Inventory</th>
<th>Observer Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>SH</td>
<td>.4</td>
<td>3.4</td>
<td>3.2</td>
</tr>
<tr>
<td>NB</td>
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<td>3.5</td>
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</tr>
<tr>
<td>CC</td>
<td>1.1</td>
<td>3.6</td>
<td>2.5</td>
</tr>
</tbody>
</table>
Table 1: Classroom Behavior Inventory

Item: 'Indices of Disturbance'

(Pre and post-test results)

<table>
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<tr>
<th>Project group</th>
<th>Self Inventory</th>
<th>Observer Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>RD</td>
<td>.3</td>
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</tr>
<tr>
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<td>.5</td>
<td>2.6</td>
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<td>GH</td>
<td>.5</td>
<td>2.8</td>
</tr>
<tr>
<td>BC</td>
<td>.6</td>
<td>3.1</td>
</tr>
<tr>
<td>DJ</td>
<td>.5</td>
<td>2.3</td>
</tr>
<tr>
<td>WP</td>
<td>.9</td>
<td>2.9</td>
</tr>
<tr>
<td>MB</td>
<td>1.1</td>
<td>3.9</td>
</tr>
<tr>
<td>DL</td>
<td>1.3</td>
<td>2.5</td>
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<td>2.9</td>
</tr>
<tr>
<td>NO</td>
<td>1.9</td>
<td>2.8</td>
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</table>

<p>| Comparison group |</p>
<table>
<thead>
<tr>
<th>Self Inventory</th>
<th>Observer Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Pre</td>
</tr>
<tr>
<td>SH</td>
<td>.4</td>
</tr>
<tr>
<td>NB</td>
<td>.4</td>
</tr>
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<td>GN</td>
<td>.8</td>
</tr>
<tr>
<td>DG</td>
<td>1.0</td>
</tr>
<tr>
<td>TM</td>
<td>1.1</td>
</tr>
<tr>
<td>CC</td>
<td>1.1</td>
</tr>
</tbody>
</table>
The project group demonstrated no recognizable trend within either Tables 11 or 12. Of those students within the comparison group a negative trend seems apparent, but inferences cannot be drawn because of the large number of incompletes not listed above. For this reason several sub-items were selected which appeared to have clear relationship with conceptual level. These were 'thoughtfulness for others', 'self confidence', 'aggressivity', 'feelings of inadequacy and inferiority', and 'resistance to classroom controls'. No attempt was made to analyze the comparison group in this way because of the small population size.

Table 13: Classroom Behavior Inventory

<table>
<thead>
<tr>
<th>Name</th>
<th>C.L.</th>
<th>Pre</th>
<th>Post</th>
<th>Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>RD</td>
<td>.3</td>
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<td>.6+</td>
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<td>DJ</td>
<td>.8</td>
<td>2.6</td>
<td>3.3</td>
<td>1.2+</td>
</tr>
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<td>.4+</td>
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<tr>
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<td>MO</td>
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<td>3.0</td>
<td>3.0</td>
<td>0</td>
</tr>
</tbody>
</table>
Table 1: Classroom Behavior Inventory

Item: 'Self Confidence'. Self inventory only.

(Pre and post-test results only)

<table>
<thead>
<tr>
<th>Name</th>
<th>C.L.</th>
<th>Pre</th>
<th>Post</th>
<th>Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>RD</td>
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<td>1.2</td>
<td>3.4</td>
<td>1.6+</td>
</tr>
<tr>
<td>CZ</td>
<td>.5</td>
<td>3.2</td>
<td>4.4</td>
<td>.2+</td>
</tr>
<tr>
<td>GH</td>
<td>.5</td>
<td>4.0</td>
<td>3.4</td>
<td>.6-</td>
</tr>
<tr>
<td>BC</td>
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<td>.4-</td>
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<td>3.3</td>
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<td>3.3</td>
<td>.2-</td>
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<tr>
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<td>1.1</td>
<td>3.3</td>
<td>3.8</td>
<td>.5+</td>
</tr>
<tr>
<td>DL</td>
<td>1.3</td>
<td>2.6</td>
<td>3.4</td>
<td>.8+</td>
</tr>
<tr>
<td>JR</td>
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<td>4.0</td>
<td>4.2</td>
<td>.2+</td>
</tr>
<tr>
<td>KO</td>
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<td>3.6</td>
<td>4.3</td>
<td>1.9+</td>
</tr>
</tbody>
</table>
Table 15: Classroom Behavior Inventory

Item: 'Aggressivity'. Self inventory only.

(Pre and post-test results)

<table>
<thead>
<tr>
<th>Name</th>
<th>C.I.</th>
<th>Pre</th>
<th>Post</th>
<th>Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>ND</td>
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<td>3.5</td>
<td>.9-</td>
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<tr>
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<td>2.2</td>
<td>3.3</td>
<td>1.1-</td>
</tr>
<tr>
<td>JR</td>
<td>1.3</td>
<td>2.7</td>
<td>2.3</td>
<td>.1-</td>
</tr>
<tr>
<td>KO</td>
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<td>2.3</td>
<td>2.2</td>
<td>.6+</td>
</tr>
</tbody>
</table>
Table 16: Classroom Behavior Inventory

Item: 'Inadequacy and Inferiority'. Self inventory only.

(Pre and post-test results)

<table>
<thead>
<tr>
<th>Name</th>
<th>S.L.</th>
<th>Pre</th>
<th>Post</th>
<th>Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>RD</td>
<td>.3</td>
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<td>.8-</td>
</tr>
<tr>
<td>GH</td>
<td>.5</td>
<td>2.7</td>
<td>3.0</td>
<td>.3-</td>
</tr>
<tr>
<td>BC</td>
<td>.6</td>
<td>3.2</td>
<td>2.7</td>
<td>.5+</td>
</tr>
<tr>
<td>DJ</td>
<td>.8</td>
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<td>2.8</td>
<td>0</td>
</tr>
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<td>WP</td>
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<td>.8+</td>
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</tr>
<tr>
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<td>3.5</td>
<td>.8-</td>
</tr>
<tr>
<td>MO</td>
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<td>2.1</td>
<td>3.3</td>
<td>1.2-</td>
</tr>
</tbody>
</table>
Table 17: Classroom Behavior Inventory

Item: 'Resistance to Controls'. Self inventory only.

(Pre and post-test results)

<table>
<thead>
<tr>
<th>Name</th>
<th>C.L.</th>
<th>Pre</th>
<th>Post</th>
<th>Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>RD</td>
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<td>2.3</td>
<td>3.5</td>
<td>.7-</td>
</tr>
<tr>
<td>GZ</td>
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<td>3.0</td>
<td>0</td>
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<tr>
<td>DJ</td>
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<td>2.0</td>
<td>2.7</td>
<td>.7-</td>
</tr>
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<td>3.3</td>
<td>2.8</td>
<td>.5+</td>
</tr>
<tr>
<td>KB</td>
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<td>JR</td>
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<td>3.5</td>
<td>3.0</td>
<td>.5+</td>
</tr>
<tr>
<td>KO</td>
<td>1.9</td>
<td>2.8</td>
<td>2.5</td>
<td>.3+</td>
</tr>
</tbody>
</table>

The learning environment should have had the most positive effect upon the Sub I students. Results within the five sub-items demonstrate that this did not happen. Results were confused; sometimes Sub I students improved, and sometimes regressed. Higher conceptual students showed the same random pattern.

In order that the study and study data can be more clearly analyzed the following and final chapter is composed of two sections. The first examines the descriptive research component of the study. The second section attempts to isolate some of the problems which appear to impede the development of research within the Boys' Farm. Various recommenda-
tions are made which should facilitate more effective research in the future.
CHAPTER VII
CONCLUSIONS AND RECOMMENDATIONS

Section 1. The descriptive study component

Subjective analysis of data.

For reasons already itemized the test data provided few firm indicators as to the validity of the treatment stated within the study design. It seemed to illustrate that students diagnosed as I Cfm's (at this institution) are of 'below average' intelligence as measured by the Lorge Thorndike I.Q. instrument. They are cognitively concrete with low conceptual level which ranges from Sub I through Stage I of the Hunt scale. These observations are born out by the case studies described in Chapter VI and which were carefully selected as being representative of the Cfm population at the Institution.

Stanford Achievement Test. Results indicated a positive trend for the project group, with a total of nineteen improved scores for the three test areas, eight negative scores and one with no change. For those tested in the comparison group, five scores showed improvement, and thirteen regressed. This is congruent with the observed activities for both groups. The project group was individualized and participated in a mathematics program each day, whereas the comparison group spent little time on the subject and was not individualized. There appeared no relationship or differential effect between conceptual level and S.A.T. performance.

Gates MacGinitie Reading Test. Of the two tests (vocabulary and comprehension) project scores showed sixteen improvements, and four
regressions. The results of one (student MO) were questionable. In vocabulary he gained the equivalent of 6.4 grades. This probably reflects a badly administered pre-test. Had statistical methodology been applied, his test data would have been rejected. Of the comparison scores, seven showed improvement, four regression, and one did not change. One student (TM) showed a loss of 7.1 grades in vocabulary and 3.4 grades in comprehension. Had statistical measures been applied this data, too, would have been rejected.

There appeared little relationship between reading performance and conceptual level for members of either group.

**Classroom Behavior Inventory.** Project results were ambiguous. Seven students saw themselves as improved in 'Indices of acceptable behavior' and three students showed regression or 'not changed'. Observers (educational counsellors) saw six students as improved, but identified only four of the seven students who had viewed themselves as improved. To compound this situation further, five project students saw themselves as being less disturbed on the 'Indices of disturbance' and five saw themselves as more disturbed. Thus within the total inventory three students showed 'more acceptable behavior' and simultaneously were 'more disturbed'. Items within the Inventory titled 'Thoughtfulness', 'Self Confidence', 'Aggressivity', 'Inadequacy', and 'Resistance to Controls', seem to have particular reference to low conceptual children and were isolated in a further effort to detect some pattern. None could be recognized.

**Two-Factor Classroom Environment Scale.** The most unexpected result
of measuring the learning environment was the reported increase in 'interaction', while 'order and organization' remained poor throughout the study. Interestingly enough, this is more in line with the Paso Robles Project (Andre and Kayan, 1972). Here students diagnosed by I Level were homogeneously grouped and placed into learning environments which emphasized 'interaction' and played down 'control and organization'.

It may have been that the simultaneous use of I Level and the Hunt paradigm caused the educational counsellors some confusion. On the other hand, the term 'interaction' is vague and needs clear definition. Within the Two-Factor Scale, nineteen questions, marked on a true or false basis, are intended to measure the quality of the interaction. While there is no intention of reiterating these, several are selected because of their ambiguity:

(a) Lots of discussions take place in this class (T)
(b) This class usually follows the same pattern every day (F)
(c) A lot of activities or projects go on in this class (T)
(d) Students can choose where they sit (T)

The initial in parentheses at the end of each sentence gives the correct response.

With reference to (a), one observer remarked that he rated this as 'true' because everyone was talking at once. Whether this can be evaluated as desirable interaction is a moot point.

With reference to (b), the vocational specialist's comments (Chapt. V, pp. 30-31) underline the doubtful efficacy of the question as a measure of interaction.
With reference to (c), 'a lot of activities' may mean much or little, depending upon the nature of the activities.

With reference to (d), students of the project class often got into arguments over 'who should sit where'. The quality of this interaction is marginal.

A correct response to the four questions would significantly change the rating for a learning environment and must raise doubts as to the validity of the instrument, at least as a measure of interaction.

Summary

As the case studies have shown, the Cfm population at this Institution show characteristics clearly delineated by D.E. Hunt. There can be little question that students were accurately assessed by conceptual level. The diagnostician who measured the conceptual level scores has been an associate of Hunt for several years and has had much experience in diagnosing conceptual level. His inter-rater reliability is over 80%. Assuming accuracy of diagnosis, the question remains, 'what went wrong?'. As various subjective and objective observations have shown, the 'matched' environment within the project class was never really implemented. Admittedly the project class demonstrated improvement in S.A.T. and Gates MacGinitie results. Unfortunately, many of the gain scores were less than .5 of a grade equivalent which indicates 'normal' improvement. While there is no wish to denigrate the efforts of the educational counsellors who expended a great deal of energy, results were inconclusive and neither proved nor disproved the paradigm. The problems encountered with data collection precluded any accurate statistical analysis and further com-
pounded the inconclusive findings. This latter will receive further attention in Section 2 of this chapter. Meanwhile the inconsistencies apparent were considered to have been caused by the following:

(i) Paper and pencil instruments administered to delinquent students are not the best means of detecting attitudinal change. Their possible negative feelings toward testing is a powerful mediating variable.

(ii) Low conceptual students are not able to view their behavior objectively.

(iii) Within this study only two observers rated the students. More effective measures could have been made with four or more observers.

(iv) As reported in Chapter VI, observer ratings of the Two-Factor Environment Scale indicated an environment incongruent to the Hunt paradigm.

(v) Delinquent attitude interacted upon teacher behavior and prevented congruence of the learning environment.

(vi) Data collection ran into unexpected difficulties.

Conclusions and recommendations

It seems mandatory in future studies that the same person or persons should be responsible for test administration. In any event it is probably better to minimize student administered paper and pencil instruments. The Classroom Behavior Inventory may be a better measurement of change if rated by four or more observers. Even then, there is no way of knowing how effective it is until such time as successful student placement in community schools correlates closely with the instrument's measure of improvement.
Measures of academic progress may be better facilitated with the ongoing development and use of the Saskatchewan 'Newstart' program, which is intended to develop and document, communication, reading and mathematic skills. Progress is systematically measured and provides feedback to students as well as teachers and researchers. The ambivalence noted within the learning environment brings to mind D.E. Hunt's statement: "...Assuming that the matching principle is sufficiently well established, it seems probable that one of the major determinants of its acceptability will be the degree to which it is congruent with the teachers' own ideas of matching." (1970, p. 49) When the study was implemented, there was some uncertainty as to whether the environment required did indeed 'match' the values and principles of learning held by the educational counsellors. Little research is available in the area of 'teacher behavior'. Whether or not all teachers are able or willing to modulate various types of learning environments is still not clearly known.

In retrospect it seems essential that some evaluation of participating education counsellors be made before a project is started. This evaluation would be an attempt to diagnose 'teacher style'. Probably if this deviates too widely from the study requirements, it may be better to look elsewhere for educational counsellors whose style is more compatible. Although various teacher inventories exist, little information is available regarding their reliability (Flanders, 1970, p. 356). However, Flanders (ibid., p. 230) details various ways of measuring the quality of classroom interaction in which he uses a hierarchical pattern from Level 1 to Level 3. The first level applies primarily to a learning environment
where the teacher initiates, directs and actively supervises. This seems a congruent match to low conceptual students and appears a potential instrument for educational counsellor selection. No such evaluation was made prior to the present study and may partially account for the inconclusive results.

In the early stages of the study, the reticence on the part of the project counsellors to be 'observed' largely precluded environmental feedback and discussion. In addition, as both were new to the Institution last September, they were coping with a control problem which is a 'norm' for new educational counsellors to the Institution. On a purely conjectural basis another and related reason may account for the inconclusive results. I 3 Cfm's conform to where they consider the power resides. The non-directive approaches utilized the previous semester with the project group may have given students the notion that they were 'in charge' of proceedings. True to the interactive B.F.E. paradigm, teacher behavior may have been changed by the group 'power'. Delinquency may exert an influence as yet not measured upon a learning environment, particularly if the delinquent students are 'Cultural Conformists'; homogeneously grouped and 'power' oriented. This could be a real problem if some ambivalence exists as to the 'power' origin. To become even more speculative this negative power orientation seems likely to cause developmental fixation, as postulated by Hunt, in reference to a 'mismatched' environment.

One of the problems encountered during the study was explicating to teachers the definition of 'structure' as it applies to the Hunt paradigm. Teachers define the term in very different ways and are influenced by their own value system and mode of operation. There seems a need to
specify learning environments in terms of structure that teachers can understand and readily act upon. Joyce and Weil (1972) have begun this task. Drawing from various theories and experiments they have identified fifteen 'models of teaching'. The models are further sub-divided into four families classified as 'Social Interaction', 'Operant Conditioning', 'Information processing', and 'Personal Sources'. Each of the models has been coded in terms of the level of structure required. Complementary work by Schroder, Karlins and Phares (1973) and Coles (1972) provide useful reference to prospective researchers.

Unfortunately, despite the above, little information is currently available which makes easier the task of measuring a low conceptual learning environment. Means must be found that provide teachers with supportive and constructive feedback, and cues as to desirable interactions with low conceptual students. Flanders (1970), Allen and Ryan (1969), Walberg and Anderson (1969), et.al. have compiled a good deal of information concerning learning environments and classroom interaction, some of which may be relevant to the conceptual paradigm. As previously stated, one aspect of Flanders' work includes a consideration of interaction in developmental constructs; that is, interaction which gradually increases in terms of cognitive complexity. Whereas Hunt has given close consideration to 'person' characteristics, and not enough to specific forms of interaction, Flanders has given close scrutiny to the meaning of 'interaction' without a great deal of consideration to 'person' characteristics. An integration of both theories appears an interesting line of research, if repertoires of matched interactions, and means of identifying them, resulted.
This information is needed and could help future researchers to match their teachers more effectively. The 'teacher variable' exerts a powerful influence upon the learning environment and it remains difficult to understand how conceptual studies can be validated unless this matching aspect is controlled.

Section II. The case study component

While it is artificial to dichotomize this section from the last, the purpose here is to isolate those factors peculiar to this Institution which effected the implementation and results of the project. These are seen as follows:

(a) The decentralized organization of the Institution.
(b) Staff attitude toward testing.
(c) Lack of centralized educators.
(d) Grouping resulting from the clinical classification.
(e) Intake and discharge policy.
(f) Lack of adequate staff training.

The organization. During the year 1968 the Institution came under new management and within a short time extensive re-organization took place. This was intended to transform the Institution from a traditional, custodial setting to one which was treatment centered. An integral part of this process was the implementation of the Interpersonal Maturity Typology and the beginning development of a differential treatment milieu. Concurrently an innovative administrative structure was introduced which allowed for staff participation in the decision making process. Seven cottage units were developed, each containing a staff team of five child
care counsellors, one senior child-care counsellor, and a social worker. Responsible for the supervision of the unit program. Approximately sixteen boys, diagnosed according to the Interpersonal Maturity Typology, and homogeneously grouped accordingly, resided in each of the seven units. Each team was given a great deal of autonomy in developing the treatment philosophy and program within its cottage unit. In addition, the social worker coordinators participated in the development of Agency policy, in company with the Executive Director and other administrators. While this participatory leadership can be applauded, the very autonomy of each unit ultimately led to a situation which effected the study, described in previous chapters.

For a research project to be effectively implemented the staff members must have commitment to it. Within the two cottages involved, only the project unit demonstrated such a commitment. Although this can only be a subjective view, the comparison cottage team seemed to see the Hunt paradigm as contrary to its treatment philosophy. Only in the final stages of the project were structures applied which ensured adequate data collection. By this time, missing data constituted a serious problem. It seems ironic that while the Agency is committed to differential treatment, it relies upon a participatory, non-directive leadership style. This does not differentiate and may or may not be appropriate for all unit sub-systems. The hiring practices of one cottage suggested the need for more extrinsic structure. During the study, a cottage educational counsellor resigned and was replaced within one week. No consultation took place with other Agency staff who could have offered expertise during the selection process. Paradoxically enough, and depending upon the personnel, the 'open', decentralized
units have the capacity to be quite closed as the above incident seems to illustrate.

Over the years some units have shown considerable variance in their treatment modality. This can be partially accounted for by the lack of clear treatment specificity within the J Level paradigm, the high attrition rate of coordinators and other staff, the differing treatment beliefs of successive coordinators, and the differential levels of staff competence, experience and scholarly. The resulting circumstances create difficulties for prospective researchers. The following conclusions and recommendations are aimed at reducing the organizational inconsistencies enumerated.

Presumably, for a program to be demonstrably effective, it should be operating within the parameters of a specific and measurable paradigm. Although cottages vary in ability here, generally there is a need for improvement. Too often cottage action plans are after the fact; that is they are written describing 'what happened', or what was thought to have happened. There is a real need for supervisory structures in the area of planning, which are presently 'fuzzy'. As the two treatment supervisors are increasingly involved with cottage team planning, they should, with the cottage coordinator, have the final responsibility for program design. In addition, these persons would be expected to use the service of the various Agency consultants in such planning. For research purposes, once the design is finalized, at least one year of operation appears mandatory, so that accurate evaluation can be made.

To maintain program consistency the plan should be explicit, so that if staff change occurs, especially at coordinator level, the existing
program can remain. At the present, a new coordinator usually means a new program. It is also important that during staff hiring, these factors are borne in mind. Newly hired staff should be aware of the nature of the program and demonstrate commitment toward it.

Data collection. Some staff at the Institution have, to a greater or lesser degree, a skepticism toward self-reporting paper and pencil instruments. This is easy to understand, if not to condone. Most Cfm students have had a disturbed home environment and suffered deprivation of some kind. Without exception they have failed in, and are negative toward, school and the education process. Test situations can be threatening to the boys and result in 'confrontative' situations which some staff feel should be avoided. While this humanistic attitude may be admirable, it is open to debate whether avoidance of confrontative situations is always conducive to conceptual or interpersonal growth.

Part of the difficulty in collecting test data was caused by this attitude, which in turn compounded the problem of validating the educational treatment. Other reasons for missing data concerned miscommunication, illness, A.W.O.L., and discharge without prior notice.

If research is to have any likelihood of success at the Institution, a greater commitment on the part of personnel is required. This applies notably in the area of data collection. Regular workshops are required to acquaint various staff members with the nature of test instruments, and which will demonstrate how such instruments ultimately may enhance treatment effectiveness.

As the Institution now has its own research foundation, structures are required which detail test procedures to the decentralized units.
counsellors did not create the desired learning environment, the study ran into difficulties; whereas had more teachers been involved, it is possible that at least sometimes the students would have experienced the appropriate environment. Of more significance, during the project many students were found to have learning difficulties, and the human resources to assist were simply not available. Unfortunately, the Agency has developed the 'affective' process to such an extent that 'content', e.g. skill training, has suffered neglect. Because of this, adequate educational treatment remains difficult to implement and research.

A compromise solution which has the capacity to improve education content but still retains a 'process' balance is not difficult to arrange. If the decentralized units each released one educational counsellor to operate on a central basis with clearly designated subject responsibilities, a better situation could result. The remaining cottage based educational counsellors, being aware of their students' needs, could then contract central service skills as required. Matching centrally based educational counsellors to students on an I Level basis may present problems, although the Agency is small enough so that staff are generally aware of one another's strengths and weaknesses. It is assumed that when students are assigned to central personnel, mismatching could be avoided. The proposed structural changes offer minimal risk. If, after an evaluative period of three months, no demonstrable improvement is apparent, the organization could revert with little disruption. On the other hand the change has the capacity to vitally improve present program level with a corresponding higher level of research potential.
Intake and discharge. The present Agency mandate is to accept adjudicated delinquents for treatment purposes for a period of time determined within the Agency, by those staff members working closely in the treatment process. This policy certainly reduces the custodial image of the Institution in the eyes of the general public and the boys themselves. However, for researchers, intake and discharge become important mediating variables, as students come and go with varying degrees of frequency. For some boys, discharge may come after three months of residence, while for others a much longer period can be involved. This variance is also apparent within individual cottage units.

While it is not recommended that boys serve out defined 'sentences', it seems necessary to survey as soon as possible, the results of these policies, to see if recidivism has correlation with length of residence, and delinquent sub-type classification. As a result, better time-frame guides may become available. These would be useful to both treaters and researchers.

Training. If the Agency programs are to accurately reflect the I Level paradigm, a training component seems essential. Because of the complexities of the paradigm, and the heterogeneous nature of staff competence and scholarly, this training presents problems. At the present, although various persons within the Agency have expertise in the teaching of I Level, information dissemination lacks structure and definition.

As each cottage team has a weekly three hour meeting, it is recommended that at least twice per month training be a component of the meeting. Here I Level could be given detailed analysis. It is not a purpose of this study to detail the nature of the training programs. However, I
believe that dydactic approaches have proved ineffective in the past. Micro-teaching techniques, use of video-tape, case study analysis, and closer supervision of new staff members, should be included as elements of the component.

Ultimately, the Agency will need to demonstrate the validity of its treatment approaches. The development of an adequate training program is integral to this process and should be given the utmost priority.

Conclusion

Doubtless, within the Agency, other and more subtle variables exist, which have the capacity to create difficulties for researchers. However, those which have been the subject of discussion seem to be of the most significance. Recommendations have been kept at a modest level and generally state the obvious. The minimum of restructuring is required for their implementation. Nevertheless, both from a treatment and research point of view, if the recommendations are acted upon, they may well clarify and better define the objectives and processes of Agency program.


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APPENDIX A

THE INTERPERSONAL MATURITY TYPOLOGY
INTERPERSONAL MATURITY LEVEL CLASSIFICATION: JUVENILE

(An integration of material and research findings emanating from the California Youth Authority)

Compiled by:

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Permission obtained from the California Youth Authority to extract, reprint, and distribute material from their publications for this booklet.
INTRODUCTION

Enormous quantities of material have been written on delinquency, and it has been suggested that delinquency ranks third, behind the Bible and Shakespeare, in the quantity of material written - unfortunately as far as treatment programs are concerned, this does not suggest quality of material and we are left with few agreed upon facts. Theorists and practitioners now, and learning from our past failures, are strongly adhering to the fact that delinquents are not all alike - that they are different from each other in the reasons for their delinquency, in the expression of their delinquency, and in their capacity for change toward non-delinquent patterns.

The typology being presented here is the "Interpersonal Maturity Level Classification: Juvenile" and is an elaboration of the Sullivan, Grant and Grant levels of interpersonal maturity - a theoretical formulation describing a sequence of personality integrations in normal childhood development.* This classification system focuses upon the ways in which the delinquent is able to see himself and the world, especially in terms of emotions and motivations; (i.e. his ability to understand what is happening between himself and others as well as between others). It is through the use of this typology that we are able to subdivide delinquents into well defined types which have clear-cut implications for the kinds of treatment required.

* This theory is described in detail in "The Development of Interpersonal Maturity: Applications to Delinquency", Psychiatry, November, 1957.
Theoretical frame of reference

There are seven stages of interpersonal maturity which characterize psychological development. They range from the least mature, which resembles the interpersonal interactions of a new born infant, to an ideal of social maturity which is seldom or ever reached in our present culture. Each of the seven stages or levels is defined by a crucial interpersonal problem which must be solved before further progress towards maturity can occur. All persons do not necessarily work their way through each stage, but may become fixed at any particular level. The range of maturity levels found in a delinquent population is from maturity level 2 (integration level 2 or \(I_2\)) to maturity level 5 (\(I_5\)). Level 5 is infrequent enough that, for all practical purposes, use of levels 2 thru 4 describes the juvenile population.

The classification of a delinquent youth is made in two steps. The individual is first diagnosed according to the level of perceptual differentiation or degree of complexity in his view of himself and others. This step identifies the individual's interpersonal maturity level (also called integration level or \(I\) Level). In the second classification step, individuals within each maturity level are further diagnosed according to response set or way of responding to their perceptions of the world. There are two major ways in which the integration level 2 (\(I_2\)) individual responds to his perceptual frame of reference. Similarly, there are three typical response sets among delinquent \(I_3\), and four typical response sets among delinquent \(I_4\). In this manner, nine delinquent subtypes have been identi-
fied. These subtypes have been described by lists of item definitions which characterize the manner in which the members of each group perceive the world, respond to the world, and are perceived by others. The description of the subtypes, with predicted – most – effective intervention or treatment plans, combine to make up the "Interpersonal Maturity Level Classification: Juvenile Typology".

Brief descriptions of the three maturity levels and the nine subtypes are given below:

**Maturity Level 2 (I_2).** The individual whose interpersonal understanding and behavior are integrated at this level is primarily involved with demands that the world take care of him. He sees others primarily as "givers" or "withholders" and has no conception of interpersonal refinement beyond this. He has poor capacity to explain, understand, or predict the behavior or reactions of others. He is not interested in things outside himself except as a source of supply. He behaves impulsively, unaware of anything except the grossest effects of his behavior on others.

Subtypes: (1) **Asocial, Aggressive** (Aa) responds with active demands and open hostility when frustrated.

(2) **Asocial, Passive** (Ap) responds with whining, complaining and withdrawal when frustrated.

**Maturity Level 3 (I_3).** The individual who is functioning at this level, although somewhat more differentiated than the I_2, still has social perceptual deficiencies which lead to an underestimation of the differences
among others and between himself and others. More than the I₂, he does understand that his own behavior has something to do with whether or not he gets what he wants. He makes an effort to manipulate his environment to bring about "giving" rather than "denying" response. He does not operate from an internalized value system but rather seeks external structure in terms of rules and formulas for operation. His understanding of formulas is indiscriminate and oversimplified. He perceives the world and his part in it on a power dimension. Although he can learn to play a few stereotyped roles, he cannot understand many of the needs, feelings and motives of another person who is different from himself. He is unmotivated to achieve in a long-range sense, or to plan for the future. Many of these features contribute to his inability to accurately predict the response of others to him.

Subtypes:

(3) Immature Conformist (Cfm) responds with immediate compliance to whoever seems to have the power at the moment.

(4) Cultural Conformist (Cfc) responds with conformity to specific reference groups, delinquent peers.

(5) Manipulator (Mp) operates by attempting to undermine the power of authority figures and/or usurp the power role for himself.

Maturity Level 4 (I₄). An individual whose understanding and behavior are integrated at this level has internalized a set of standards by which he judges his and others' behavior. He can perceive a level of interpersonal interaction in which individuals have expectations of each other and
can influence each other. He shows some ability to understand reasons for behavior, some ability to relate to people emotionally and on a long-term basis. He is concerned about status and respect, and is strongly influenced by people he admires.

Subtypes: (6) Neurotic, Acting-out (Na) responds to underlying guilt with attempts to "outrun" conscious anxiety and condemnation of self.

(7) Neurotic, Anxious (Nx) responds with symptoms of emotional disturbance to conflict produced by feelings of inadequacy and guilt.

(8) Situational Emotional Reaction (Se) responds to immediate family or personal crisis by acting-out.

(9) Cultural Identifier (Ci) responds to identification with a deviant value system by living out his delinquent beliefs.

Maturity Level 5. A person who functions at this level is able to see patterns of behavior; he may see himself and others behaving in the same way in different situations or see a continuity in his past, present, and future. He begins to see others as complex, flexible objects which cannot be dealt with on the basis of a few single rule-of-thumb procedures. He is aware of many points of view in the world around him and sees interwoven reasons for behavior. He is able to play different roles in different situations and is thus more flexible. He is more capable of establishing and carrying through long-range plans than persons at lower levels.
Delinquency, for a person at this maturity level, is apt to be situationally determined.

The delinquent subtypes, along with their code names, may be summarized as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>Delinquent Subtypes</th>
</tr>
</thead>
<tbody>
<tr>
<td>I_2</td>
<td>Aa</td>
<td>Asocial, Aggressive</td>
</tr>
<tr>
<td></td>
<td>Ap</td>
<td>Asocial, Passive</td>
</tr>
<tr>
<td>I_3</td>
<td>Cfm</td>
<td>Conformist, Immature</td>
</tr>
<tr>
<td></td>
<td>Cfc</td>
<td>Conformist, Cultural Manipulator</td>
</tr>
<tr>
<td></td>
<td>Mp</td>
<td></td>
</tr>
<tr>
<td>I_4</td>
<td>Na</td>
<td>Neurotic, Acting-out</td>
</tr>
<tr>
<td></td>
<td>Nx</td>
<td>Neurotic, Anxious</td>
</tr>
<tr>
<td></td>
<td>Se</td>
<td>Situational Emotional Reaction</td>
</tr>
<tr>
<td></td>
<td>Ci</td>
<td>Cultural Identifier</td>
</tr>
</tbody>
</table>

Classification procedure

The procedure for classification being followed at Saskatchewan Boys' School (as of March, 1968) is similar and taken from that of the Preston Typology Study - a California Institutional Youth Authority Research Study. The classification procedure involves a careful integration of material from three sources: the Jesness Inventory, a semi-structured interview, and the PTS Sentence Completion Test. All the three sources of data are regarded as fallible instruments and are given approximately equal weight in arriving at a final classification.

At present, Saskatchewan Boys' School arrives at a tentative or confirmed diagnosis. A tentative diagnosis is made during the boy's first three to four weeks at Saskatchewan Boys' School and is based upon the interview, the inventory and the sentence completion test. A diagnosis is arrived at in a staffing conference, usually with the aid of Dr. Russon,
Consultant Psychiatrist, where the material from the three sources are reviewed and discussed in detail if there is disagreement. A confirmed diagnosis can only be obtained if a boy remains in the treatment program at Saskatchewan Boys' School for a period of approximately three months. At this time a case conference is held which includes Dr. Russon, the Treatment Supervisor, the Caseworker, the two dormitory Group Workers, the Supervisor of Recreation, usually the teacher, and wherever possible, the morning supervisor. Here the item definitions which describe the four major levels as well as the nine subtypes are reviewed and scored and in this way the appropriate subtype is diagnosed.

The Jesness Inventory is a structured personality - attitude test which consists of 155 true-false items providing scores for ten scales and a delinquency proneness index (the Asocial index). The Asocial index combines information provided by scale scores into a single best estimate of delinquency proneness or persistent delinquency. At present, we are sending the raw scores obtained on the Jesness Inventory to California for computer analysis as their computer is programmed to present figures showing the probability of a subject's belonging to each of the nine I Level subtypes, taking account of all inventory data.

The PTS Sentence Completion Test consists of 13 stems and three broad questions or topics. The subjects are given 75 seconds in which to write their responses to each stem and three minutes for each of the topics. With respect to both the sentence completion test and the semi-structured interview, their responses are compared to the responses made by 2,000 subjects of various subtypes (see the Preston Typology Study Classification Manual). The rater then will arrive at a first and usually second choice of subtype.
At present, this is done with two independent raters - before the results of the Jesness Inventory are known.

It should be noted that all material in this booklet has been extracted from various research reports and articles emanating from the California Youth Authority - with particular reference to the Community Treatment Project and the Preston Typology Study. Permission has been obtained from the California Youth Authority to extract, reprint, and distribute this material.

The information in the following pages represents descriptions of the nine I Level subtypes and includes for each subtype the subject's ways of perceiving and responding to the world, background characteristics, treatment recommendations, and research findings. It should be noted that these are not complete descriptions and in particular the treatment recommendations are vast over-generalizations, and complete descriptions can only be obtained by reviewing the 1966 edition of "Interpersonal Maturity Level Classification: Juvenile".

These descriptions were designed to aid Regional Workers and Supervisors in Saskatchewan to more fully understand and work with delinquent cases on rather large caseloads.

Any further information required which is related to the above typology can be secured through the Treatment Supervisor at Saskatchewan Boys' School.
APPENDIX B

A DESCRIPTION OF OPTIMAL TRAINING ENVIRONMENTS

ACCORDING TO HARVEY, HUNT AND SCHRODER'S CONCEPTUAL MODEL
Characteristics of stage

I. This stage is characterized by extremely fixed patterns of response. The individual tends to see things evaluatively, that is, in terms of rights and wrongs, and he tends to categorize the world in terms of stereotypes. He prefers unilateral social relationships, that is, those which are hierarchical and in which some people are on top and others on the bottom. He tends to reject information which does not fit in with his present belief system or to distort the information in order to store it in his existing categories.

II. In this stage the individual is characterized by a breaking away from the rigid rules and beliefs which characterize his former stage. He is in a state of active resistance to authority and tends to resist control from all sources, even non-authoritative ones. He still tends to dichotomize the environment. He has difficulty seeing the points of view of others, and difficulty in maintaining a balance between task orientation and interpersonal relations.

III. At this stage, the individual is beginning to re-establish easy ties with other people, beginning to take on the point of view of the other, and in his new-found relationships with other people has some difficulty maintaining a task orientation because of his concern with the development of interpersonal relations. He is, however, beginning to balance alternatives and to build concepts which bridge differing points of view and ideas which apparently contradict each other.

IV. The individual is able to maintain a balanced perspective with respect to task orientation and the maintenance of interpersonal relations.
He can build new constructs and beliefs, or belief systems, as these are necessary in order to accommodate to changing situations and new information. In addition, he is able to negotiate with others the rules or conventions that will govern behavior under certain situations, and can work with others to set out programs of action and to negotiate with them conceptual systems for approaching abstract problems.

Optimal training environment

I. In order to produce development from this stage, the training environment needs to be reasonably well-structured, because this kind of person will become even more concrete and rigid under an overly open social system. At the same time, however, the environment has to stress delineation of the personality in such a way that the individual begins to see himself as distinct from his beliefs and begins to recognize that different people, including himself, have different vantages from which they look at the world, and that the rights and wrongs in a situation, and the rules in a situation, can be negotiated. In summary, the optimal environment for him is supportive, structured, fairly controlling, but with a stress on self-delineation and negotiation.

II. The delineation of self which is suggested above is now taking place, and the individual needs to begin to reestablish ties with others, and to begin to take on the points of view of others, and to see how they operate in situations. Consequently, the training environment needs to emphasize negotiation in interpersonal relations and divergence in the development of rules and concepts.
III. The training environment at this point should strengthen the reestablished interpersonal relations, but an emphasis should also be placed on tasks in which the individual as a member of the group has to proceed toward a goal as well as maintaining himself with other individuals. If the environment is too protective at this point, the individual could be arrested at this stage and, while he might continue to develop skill in interpersonal relations, would be unlikely to develop further skill in conceptualization or to maintain himself in task-oriented situations.

IV. While this individual is adaptable, he no doubt operates best in an interdependent, information-oriented, complex environment.
APPENDIX C

COTTAGE ACTION PLAN FOR THE COMPARISON GROUP
Mandate

L'Avenir treatment program is an individualized treatment program for sixteen boys. The boys are primarily diagnosed as high conceptual level Cfms and some Nxs. They range in age from twelve to eighteen and also vary in size, maturity and commitment to a delinquent behavior. There are definite common needs and characteristics of CfM boys, but there are particular differences within each boy and therefore individualized treatment programs are developed and implemented for each boy. The projected length of stay varies from six months to fifteen months. The L'Avenir treatment program is aimed at:

1) Eliminating delinquent patterns of behavior,
2) Moving boys from I₃ to I₄, and
3) Preparing boys to return to school and/or work.

Cottage treatment philosophy

The philosophical base upon which L'Avenir operates is to give boys the opportunity to change and grow through resolving problems rather than suppressing their behavior problems, which are symptoms of their deeper problems. A warm, confronting counsellor can then work through areas of concern with them. Staff emphasis is on being aware of the problem, being in control of what is occurring and being willing and able to go through it with the boy or boys. If the entire group acts out together, there is chaos and it becomes more difficult for change to take place. It is therefore essential that action out be limited to a few boys at any one time.
A second area of emphasis is our commitment to preparing boys to be able to function in a socially acceptable manner when they return to the community. Therefore, a second aspect of L'Avenir program is keeping boys in contact with the community. The treatment program is also based upon the premise that staff cannot make all of the vital decisions for boys and eventually a boy must be able to make decisions and own the decisions he has made. The staff at times must make decisions for boys because boys are not always responsible enough to make their own decisions. Boys in L'Avenir program will always be at different levels of ability to make decisions and own up for their decisions. At other times, to further treatment, and when it is not injurious to self or others, it is necessary and beneficial for a boy to make a decision and carry it through even though there will be short term adverse effects. Again, staff must be very aware of the situation, the projected outcome and the risk involved.

The counsellor can be seen as a parent, a confronter, a catalyst, a supporter, a clarifier, an enabler or a preparor.

The L'Avenir treatment program does not utilize an overpowersing hierarchy to which boys can adhere, defy and/or manipulate to their advantage. The youth must look in different terms upon his evaluation and categorization of adults in monolithic blocks. The object being to base his experience of the adult, in this case the counsellor, on the strength of his character and personality as a rational, feeling individual rather than an impersonal monitor absolutely forbidding volatile asocial expressions of frustrations and generally acting out behavior.

The L'Avenir team is not striving for a tranquil cottage where staff and boys are comfortable. It is all too easy for Cfm boys to conform to a
very structured program, (conforming to the power structure) and then return to the community unprepared to cope with his frustrations, stresses and injustices. Our program allows a boy the opportunity to make decisions and to own the decision so that we can deal with the decision-making process and the feelings behind the decisions.

the 'raison d'etre' of the program is that with trust invested in the youth, he gets the opportunity to measure himself in relation to the norms of caring persons. Boys must be nurtured along as they are at different levels in their ability to handle trusts. Such trust gives him the possibility of evaluating his actions vis a vis himself and his social responsibilities. The culmination of his improved self-portrait being reintegration to either school or job in the 'normal' social cycle where he would be better equipped to handle the frustrations with this 'new found' self sufficiency and not have to resort to asocial means to settle problems arising from the general alienation surrounding him.

L'Avenir Cottage is not always a comfortable place for boys to live and staff to work. Unfortunately, the boys we are charged to help will be returning to their homes which are not always comfortable, which do not give the structure that they may need. Staff will work to effect changes in their environments, but our goal is to prepare them to cope with the frustrations, stresses and injustices they will encounter when they return to the community. We are committed to helping boys to increase their awareness of themselves, their decision-making processes and their environment.
Boy development

A. One to One Counselling

1. Goals
   a) To enable a boy to see himself progressing
   b) To enable boys to develop a close relationship with a warm, confronting counsellor
   c) For boys to model staff
   d) For boys to become I4s.

2. Objectives
   a) Each boy is assigned to a counsellor after two weeks in the cottage.
   b) Each counsellor and boy will meet weekly to discuss goals, progress and problems. Boys are encouraged to discuss feelings.
   c) Each counsellor is responsible for developing an individualized treatment program before the boy is in the program one month.
   d) Counsellors should be honest and confrontative with boys.
   e) Detailed quarterly progress reports shall be sent to judges.
   f) Charts and graphs are utilized so that boys and staff can evaluate the effectiveness of treatment.
   g) The consulting psychiatrist shall attend staff meetings fortnightly to assist in treatment planning for individual boys.

B. Group Meetings

1. Goals
   a) To help boys function in a group.
   b) To develop cottage norms.
   c) To develop individuality within the group.
2. Objectives
   a) Four boy meetings per week:
      1. Tues. - norms and planning meeting
      2. Thurs. - weekly review
      3. Fri. - weekend planning
      4. Sun. - weekend appraisal

C. Education
1. Goals
   a) To motivate towards continuance of education and to remotivate and interest those boys who are turned off school.
   b) To develop academic and vocational and work skills.
   c) To have the education program to be an integral part of the total treatment program.

2. Objectives
   a) To develop individualized educational objectives and programs which are consistent with his treatment goals for each boy after one month.
   b) To prepare progress reports on each boy every three months.
   c) To utilize the child care staff in the educational process.
   d) To get boys to express their feelings in writing.
   e) Groups to be developed based upon individualized educational programs.

Boys fall into three categories:
   a) Boys who will definitely be returning to academic-oriented schools. These boys receive remedial help three or four times per week and are in shop class once or twice per week. The goals with these
boys are two-fold: (1) to turn them on to education and give them confidence in their abilities and capabilities, and (2) to help them obtain skills (e.g., reading, writing, math, etc.).

b) Boys who are vocationally-oriented. These boys spend the majority of their school days in the shop areas. They are learning shop skills and care of equipment. Their academic classes are less frequent than the academic group. Classes are geared to expanding their interests and sensitivities (e.g., ecology, poetry, guitar, song-writing, analyzing, etc.).

c) Boys who will be entering the work world. These boys also spend a majority of their school day in the shops and their classes are also geared to expanding their interests and sensitivities. They are also exposed to temporary jobs and other work situations. They are also taken to Manpower and assisted in obtaining a job.

D. Off-Campus Leaves

1. Goals
   a) To ascertain strengths and weaknesses of boys while they are in the community.
   b) To enable boys to have fun without engaging in illegal behavior.

2. Objectives
   a) Earned weekends at home.
   b) Earned weekly supervised trips into Shawbridge.
   c) Earned weekly supervised trips into the community.
   d) Utilization of the services of two volunteers to assist with
outings.

E. Family Work

1. Goals
   a) To ascertain strengths and weaknesses of the family.
   b) Environmental manipulation (e.g., work with families, to initiate changes in response patterns).

2. Objectives
   a) Monthly visits to the homes by counsellors.
   b) Weekly telephone contacts to families.
   c) Weekly parents meetings.

F. Recreation

1. Goals
   a) Recreation is to be an integral part of the total treatment program.
   b) Maintain a good working relationship with the Recreation staff.

2. Objectives
   a) To utilize a point system tied into regular school program.
   b) Recreation staff to attend at least one cottage meeting per month.
   c) Recreation staff at cottage for lunch at least once per week.

G. Basic Child Care

1. Goals
   a) Cottage shall meet Health Department's standards.
   b) For boys to take pride in their work.
   c) Cottage shall meet safety standards.
2. Objectives
   a) Details will be done three times per day.
   b) Farm nurse will make periodic inspections of the cottage, at least once per week.
   c) Farm nurse to give weekly hygiene classes.
   d) Boys to be paid in cash and verbal support for good work.
   e) Four staff shall be responsible at the start of their shift for checking the cottage to insure its meeting health and safety standards.

H. Personal Management
   1. Goals
      a) To enable boys to learn the value of money.
      b) To enable boys to become more self sufficient.

2. Objectives
   a) Boys shall earn their allowances by doing details.
   b) Boys shall be fined for damages they cause.
   c) Boys shall determine what clothes they need.

I. AWOLs and Delinquencies
   1. Goal
      a) Boys who commit delinquencies and/or go AWOL will be confronted rather than rejected.

2. Objectives
   a) Individualized action consistent with the boy's treatment plan shall dictate action to be taken.
   b) Treatment of boys shall continue whether he is in the cottage or detention.
J. Discharge into the Community

1. Goals

a) A boy's progression from residential to community treatment is based upon the premise that he may encounter family problems or he may still have difficulties at school or work, or he may still commit a minor delinquency. He is returning to the community because the remaining areas of conflict can only be worked through in the community with a community treater.

b) The cottage will maintain a very close liaison with the community treater. The community treater will work a Wednesday afternoon and evening shift each week. The C.T. will run a discharge group in Montreal on Friday morning for boys in Phase II. He will attend cottage staff meetings twice per month.

2. Objectives

a) Boys progress to the community treatment phase when we feel that:

1. They are not a danger to the community or themselves.
2. The boy's growth can best be facilitated in the community.

b) The cottage shall be a resource for the community treater:

1. The short-term use of the residential program for boys who are encountering difficulties in the community or who are having a temporary problem and need a place to stay.
2. The cottage team will be responsible for the community treatment for boys living in the Hull area.
APPENDIX D

COTTAGE ACTION PLAN FOR THE PROJECT GROUP
Mandate

To operate a decentralized open treatment unit, for a maximum of 16 boys, diagnosed at I Level 3, subtype Cfm, who are in need of residential treatment. 75% of admissions will be of low conceptual level and 25% of higher conceptual level (Hunt's Conceptual Model). Length of stay will average 12 months per boy. Accumatively there will be a 90% population average.

Basic Philosophy of Boy Development:

Lindsay Cottage staff is responsible for meeting the total needs of all boys - physical, mental and emotional. Lindsay Cottage Program is designed to:

1) Increase individualization in the boy's perception of others, and awareness of other's, and increase his independence.

2) Build up the self-esteem and competence of boys.

3) Build up an individual identity and sense of uniqueness.

4) Develop an internalized value system.

5) Develop a competence in making successful decisions.

6) Build competence in realistic planning.

7) Develop insight into problems.

8) Develop to I₄, Non-neurotic.

9) Eliminate delinquency.

10) Develop capacity for realistic self-evaluation.

11) To increase comfortability in and discrimination with those relationships.
To achieve these goals the program will have clearly planned and delineated activities and structure for the group and for the individual boy. Staff will constantly monitor the external/internal control of a boy and give him responsibilities sufficient to reinforce and promote growth and yet not overwhelm him.

<table>
<thead>
<tr>
<th>External Control</th>
<th>Conformity</th>
<th>Internal Control</th>
</tr>
</thead>
</table>

The program is designed to reinforce boy individuality with ingroup activity especially within the committee structure.

Modelling by the staff is basic to the achievement of the eleven goals.

Theoretical Validation:

Warren and Hunt have demonstrated a Cfm Program must isolate, draw out and support a boys' individuality in order for him to differentiate himself from his peers. Lindsay Program will reinforce success and provide visual and verbal reinforcement or success and non-failure. The program will eliminate fear of being in the Lindsay Program. The dependency needs of I^3 children have been neglected during childhood. Lindsay Cottage will meet many of these needs through close attention to the physical and material needs/wants of the boy. A close relationship will develop between counsellor and boy with specific times set aside for individual counselling with defined contracts between staff and boy. On many occasions the counsellor will be a "nurturing parent" to the boy.
Cottage Framework:

a) Structured day

b) Each counsellor will develop a close relationship with the boy for whom he is the specific counsellor.

c) Boys' and staff ownership of responsibilities will visually be represented.

d) There will be a focus on staff being responsible to the team.

Targets: September 1974 for the staff to have ownership and non-contradictory interpretation of the Cottage framework.

For all staff to have done and been supervised in eight individual counselling tapes, where deemed appropriate.

Boy Contracting and Counselling:

Each boy will have at least weekly scheduled counselling sessions with his counsellor. He will contract to work on a maximum of five behavioral patterns every four weeks as part of the individual counselling. This will achieve the following goals:

1) Reduce rigidity of behavior patterns.

2) Enhance own status, group planning.

3) Decrease low self-concept.

4) Promote a capacity to delay response to stimuli.

5) To increase the ability to experience growth in decision making.

Objective: All staff members to monitor any step of progress or a success and to positively and individually reinforce it.
Target: September 1974 - for staff to have competence in diagnosing and initiating appropriate contracts for boy growth.

Group Work:

The committee structure is designed to achieve the following goals through small directional and activity focused group work. Each committee has a Salary Chairman elected by committee group:

a) Assist a boy to show initiative and to plan how he can make changes in Lindsay Cottage.

b) To provide boys with skills in working together.

c) For boys to realize that different boys have different talents and responsibilities.

d) For boys to understand that there are alternate ways of reacting to a situation, achieving an objective and solving a problem.

Objective: For staff to be able to recognize irresponsible "cop-outs" in committees and appropriately confront. There are eight committees:

1) Basement Environment Committee

2) First Floor Environment Committee (a)

3) First Floor Environment Committee (b)

4) Second Floor Environment Committee

5) Kitchen Committee

6) Education Committee

7) Finance Committee

8) Program Committee
A committee is not a mere tool of the staff committee member.

Evening Groups:

The total Cottage Group will meet five evenings a week to focus on emotional and task oriented problems. It will also meet on request of any boy or staff member, for a specific purpose.

The goals of the group sessions are as follows:

a) To help a boy stand up to criticism without losing self-control.
b) To develop self-competence to express views and points.
c) To see alternate ways of reacting to a situation.
d) To see individual differences in others including perceptions of how other people feel.

Goal: This is an ongoing directional tool for boys.

For a group counsellor to verbally "stroke" a boy's increased attention span, interests in influencing others in a positive way and his insight into his and others' problems.

Target: Commencing September 1974, the "feeling board" will be a major focus of group meetings. Each boy and staff will record his feelings on the board several times each day. In the meeting the counsellor/boys explore the connection of feelings and behavior.

The goals of the "feeling board" are:

a) For boys to see that others have different needs than himself.
b) To develop concern for the feelings of others.
c) To develop an ability to confront a problem rather than run away from it.
d) To develop a desire to influence others in a positive way.

Target: To have Lindsay staff in a regular group work training process by October 1974.

Orientation:

Prior to admission to the Lindsay Cottage the Coordinator will request a family assessment from the community worker. The goals of this assessment are:

a) At intake for Lindsay Cottage to be accepting and supportive of a boy's family.
b) To involve family in making changes for the boy himself.
c) To provide close communication between the cottage and the family.
d) To reduce fear in the family about a boy coming to B.F.T.S.

On intake of a boy to Lindsay Cottage there are the following goals:

a) The new boy is to feel safe on admission to Lindsay Cottage.
b) For boys to remain in Lindsay and not go A.W.O.L.
c) To build a sense of caring, belonging to the Cottage.

Objectives: For the boy to recognize the Lindsay Cottage structure and framework within two weeks.

This will be achieved by letting the boy know the Cottage structure and his position in it by:

a) Being given a Cottage Boy Manual.
b) Joining one committee upon entry into the Cottage and another a week later.
c) A boy's day of admission being when his specific counsellor is on duty.
d) Knowing what he can expect from his counsellor.

e) Working with his counsellor on his first contracts after two weeks.

f) Having his blown photograph made after being two weeks in the cottage.

g) For a counsellor to have a clear treatment plan within two weeks.

**Basic Child Care:**

**Goals:**

1. To meet the physical and dependency needs of the boys in Lindsay Cottage on a 24 hour basis.

2. For Lindsay Cottage to be a non threatening and safe place to live and feeling proud of it.

3. For boys to be fully involved in and committed to good health and hygiene of Lindsay Cottage.

4. For boys to internalize their desire to look after themselves and others regarding health, hygiene and safety.

5. To increase a boy's ownership of responsibility and caring for himself.

   **Target:** That cleanliness and hygiene and medical safety are an unquestionable and automatic feature of Lindsay Cottage.

   This will be achieved through:

1. Environment Committees

2. Staff modelling and contracts with consistency.

3. Individual counselling.

4. Clear staff expectations.
5. Staff being aware of individual needs and limitations of each boy.

6. A reward system.

7. Staff being aware of the clothing needs of a boy and the involvement of a boy in buying clothes.

8. A reward system for boys who have achieved in self care.

Financial Rewards:

Each boy receives a basic allowance of 75c. This is payment for committee participation. Each committee has an allotted fund. It is the committee's responsibility to allocate work and salary so that the committee's responsibilities can be met. It may advertise a job within the cottage and pay a non-committee member if necessary. It is the committees responsibility to see that the committees functions are met. Each committee elects a Chairman, who will give a salary list to the Finance Committee Chairman, in order that the boys might be paid. Payment of and handling of cash is done by one of the boys.

Work:

For boys leaving Lindsay Cottage over 16 years of age and not going to school to be involved in work.

Preparation for work is not a major focus for Lindsay Cottage because of the age of the boys. Where the boy is nearing the age of 16, there will be contact with central vocationalist in order to plan the boy's future career. If necessary, work study outside of B.F.T.S. will be found.

Recreation:

The Recreation Program is to provide boys with physically beneficial experience which is enjoyable as well as to develop basic mode of skills
and to provide an acceptable outlet for frustrations, anxieties and aggression.

Recreation Counsellors provide specialized skills, work closely with individualized boy counsellors and provide maximum benefit for boys.

Through individualized programs there applies short and long term objectives designed to meet the needs and the abilities of the child. Recreation Department provides individual intra-mural and cottage space sports, both on and off campus.

A list of sports facilities and equipment utilized by the Recreation Department Action Plans is also provided.

Goals:

a) To increase a boy's sense of adequacy.
b) To decrease his low self-esteem.
c) To increase his attention span.
d) To increase his self awareness.
e) To increase his sense of belonging.
f) For him to be able to work as a team member.
g) To build up his physical health, and prowess.

The goals of the system are:
a) For boys to realize that they have different responsibilities, and that different expectations are made on them by different people.
b) For a boy to realize that he is accountable for what he does and what he does not do.
c) For boys to realize that every person's contribution is important to Lindsay Cottage.
d) For boys to own the need to be consistent in meeting their responsibilities.

**Education:**

The goals of the education program are:

a) To improve attitude towards school and work.
b) Develop self-confidence to express viewpoints.
c) To increase sense of adequacy.
d) To increase attention span.
e) Enhance own status through planning.
f) For boys on discharge to be involved in full time work or school.
g) For the Education Program to be individualized for boys' acceptance of education.

Boys are accountable for their involvement in the classroom. This is measured each half hour of the school day. There are two classrooms, each with an educational counsellor. Group teaching and team teaching is used when necessary. The need for individualization is a prime factor. There will be one classroom for the main group and one classroom used for remedial work in groups.

**Objectives:**

a) For all boys in Lindsay Cottage to feel comfortable with the Lindsay Cottage school program.
b) To focus on the identification of grade level and basic improvement through remedial work.
c) Re-motivation towards education and work.
d) For all boys to become sensitive to their own education abilities.
Target: October 1974 - To have information concerning boys and the program shared between the Recreation Department and Cottage Staff Team through:

a) Recreation files written about individual boys as well as total cottage group assessed by both Recreation and Cottage staff. 
b) For cottage representative in attendance at the weekly Recreation staff meeting. 
c) A Recreational Counsellor attending cottage staff meetings once every month.

Family Work:

Goals:

a) For the community worker, primary treater and the cottage coordinator to plan and to prepare the future placement of a boy. This is an on-going process beginning in the initial stages of residential placement. 
b) To help the family make changes in those areas where they contributed to a boy's problems.
c) For a boy, early in treatment, to be aware of what the future holds for him, with regard to family placement or alternate placement. 
d) For conjoint family re-orientation to be on-going. 
e) To obtain a decision from the family to behavioral attitudinal change. 
f) For a family to recognize change in a boy and learn appropriate responses. 
g) For all positive and negative changes in a boy to be related back to family on a two-week basis.
Target:

To discuss with the community worker this summer the possibilities of a bi-weekly group for parents.

All family work is contracted to a community worker who is based at the Y.M.C.A. Project Centre.

Work begins prior to admission. The community worker is consulted on all decisions during treatment. For example, weekends for a boy being away with his family.

Leaves:

Goals:

a) For boys to have a continuing experience with the community while in Lindsay Cottage.

b) For boys to have an opportunity to test out new learned behaviors, controls and developments in the community.

c) To prepare a boy for leaving Lindsay Cottage.

Any place a boy may stay will be assessed by primary treater or community worker before leave is granted. A counsellor will validate his relevance to a boy's growth. Leaves serve as a reinforcement for growth and an ongoing support to the boy of his community.

Target: By June 1, 1974 for all families to be re-assessed with regard to the family taking responsibility for providing an adequate home for a boy upon discharge, and making changes where they contributed to the boy's problems.

A.W.O.L.s and Delinquencies

Goals:

a) To eliminate A.W.O.L.s and delinquencies.
b) For the staff to be aware of a boy's tensions and to resolve them before there is an A.W.O.L. or a delinquency.

c) For staff to work with an A.W.O.L. in a clear adult and non-rejecting way.

d) For boys to own their responsibilities for being A.W.O.L. or delinquent.

e) For a boy to recognize A.W.O.L.s and delinquencies as problems.

Lindsay Cottage sees A.W.O.L.s as an avoidance of responsibility. It will be dealt with by:

a) No leave for four weeks.

b) Extra committee jobs of one hour, for three nights.

c) Early bedtime for one week.

d) Concentrated look at boy's growth, A.W.O.L.s and delinquencies must be understood.

Continued A.W.O.L.s indicate the inability to handle his present situation. DARA might then be used. The Lindsay Quiet Room will be used when the A.W.O.L. is part of other acting-out symptoms. When the Quiet Room is used, the counsellor will lock himself in the Quiet Room with the boy until the boy calms down.

If a boy is delinquent in the community, he will be dealt with through the Courts. Decisions about the boy will fall in line with his detailed treatment plan.

Control:

Adequate control in Lindsay Cottage is there to achieve the following goals:

a) There will be emotional and physical safety.
b) Acting out will be confined to one or two people at a time, rather than the whole of the group, and thus it can be dealt with effectively.

c) A boy will develop a sense of belonging.

d) There will be opportunities for close relationships to develop between boys and staff members.

e) The activities program of Lindsay Cottage will be able to be carried out.

Controls will be achieved through:

a) Counsellors being aware of the incipient problems in the program and among the boys.

b) Counsellors being aware of individual and group tensions.

c) Counsellors modelling self-control in resolving their own tensions.

d) The responsible adult part of the boy and the group being "hooked" by the staff member.

e) Positive aspect of a boy's behavior being reinforced verbally.

f) By giving a boy attention before he loses control.

g) By holding a boy when he is out of control or threatening property or persons.

h) By staff being interactional and not reactional in control problems.

i) By staff not threatening boys and not giving them a source of fear.

j) By boys being aware of peer needs in control.

**Discharge into the Community:**

**Goals:**

a) Discharge to occur when the program is assured of the boy being successful.
b) Before discharge, there will be a diagnosis of growth and prognosis. Agreement with the community worker will be reached ten weeks prior to discharge on appropriate community placement. Placements other than the family will be found by the community worker. Preparation for educational placement, recreation placement or job placement will be concluded before a boy moves into the community by the primary treater.

c) The threat of moving into the community from Lindsay Cottage is removed by preparation.

d) For the staff of Lindsay Cottage to resolve termination problems before a boy leaves.

Boy's Evaluation of his own Progress:

a) The Lindsay staff will evaluate constantly with the boy his successes and his difficulties in meeting his goals.

b) There will be an ongoing visual evaluation through graphs, showing which conflict a boy met and which he failed to meet.

c) When a boy is able to handle individual responsibility, he will be given the responsibility as a committee chairman.

Individual Treatment Planning:

Goals:

a) The primary treater in conjunction with the coordinator will produce a treatment plan for each of his boys with ongoing assessment, utilizing CfM treatment recommendations.

b) The boy will be aware of his treatment plan; where a boy is capable, he will assist in designing the plan.

c) A coordinator will write all reports to the court, summarizing change every four months.
d) Each day the counsellor on duty will summarize in a log the highlight of each boy's day. The primary treater draws this together each week for each of his boys.

e) Each week a teacher and the primary treater will chart progress in seven behavioral areas, by scoring those areas on a seven point scale.

f) Each week at staff meetings, one boy is conferenced in depth.

Program Evaluation and Development:

Goals:

a) Each counsellor is given a program area. It is his responsibility to produce ideas around future changes in that area to the coordinator and the team.

b) The coordinator will be supervised every week to develop an accurate evaluative method for the program.

c) The coordinator and the Residential Treatment Supervisor will review the total program at six-month intervals.

Targets:

a) An evaluation tool is to be produced by December 1, 1974.

b) Each staff meeting evaluates at least one aspect of the program.

Program Contracting

Goals:

a) Where Lindsay has isolated boy program needs which are not met within the Lindsay program, the coordinator will search out resources in B.F.T.S. and contract (perhaps on a reciprocal basis). The assistance of that resource is to meet specific and delineated objectives.

b) When consultants are used to evaluate the Lindsay program, the contracts will be specific and within a specific time period.