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ABSTRACT
        Project BASICS attempts to answer questions about
which of the best reading and mathematics strategies will produce
mastery learning for what types of students in terms of their
individual characteristics and needs. It focuses on the discovery and
implementation of alternative strategies for mastery learning with an
innovative school setting. The overall objective is to provide
solution strategies for students (K-3) to result in 90 percent of the
project students achieving at the same mastery level as the top 20
percent of California students in normal classroom situations. The
project seeks to resolve the problem of reading, communications
skills, and mathematics deficiencies by using the seven basic steps
of the scientific method in its system approach to education planning
and problemsolving. This booklet, the third of a series, is devoted
to step three: analyze problems for objectives. Subsequent booklets
deal with the succeeding steps. Described are the steps taken to
analyze the problems in the South Bay area. Since the process of
analysis is used with problems or with systems, a systems analysis is
followed based on these steps: (1) Perform mission analysis, (2)
perform function analysis, (3) perform task analysis, and (4) perform
method-means analysis. (Author/EA)

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3.0

ED 082306

BASICS

An Analysis of

Curriculum Fundamentals

for Program Objectives

South (S. F.) Bay Area, Calif

1971

EA 005 412

World-Wide
EDUCATION AND RESEARCH
institute

AN ANALYSIS OF CURRICULUM FUNDAMENTALS FOR PROGRAM OBJECTIVES

IN THE

SAN FRANCISCO SOUTH BAY AREA OF CALIFORNIA

Conducted for

PROJECT
BASICS

(Bay Area School Innovating Curricula Systematically)

Fremont Unified School District

40775 Fremont Blvd., Fremont, California 94538

Sponsored by a Consortium

of

Fremont Unified School District
San Jose Unified School District
Catholic Schools of the Archdiocese of San Francisco

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1971

FOREWORD

1. INTRODUCTION TO PROJECT BASICS

Which of the best[1] reading and mathematic strategies will produce
mastery learning for what types of stuc?nts in terms of their individual
characteristics and needs?

Seeking the answer(s) to this question--which poses a complex, basic
educational problem--lies at the heart of Project BASICS. The project
focuses upon the discovery and implementation of alternative strategies for
mastery learning within an innovative school setting. It seeks a "zero
rejects" approach to education that will lead to pupil success in reading,
mathematics and communicating.

The most germane model of school learning dealing with mastery learning
strategies was developed by Carroll.[2] Bloom[3] supports the Carroll model
when he states, "If students are normally distributed with respect to
aptitude but the kind and quality of instruction and the amount of time
available for learning are made appropriate to the characteristics and needs
of each student, the majority of students may be expected to achieve
mastery of the subject. And the relationship between aptitude and achieve-
ment should approach zero." It is this hypothesis and learning theory upon
which Project BASICS is focused.

The need for Project BASICS was reflected in Governor Ronald Reagan's
State of the State Message[4] delivered on January 12, 1971. Referring to his

1. "Best" means successfully demonstrated with primary students and/or best
   research findings.
2. Carroll, John, "A Model of School Learning", Teachers College RECORD,
   1963, 64: 723-733.
3. Bloom, Benjamin, "Learning for Mastery", Evaluation Comment, Center for
   the Study of Evaluation, UCLA, Vol. 1, No. 2, May, 1968.
4. Reagan, Governor Ronald, "State of the State Message", January 12, 1971.

Commission on Educational Reform he stated, "I can tell you of their dismay ...over the functional illiteracy evidenced by so many of our high school graduates; far too many of these young men and women have failed to acquire the ability to read, to write, to compute, and to communicate. It is not enough to say they have failed; it is more pertinent to ask, 'has the system failed?' and if so, how can it be corrected?"

The need for project BASICS is further evidenced in the fact that less than 50% of the students in the project's target area are achieving mastery of reading skills at the primary level and less than 60% are achieving mastery in primary mathematics.

The project's mission objective to be achieved and the five procedural objectives to be followed are as follows:

Mission Objective

To provide solution strategies for students (normally distributed with respect to aptitude, in grades kindergarten, one, two and three) which will result in a minimum of 90% of the project's students achieving at the same level of mastery as the top 20% of students in normal classroom situations in the State of California at the end of three years of instruction and program implementation. These solution strategies will be implemented and this mission objective will be accomplished at this end of the three year period at a cost no higher than the average instructional cost per student in California schools.
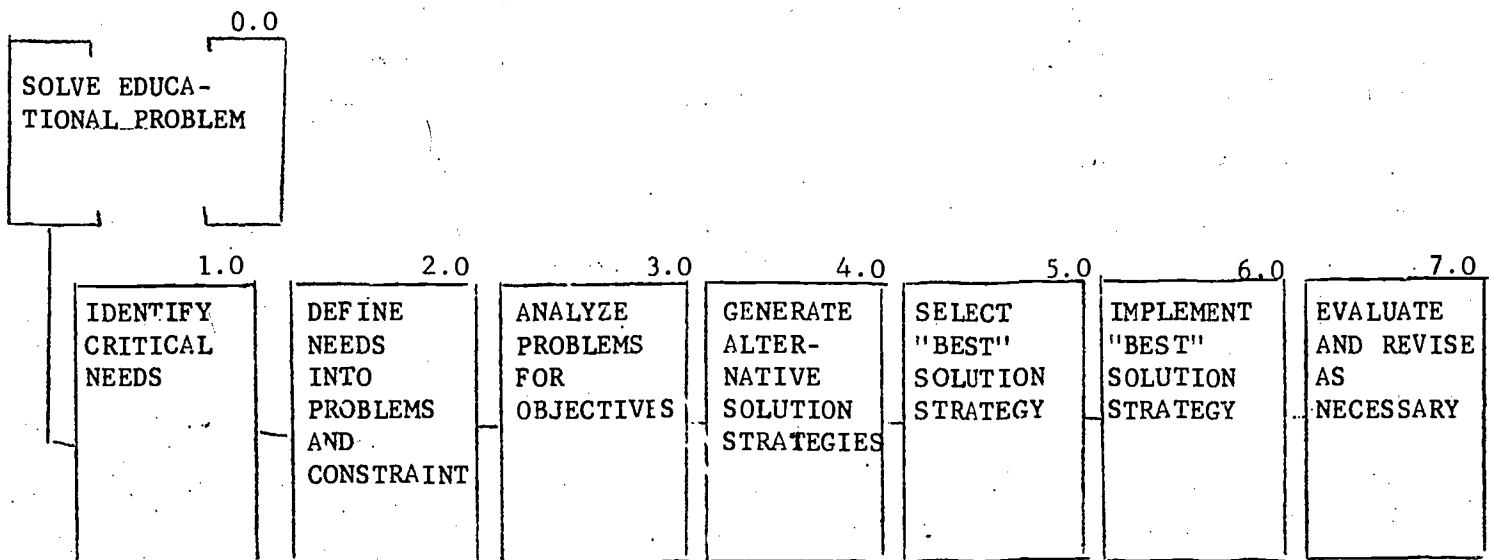
Procedural Objectives

a. Identify both the exemplary school programs which lead to pupil success in school and the programs that fail to produce success.

b. Examine the effectiveness of various instructional programs.

c. Conduct research and experimentation on a clinical basis to seek improved methods of instruction.

d. Measure the potential for self-sustained learning among pupils of varying aptitudes and characteristics.

e. Discover ways to improve instruction in reading and communicating, and mathematics and creative problem solving.

II. PROCEDURE OF PROJECT BASICS

The obvious deficiencies of pupils in reading, the communication skills, and mathematics is recognized as a significant educational problem. Project BASICS seeks to resolve this problem by the best possible method--the scientific method. In essence, the project will use this underlying method in its "system approach to educational planning and problem solving." This consists of the seven basic steps of the scientific method which can be graphically shown as follows:

0.0
SOLVE EDUCA- TIONAL PROBLEM

1.0	2.0	3.0	4.0	5.0	6.0	7.0
IDENTIFY CRITICAL NEEDS	DEFINE NEEDS INTO PROBLEMS AND CONSTRAINT	ANALYZE PROBLEMS FOR OBJECTIVES	GENERATE ALTER-NATIVE SOLUTION STRATEGIES	SELECT "BEST" SOLUTION STRATEGY	IMPLEMENT "BEST" SOLUTION STRATEGY	EVALUATE AND REVISE AS NECESSARY

In keeping with the foregoing diagram or model of the scientific method, this booklet is devoted to the analysis (3.0). Subsequent booklets published by the project will deal with the succeeding steps.

CONTENTS

I. SYSTEM ANALYSIS: WHAT IT IS

Analysis may be defined as the process of breaking down an existing whole into its constituent parts. It is thus assumed that the parts have a logical relationship to each other and to the whole. Thus, when the process of analysis has been finished, all of the constituent parts will have been identified and separated into logical groups and their inter-relationships will have been established.

The process of analysis as described herein is to be used with problems or with systems. Problem definition has been covered in a previous booklet. Let us, therefore, turn our attention to the definition of a system. The first definition of "system" in Webster's Unabridged Dictionary is:

> " A complex unit formed of many often diverse parts
> subjected to a common plan or serving a common purpose."

A clearer definition from the dictionary may be obtained from its description of a biological system:

> "An assemblage of parts or organs of the same or similar
> tissues or concerned with the same function; e.g., the
> nervous system, the digestive system."

The foregoing definitions provide some preliminary insights to the reasons for adopting the following definition of a system to be used in this training exercise:

> A system is the sum total of parts working independently
> and in interaction to meet previously specified objectives.

It may thus be seen from the preceding definition of a system that system analysis would consist of breaking down an existing system into its constituent parts or functions and showing the separation of such parts into logical groups as well as showing the logical relationships that they have to one another and to the system as a whole.

It may thus be seen that the process of analysis is comprised of four different activities:

1. <u>Define</u> the system.

2. Separate the system into its constituent parts or <u>subsystems</u>.

3. Show the logical <u>relationships</u> that exist among the parts or subsystems.

4. Specify the <u>limits</u> or terminal point in the analysis process.

In viewing the analysis process, it is sequential. Thus one analysis can be followed by another or any or all of its identified parts. There are, in general, four general steps in system analysis. In flowchart form, these steps are:

```
      3.0
ANALYZE
PROBLEM
```

```
 3.1              3.2              3.3              3.4
PERFORM          PERFORM          PERFORM TASK     PERFORM METHOD-
MISSION          FUNCTION         ANALYSIS         MEANS ANALYSIS
ANALYSIS         ANALYSIS
```
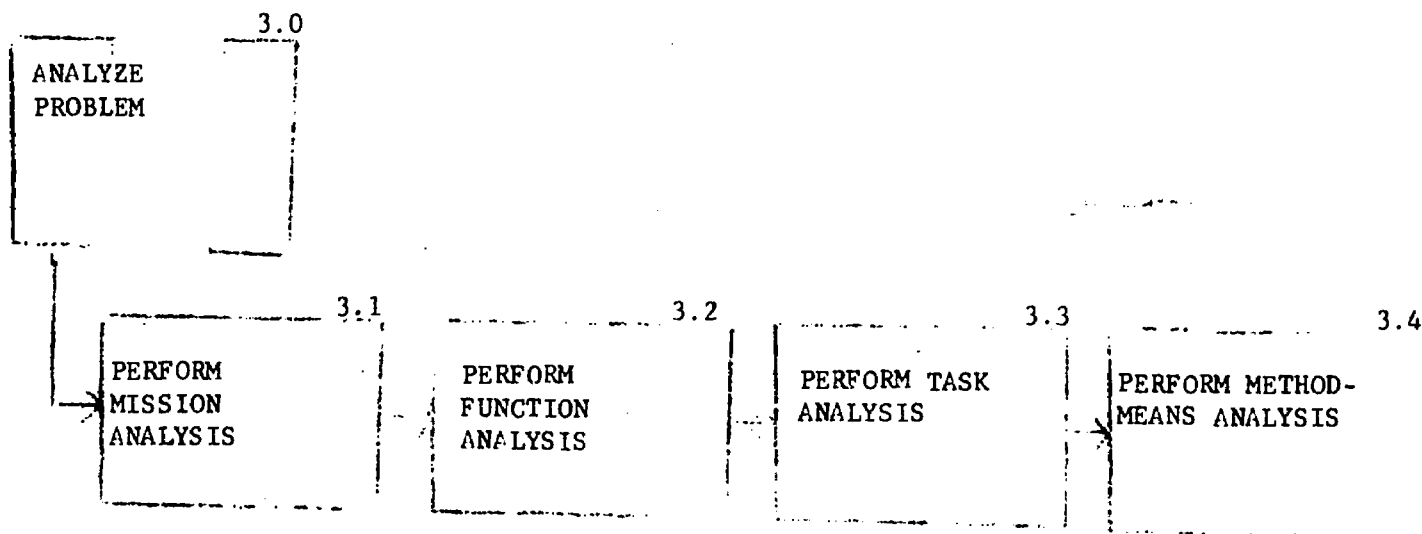
It should be noted that at this stage of the problem-solving process it is important to defer solutions ("hows") and continue to define objectives ("whats") through the process of analysis. Most persons tend to be very much "solution-oriented," therefore it is important to recognize "whats" from "hows" and store away the "hows" as they may emerge merely to get them out of the way at this time.

For purposes of illustration, suppose we are making an analysis of "Assisting Migrant Pupils." Some "hows" that might emerge are:

Purchase mobile classrooms

Hire bilingual teachers

Use more visiting teachers to go into camps

Acquire teaching materials that would motivate migrant pupils
and reflect their environment

The foregoing "hows" would be stored. They are not desired at this
point. Instead, the "whats" are being sought. In this problem, some of
the "whats" might be:

Assist migrant pupils with academic learnings

Improve health of migrant pupils

Enhance the social aspects of migrant pupils' lives

Improve the psychological and self-concept aspects of migrant
pupils

II. AN ANALYSIS OF PROBLEMS IN THE BASIC SKILLS

Problems in the basic skills were defined for the areas of reading, computation, and communication proficiency. The mission profile or first break out in the analyses of these problems yielded the following results:

0.0 Improve Pupil Reading

    1.0 Improve reading readiness
    2.0 Improve reading skills
    3.0 Improve knowledge for reading
    4.0 Improve attitudes for reading
    5.0 Improve reading habits
    6.0 Improve pupil's self-confidence in reading

0.0 Improve Computation Proficiency

    1.0 Improve computation readiness
    2.0 Improve number concepts
    3.0 Improve addition skills
    4.0 Improve subtraction skills
    5.0 Improve multiplication skills
    6.0 Improve division skills
    7.0 Improve understanding of relationships between skills
          and relate to problem-solving

0.0 Improve Communication Proficiency

    1.0 Improve listening skills
    2.0 Develop speaking skills
    3.0 Develop reading skills
    4.0 Develop writing skills
    5.0 Improve self-confidence

This information will be shown on the following pages in flowchart form.

MISSION PROFILE FOR IMPROVING PUPIL READING

0.0

IMPROVE PUPIL
READING

2.0

IMPROVE
READING
SKILLS

1.0

IMPROVE
READING
READINESS

3.0

IMPROVE
KNOWLEDGE
FOR
READING

5.0

IMPROVE
READING
HABITS

6.0

IMPROVE
PUPIL'S
SELF-
CONFI-
DENCE IN
READING

4.0

IMPROVE
ATTITUDES
TOWARD
READING
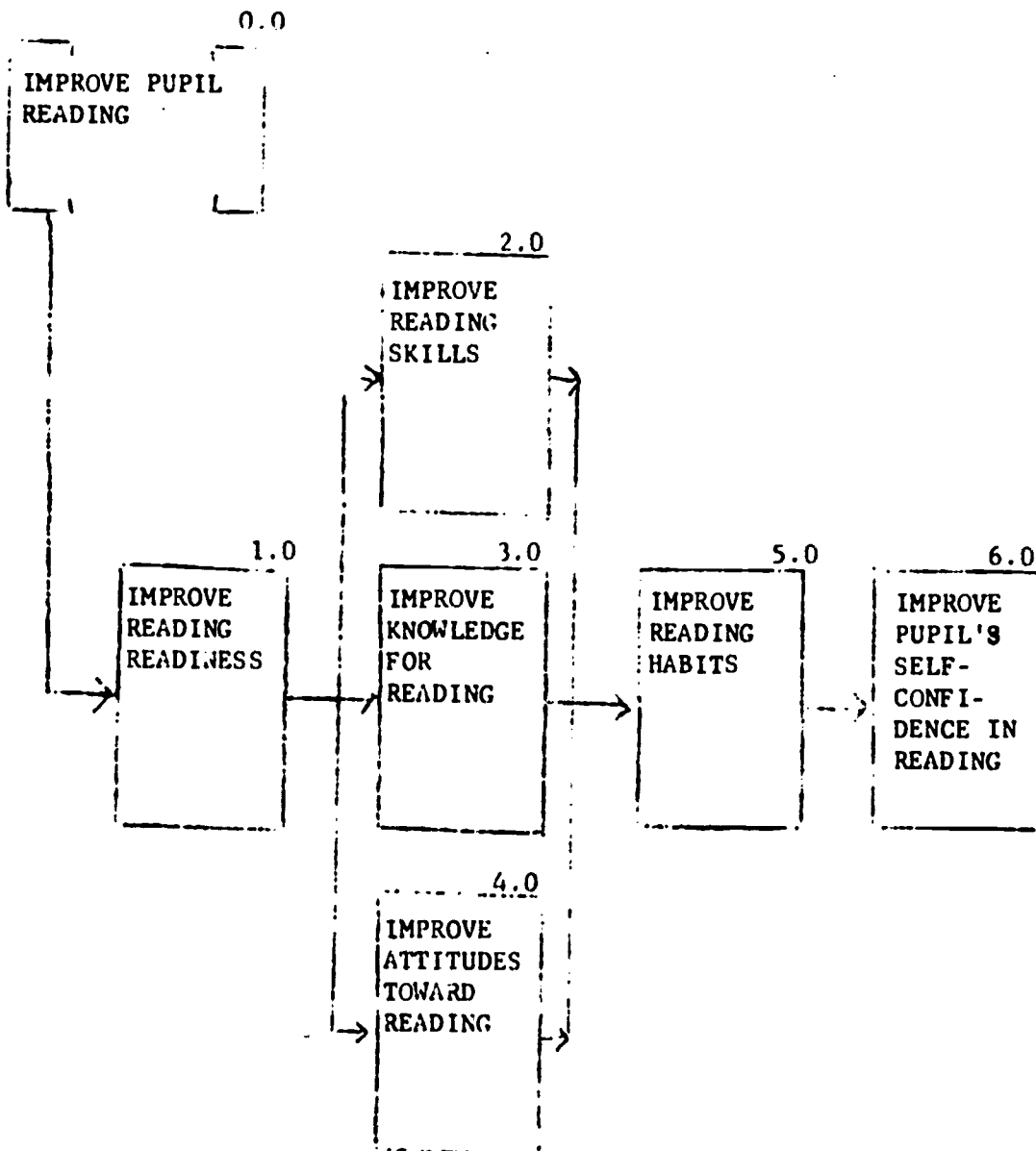
FUNCTION ANALYSES OF IMPROVING READING PROFICIENCY

1.0 IMPROVE READING READINESS
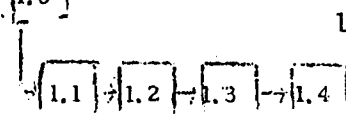
    1.1 Relate pupil experiences to printed page
        1.1.1 Learn number concepts
        1.1.2 Learn color concepts
        1.1.3 Become familiar with lines and con-
             trasts
        1.1.4 Obtain perspective for size, shape

    1.2 Develop discrimination facility
        1.2.1 Develop visual discrimination
        1.2.2 Develop audio-discrimination
        1.2.3 Develop tactile discrimination
        1.2.4 Develop olfactory discrimination
        1.2.5 Develop taste discrimination

    1.3 Learn mechanics of printed page
        1.3.1 Learn up and downness
        1.3.2 Learn left to rightness
        1.3.3 Learn sequence
        1.3.4 Learn alphabet

    1.4 Learn word and linkage construction
        1.4.1 Learn word construction
        1.4.2 Learn phonics
        1.4.3 Learn phrase and sentence construction
        1.4.4 Learn paragraph construction

2.0 IMPROVE READING SKILLS
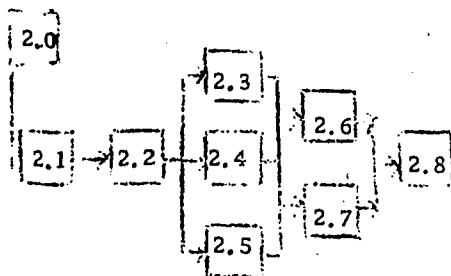
    2.1. Master use of alphabet

    2.2 Build basic sight vocabulary

    2.3 Improve word attack skills

    2.4 Improve translation from spoken to written
        speech

    2.5 Expand fluency and speed

    2.6 Increase comprehension and meaning

    2.7 Expand capability for extensive and intensive
        reading

    2.8 Improve ability for differentiating types of
        reading material

ALTERNATE

2.0 IMPROVE READING SKILLS

 2.1 Improve oral reading speed and comprehension

 2.2 Improve silent reading speed and comprehension
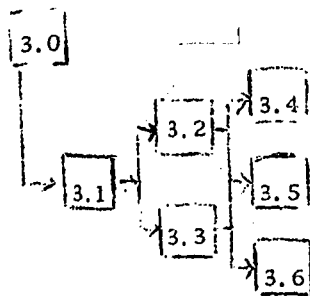 2.2.1 Improve word-attack skills
   2.2.1.1 Improve word recognition
   2.2.1.2 Improve vocabulary
   2.2.1.3 Improve word construction
  2.2.2 Improve phase of sentence structure
  2.2.3 Improve word meaning

3.0 IMPROVE KNOWLEDGE FOR READING

 3.1 Broaden pupil's environmental experiences
 3.2 Improve pupil's knowledge of his interests
  and aptitudes
 3.3 Expand pupil's knowledge of applications of
  reading into life
 3.4 Increase knowledge of scope of reading
  materials
 3.5 Increase knowledge of variety of reading
  materials
 3.6 Increase knowledge of sources of reading
  materials

4.0 IMPROVE ATTITUDES TOWARD READING
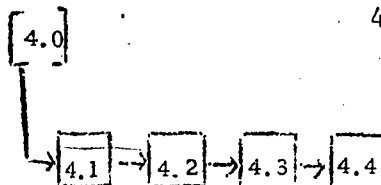
 4.1 Improve attitudes toward reading signs and
  signals in environment
 4.2 Improve attitudes toward reading newspapers
  and periodicals
 4.3 Improve attitudes toward reading letters,
  house organs, etc.
 4.4 Improve attitudes toward reading books

5.0 IMPROVE READING HABITS
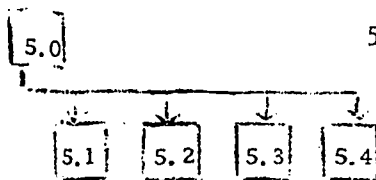
 5.1 Improve informative reading habits
 5.2 Improve vocational-linked reading habits
 5.3 Improve recreational reading habits
 5.4 Improve research and inquiry reading habits

6.0 IMPROVE PUPIL'S SELF-CONFIDENCE IN READING
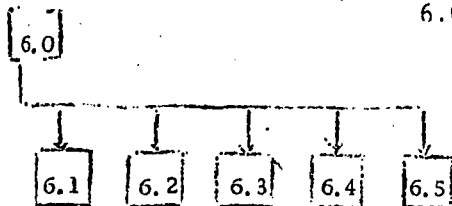
 6.1 Improve confidence in reading captions,
  instructions, etc.
 6.2 Improve confidence in reading current events
 6.3 Improve confidence in reading fiction
 6.4 Improve confidence in reading non-fiction
 6.5 Improve confidence in reading poetry and
  aesthetic material

MISSION PROFILE FOR IMPROVED COMMUNICATION PROFIENCY

0.0
```
IMPROVE
COMPUTATION
PROFICIENCY
```

3.0
```
IMPROVE
ADDITION
SKILLS
```

1.0
```
IMPROVE COM-
PUTATIONAL
READINESS
```

4.0
```
IMPROVE
SUBTRACTION
SKILLS
```

7.0
```
IMPROVE UNDER-
STANDING OF
RELATIONSHIPS
BETWEEN SKILLS
& RELATE TO
PROBLEM
SOLVING
```

2.0
```
IMPROVE NUMBER
CONCEPTS
```

5.0
```
IMPROVE
MULTIPLICATION
SKILLS
```

6.0
```
IMPROVE
DIVISION
SKILLS
```
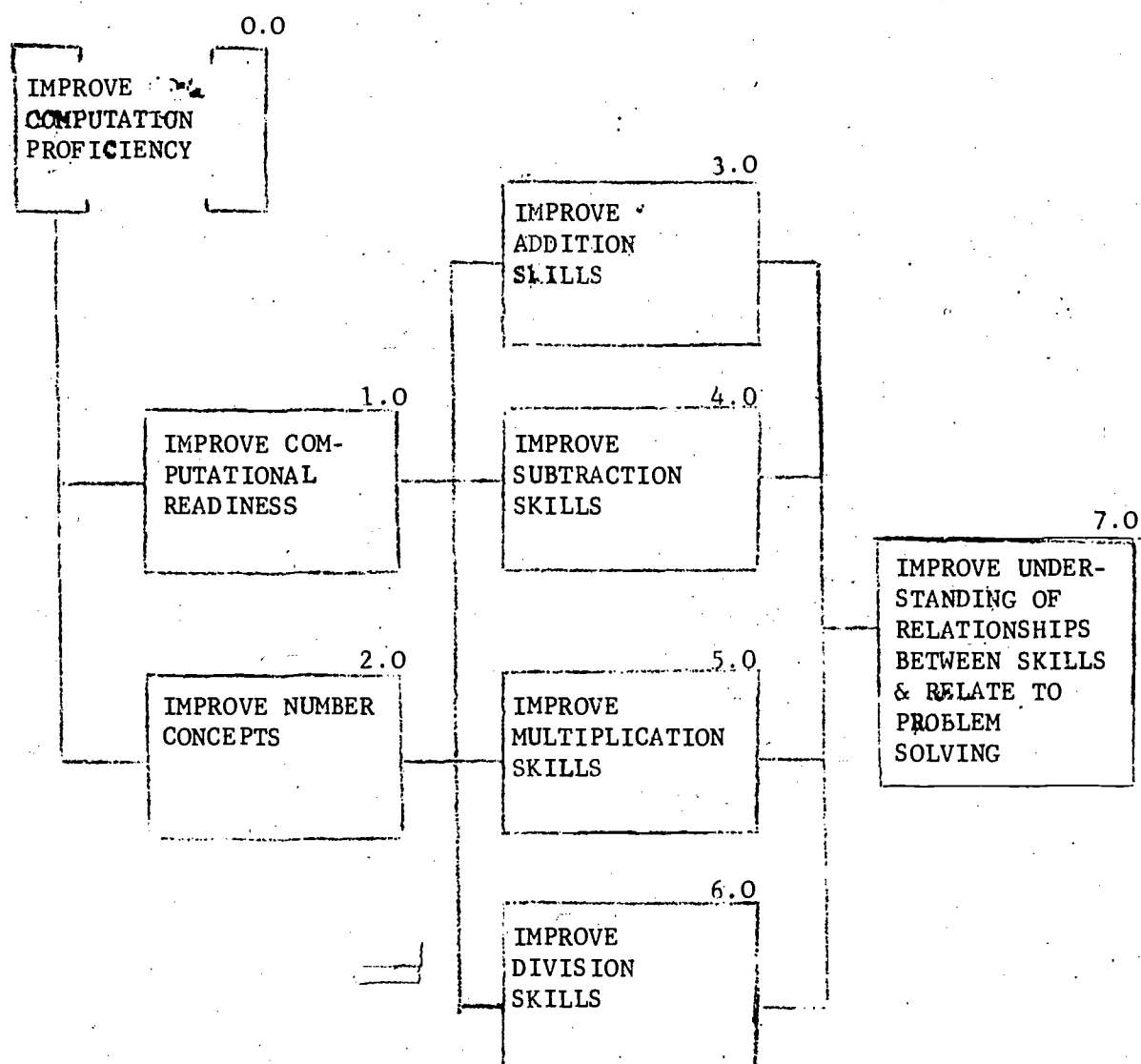
FUNCTION ANALYSES OF IMPROVING COMPUTATION PROFICIENCY
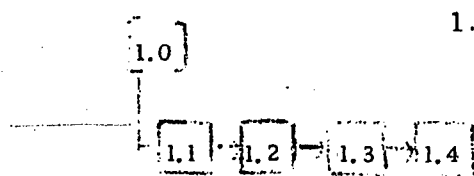
1.0   IMPROVE COMPUTATION READINESS

1.1   Acquire need for quantitative expression
1.2   Learn lines and curves
1.3   Acquire spacial concepts
1.4   Learn lin' and space relationships
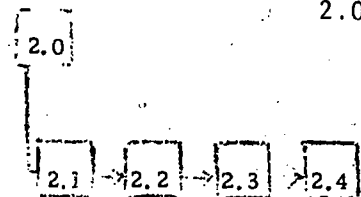
2.0   IMPROVE NUMBER CONCEPTS

2.1   Learn to count, recognize and write numbers
      in sequence
2.2   Learn relation of one - ten - hundred in
      relation to monetary system
2.3   Learn relation of abstract and real
2.4   Learn numeral-to-word relationship
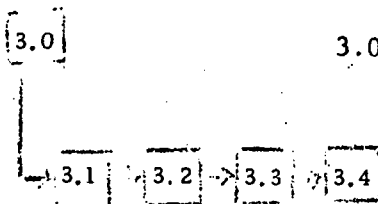
3.0   IMPROVE ADDITION SKILLS

3.1   Learn the "more than" concept
3.2   Grouping principles
3.3   Inverse relationships of addition and
      subtraction
3.4   Addition of whole numbers, decimals, fractions
      and percentages.
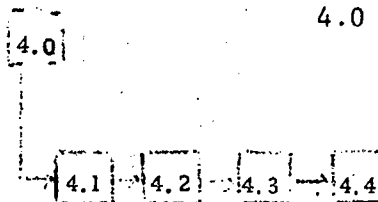
4.0   IMPROVE SUBTRACTION SKILLS

4.1   Less-than concept
      4.1.1   Numberline subtraction
      4.1.2   Subtraction facts
      4.1.3   Subtraction of one-digit numbers
      4.1.4   Subtraction of one-digit from two-
              digit numbers
4.2   Regrouping principles
      4.2.1   One-digit from two-digit using regrouping
      4.2.2   Two-digit from two and three-digit numbers
4.3   Inverse relationships of addition and sub-
      traction
4.4   Subtraction of decimals, fractions, and per-
      centages
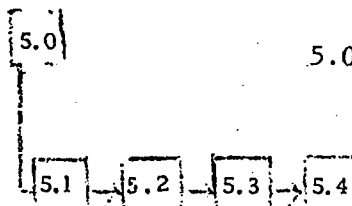
5.0   IMPROVE MULTIPLICATION SKILLS

5.1   Learn relation of addition to multiplication
5.2   Learn combinations of numbers
5.3   Learn checks for accuracy
5.4   Learn multiplication of fractions, decimals,
      and percentages

```
 ┌─────┐
 │ 6.0 │
 └─────┘
    │
    │
 ┌─────┐   ┌─────┐   ┌─────┐
 │ 6.1 │───│ 6.2 │───│ 6.3 │
 └─────┘   └─────┘   └─────┘
```

6.0   IMPROVE DIVISION SKILLS

    6.1   Learn relationship of division to multiplica-
          tion and subtraction

    6.2   Learn to divide whole numbers, fractions,
          decimals, and percentages

    6.3   Learn checks for accuracy

7.0   IMPROVE UNDERSTANDING OF RELATIONSHIP BETWEEN
      SKILLS AND PROBLEM SOLVING

MISSION PROFILE FOR IMPROVING COMMUNICATION PROFICIENCY

```
┌──────┐      ┌ 0.0 ──┐
│ IMPROVE COM-      │
│ MUNICATION        │
│ PROFICIENCY       │
└──────┘      └───────┘
     │
     │
     │
     ├──────────┬──────────┬──────────┬──────────┬──────────┐
     ↓ 1.0      ↓ 2.0      ↓ 3.0      4.0       ↓ 5.0       ↓ 6.0
┌──────────┐ ┌──────────┐ ┌──────────┐ ┌──────────┐ ┌──────────┐ ┌──────────┐
│ DEVELOP   │ │ DEVELOP   │ │ DEVELOP   │ │ DEVELOP   │ │ IMPROVE   │ │ IMPROVE   │
│ NON-VERBAL│ │ LISTENING │ │ SPEAKING  │ │ READING   │ │ WRITING   │ │ SELF-     │
│ COMMUNICA-│ │ SKILLS    │ │ SKILLS    │ │ SKILLS    │ │ SKILLS    │ │ CONFIDENCE│
│ TIONS     │ │           │ │           │ │           │ │           │ │           │
└──────────┘ └──────────┘ └──────────┘ └──────────┘ └──────────┘ └──────────┘
```

FUNCTION ANALYSES OF IMPROVING COMMUNICATION PROFICIENCY

1.0 DEVELOP NONVERBAL COMMUNICATION SKILLS

1.1 Improve tactile communication
1.2 Improve observation for cues
1.3 Develop awareness of olefactory communication
1.4 Develop awareness of animal communication
1.5 Develop knowledge of communication systems

2.0 IMPROVE LISTENING SKILLS

2.1 Improve attentiveness
    2.1.1. Concentrate
    2.1.2 Resist daydreaming

2.2 Improve self-control
2.3 Develop interest in others
    2.3.1 What others do
    2.3.2 What others say
2.4 Work to become interested in and questioning
    about all subjects

3.0 DEVELOP SPEAKING SKILLS

3.1 Improve vocabulary
3.2 Improve pronunciation and volume control
3.3 Improve smoothness of delivery
3.4 Improve speaking ability in front of group

4.0 DEVELOP READING SKILLS
4.1 Increase reading vocabulary
4.2 Increase reading speed and comprehension
4.3 Increase ability to handle new and difficult
    words
4.4 Increase interest in reading and books

5.0 IMPROVE WRITING SKILLS
5.1 Improve mechanics of writing
    5.1.1 Formation of letters
    5.1.2 Improve neatness
    5.1.3 Improve style and readability
5.2 Improve vocabulary
5.3 Improve sentence structure
5.4 Improve writing of paragraphs
    5.4.1 Improve ability to express the thought
    5.4.2 Improve readability of paragraphs

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┌─────┐
│ 6.0 │
└─────┘
   │
 ┌─┴──────────────────────────┐
 │        │        │          │
 ▼        ▼        ▼          ▼
┌─────┐ ┌─────┐ ┌─────┐ ┌─────┐
│ 6.1 │ │ 6.2 │ │ 6.3 │ │ 6.4 │
└─────┘ └─────┘ └─────┘ └─────┘
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6.0   IMPROVE SELF-CONFIDENCE IN COMMUNICATION

     6.1   Improve confidence in writing ability

     6.2   Improve confidence in reading ability

     6.3   Improve confidence in speaking ability

     6.4   Improve confidence in listening abilities

III. AN ANALYSIS OR PROBLEMS OF ACQUIRING INTELLECTUAL AND SOCIAL SKILLS

Problems involving social and intellectual skills were defined in the areas of critical thinking, social relationships, and problem solving. First-level function analyses of these problems yielded the following results:

Develop Critical Thinking

In personal (psychological)problems.
In physical and health problems
In academic problem areas
In vocational problems
In family life problems
In social and community life problems
In economic and political life problems
In the moral and spiritual realms

Develop Social Skills

Improve self-image
Improve communication skills
Improve interpersonal relationships

Assistance in Solving Personal Problems

School problems
Home (family) problems
Peer problems
Job problems
Emotional problems

This information will be shown on the following pages in flowchart form.

MISSION PROFILE FOR DEVELOPING CRITICAL THINKING

0.0

```
DEVELOP
CRITICAL
THINKING
```

5.0
```
DEVELOP
CRITICAL
THINKING
IN FAMILY
LIFE
PROBLEMS
```

3.0
```
DEVELOP
CRITICAL
THINKING
IN
ACADEMIC
PROBLEM
AREAS
```

1.0
```
DEVELOP
CRITICAL
THINKING
IN
PERSONAL
(PSYCHO-
LOGICAL)
PROBLEMS
```

2.0
```
DEVELOP
CRITICAL
THINKING
IN
PHYSICAL
AND
HEALTH
PROBLEMS
```

4.0
```
DEVELOP
CRITICAL
THINKING
IN VOCA-
TIONAL
PROBLEMS
```

6.0
```
DEVELOP
CRITICAL
THINKING
IN SOCIAL
AND COM-
MUNITY
LIFE
PROBLEMS
```

8.0
```
DEVELOP
CRITICAL
THINKING
IN THE
MORAL AND
SPIRITUAL
REALMS
```

8.0
```
DEVELOP
CRITICAL
THINKING
IN
ECONOMIC
AND POLI-
TICAL LIFE
PROBLEMS
```

FUNCTION ANALYSES OF DEVELOPING CRITICAL THINKING

1.0 DEVELOP CRITICAL THINKING IN PERSONAL (PSYCHOLOGICAL) PROBLEMS
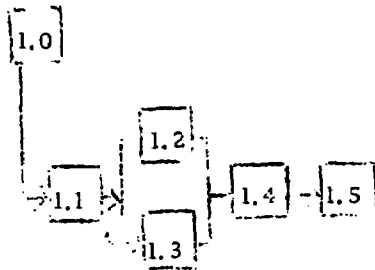
1.1 Develop critical thinking in self-identity and concept

1.2 Develop critical thinking in goal-setting and planning

1.3 Develop critical thinking in criticism and evaluation

1.4 Develop critical thinking in self-regulation and control

1.5 Develop critical thinking in philosophy and religion

2.0 DEVELOP CRITICAL THINKING IN PHYSICAL AND HEALTH PROBLEMS
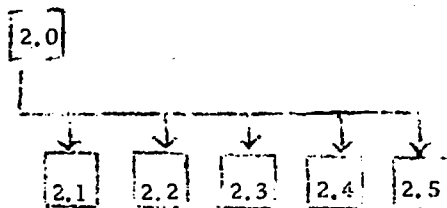
2.1 Develop critical thinking in exercise and work problems

2.2 Develop critical thinking in food and nutrition problems

2.3 Develop critical thinking in recreation and relaxation problems

2.4 Develop critical thinking in problems about elimination

2.5 Develop critical thinking in sleep and problems of recovery

3.0 DEVELOP CRITICAL THINKING IN ACADEMIC PROBLEM AREAS
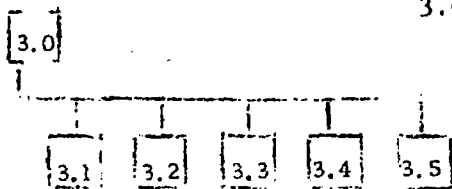
3.1 Develop critical thinking in the physical and exact sciences

3.2 Develop critical thinking in the biological and life sciences

3.3 Develop critical thinking in the social sciences

3.4 Develop critical thinking in the humanities

3.5 Develop critical thinking in the fine and applied arts

4.0 DEVELOP CRITICAL THINKING IN VOCATIONAL PROBLEM AREAS
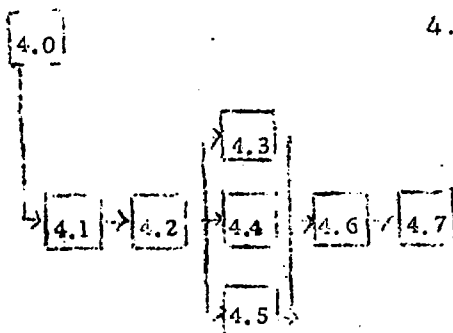
4.1 Develop critical thinking in world-of-work and vocational selection

4.2 Develop critical thinking in preservice training and preparation

-16-

4.3 Develop critical thinking in job contribution and in-life meaning

4.4 Develop critical hinking in job fulfillment

4.5 Develop critical thinking in collateral job benefits and service

4.6 Develop critical thinking in on-the-job growth and training

4.7 Develop critical thinking in job mobility, transfer, termination, and retirement

5.0 DEVELOP CRITICAL THINKING IN FAMILY LIFE PROBLEMS
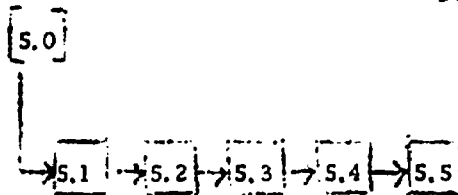
5.1 Develop critical thinking in sibling role of young family

5.2 Develop critical thinking in mate selection and establishing a family

5.3 Develop critical thinking in rearing a family to maturity

5.4 Develop critical thinking in family life of mature family

5.5 Develop critical thinking in family life of aged or disunited family

6.0 DEVELOP CRITICAL THINKING IN SOCIAL AND COMMUNITY PROBLEMS
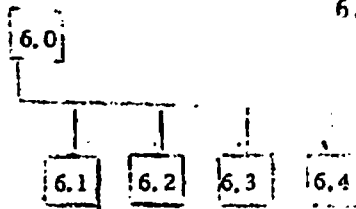
6.1 Develop critical thinking on social problems in rural communities

6.2 Develop critical thinking on social problems in urban communities

6.3 Develop critical thinking on social problems in suburban communities

6.4 Develop critical thinking on social problems in migrant or transitional living

7.0 DEVELOP CRITICAL THINKING IN ECONOMIC AND POLITICAL PROBLEMS
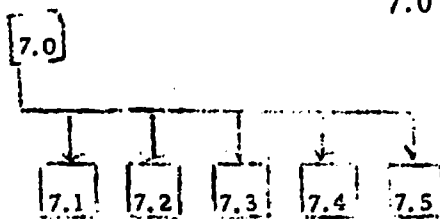
7.1 Develop critical thinking on economic and political problems of single individual

7.2 Develop critical thinking on economic and political problems of couples

7.3 Develop critical thinking on economic and political problems of small groups

7.4 Develop critical thinking on economic and political problems of large groups and organizations

7.5 Develop critical thinking on economic and political problems of super groups (nations, international organizations, etc.)

8.0

8.0 DEVELOP CRITICAL THINKING IN THE MORAL AND SPIRITUAL REALMS

8.1 → 8.2 → 8.3 → 8.4

8.1 Develop critical thinking in regard to the self and relationships

8.2 Develop critical thinking in regard to other individuals and relationships

8.3 Develop critical thinking in regard to mankind, groups, and relationships

8.4 Develop critical thinking in regard to the supreme being/metaphysical and relationships

MISSION PROFILE FOR DEVELOPING SOCIAL SKILLS

```
                    0.0
  ┌─────────┐    ┌──────┐
  │ DEVELOP         │
  │(IMPROVE)        │
  │SOCIAL SKILLS    │
  └─┬───────┘    └──────┘
    │
    │
    │                          1.0                     2.0                        3.0
    │                ┌──────────────┐        ┌──────────────┐        ┌──────────────────┐
    │                │ IMPROVE SELF-│        │ IMPROVE COM- │        │ IMPROVE INTER-   │
    └──────────────► │ IMAGE        ├──────► │ MUNICATION   ├──────► │ PERSONAL         │
                     │              │        │ SKILLS       │        │ RELATIONSHIPS    │
                     └──────────────┘        └──────────────┘        └──────────────────┘
```
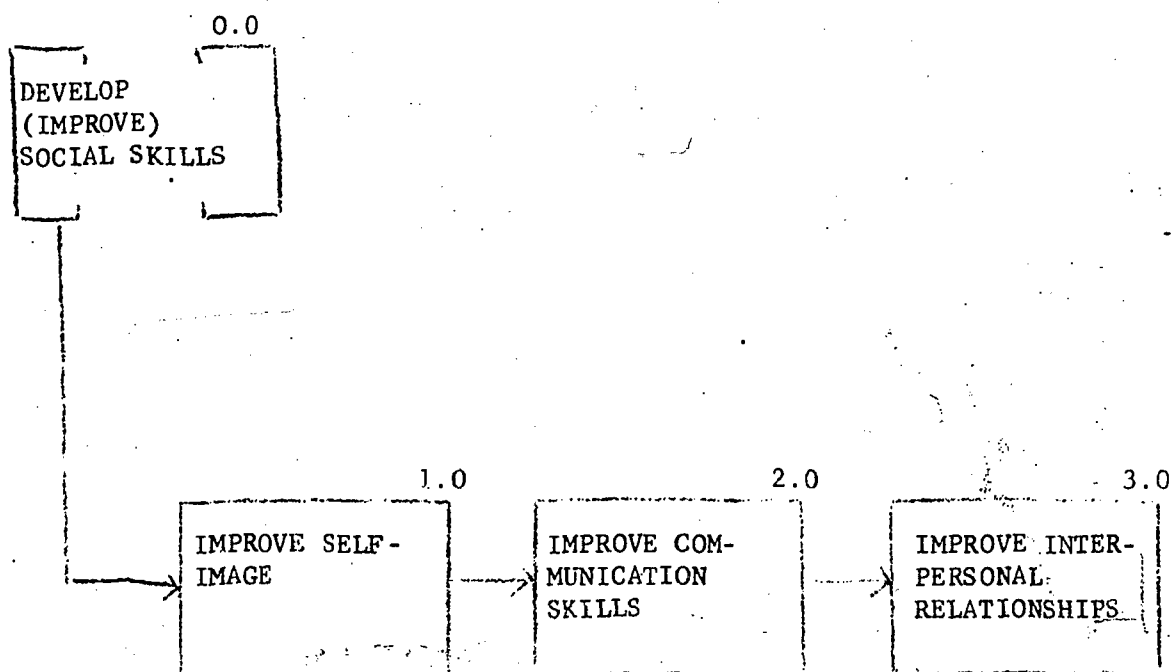
FUNCTION ANALYSES OF DEVELOPING SOCIAL SKILLS

```
[1.0]
  |
  *[1.1]-[1.2]-[1.3]->[1.4]
```

1.0   IMPROVE SELF-IMAGE
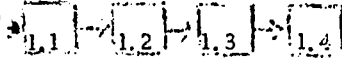
    1.1   Improve grooming habits
    1.2   Improve home environment
    1.3   Involve student in community life
    1.4   Evaluate relationships with peers

```
[2.0]
  |
  ->[2.1]->[2.2]->[2.3]->[2.4]->[2.5]
```

2.0   IMPROVE COMMUNICATION SKILLS
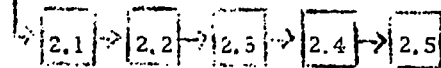
    2.1   Improve nonverbal communication
    2.2   Improve oral communication
    2.3   Improve aural communication
    2.4   Improve reading
    2.5   Improve writing

```
[3.0]
  |
  ---+----+----+----+----+
  |    |    |    |    |
[3.1][3.2][3.3][3.4][3.5]
```

3.0   IMPROVE INTERPERSONAL RELATIONSHIPS
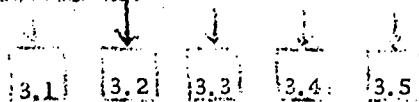
    3.1   Parent-student
    3.2   Student-teacher
    3.3   Parent-teacher
    3.4   Student-student
    3.5   Student-community

MISSION PROFILE FOR PROVIDING ASSISTANCE IN SOLVING

PERSONAL PROBLEMS

```
                    0.0
 ┌────┐  ┌────────┐
 │ PROVIDING       │
 │ ASSISTANCE IN   │
 │ SOLVING         │
 │ PERSONAL        │
 │ PROBLEMS        │
 └────────────────┘
        │
        │
        │
        │
        │              1.0            2.0            3.0           4.0            5.0
 ┌──────────────┐ ┌─────────────┐ ┌────────────┐ ┌────────────┐ ┌────────────┐
 │ ASSISTANCE   │ │ ASSISTANCE  │ │ ASSISTANCE │ │ ASSISTANCE │ │ ASSISTANCE │
 │ WITH         │ │ WITH HOME   │ │ WITH PEER  │ │ WITH JOB   │ │ WITH       │
 │ SCHOOL       │ │ (FAMILY)    │ │ PROBLEMS   │ │ PROBLEMS   │ │ EMOTIONAL  │
 │ PROBLEMS     │ │ PROBLEMS    │ │            │ │            │ │ PROBLEMS   │
 └──────────────┘ └─────────────┘ └────────────┘ └────────────┘ └────────────┘
```

-21-
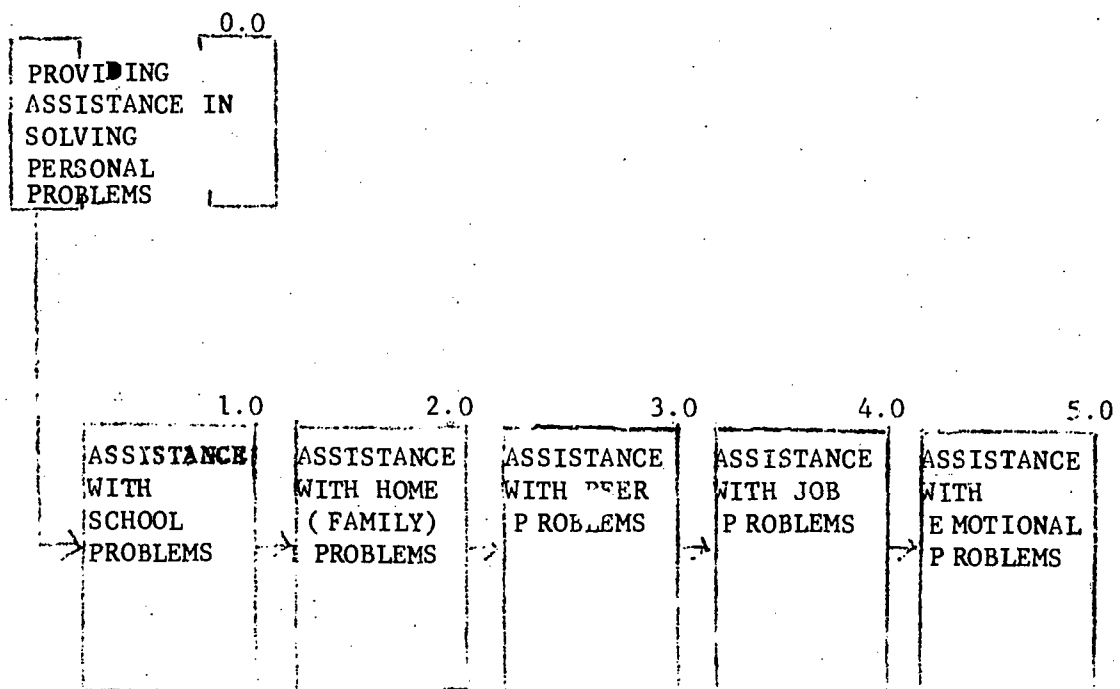
FUNCTION ANALYSES OF ASSISTANCE IN PROBLEM SOLVING

(solving personal problems)

1.0   ASSISTANCE WITH SCHOOL PROBLEMS
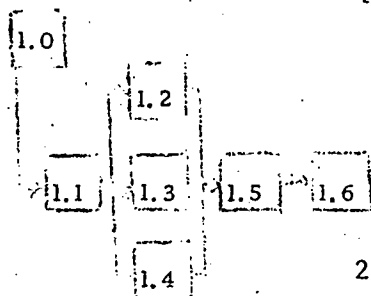
1.1   Assistance with subject problems
1.2   Assistance with instructor problems
1.3   Assistance with study problems
1.4   Assistance with subject peer problems
1.5   Assistance with academic problems
1.6   Assistance with vocational problems

2.0   ASSISTANCE WITH HOME (FAMILY) PROBLEMS
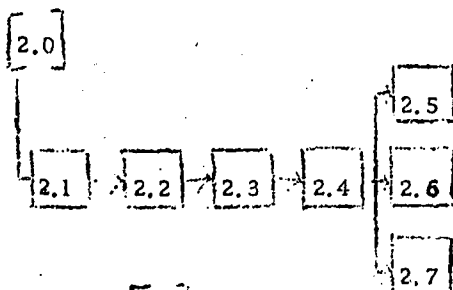
2.1   Assistance with family rules
2.2   Assistance with family cooperation
2.3   Assistance with family obligations and rights
2.4   Assistance to understand and work with family members
2.5   Assistance with sisters and brothers
2.6   Assistance with parents
2.7   Assistance with relatives

3.0   ASSISTANCE WITH PEER PROBLEMS
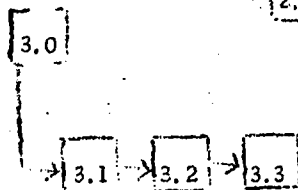
3.1   Assistance with peer social problems
3.2   Assistance with peer school problems
3.3   Assistance with sex problems

4.0   ASSISTANCE WITH JOB PROBLEMS
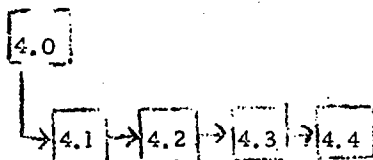
4.1   Assistance with job selection
4.2   Assistance with job application
4.3   Assistance with job interviews
4.4   Assistance with job responsibilities

5.0   ASSISTANCE WITH EMOTIONAL PROBLEMS
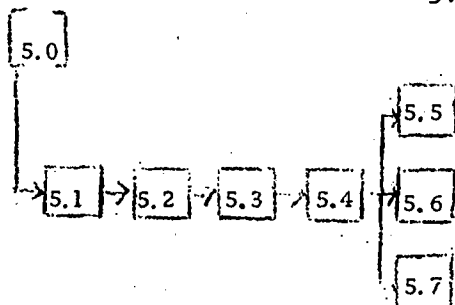
5.1   Awareness of emotional needs
5.2   Accept success and failure
5.3   Awareness of self-discipline
5.4   Awareness of self
5.5   Awareness of attitudes and values
5.6   Awareness of spiritual needs
5.7   Awareness of responsibilities

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IV. AN ANALYSIS OF PROBLEMS OF PUPIL SELF-ACTIVATION, CONTROL,
AND MOTIVATION

Problems of self-activation, control, and motivation were defined in
the areas of assuming responsibility for own learning, recognition of the
value of learning, and improving self-discipline and increasing motivation.
First-level function analyses of these problems yielded the following
results:

Assume Responsibility for Own Learning

Increase student self-motivation
Increase commitment to learning
Improve attitude
Improve problem-solving ability
Improve creativity

Recognize the Value of Learning

For leisure activities
For social enjoyment
For civic responsibility
For vocational fulfillment

Develop Responsibility for Own Actions

The ability to work independently
Increase productivity
Respect for personal property
Respect for public property
Good school-attendance habits

Motivate Pupils to Learn

In the cognitive domain
In the affective domain
In the psychomotor domain
In combination of domains

This information and further analyses will be presented in flowchart
form on the following pages.

MISSION PROFILE FOR HELPING PUPILS ASSUME
RESPONSIBILITY FOR OWN LEARNING

```
                        0.0
 ┌──────────────────────────┐
 │ PUPILS ASSUME            │
 │ RESPONSIBILITY           │
 │ FOR OWN LEARNING         │
 └──────────────────────────┘
```

```
        1.0            2.0          3.0           4.0            5.0
 ┌───────────┐ ┌───────────┐ ┌───────────┐ ┌───────────┐ ┌───────────┐
 │ INCREASE  │ │ INCREASE  │ │ IMPROVE   │ │ IMPROVE   │ │ IMPROVE   │
 │ STUDENT   │ │ COMMITMENT│ │ ATTITUDE  │ │ PROBLEM-  │ │ CREATIVITY│
 │ SELF-     │ │ TO LEARNING│ │          │ │ SOLVING   │ │           │
 │ MOTIVATION│ │           │ │           │ │ ABILITY   │ │           │
 └───────────┘ └───────────┘ └───────────┘ └───────────┘ └───────────┘
```
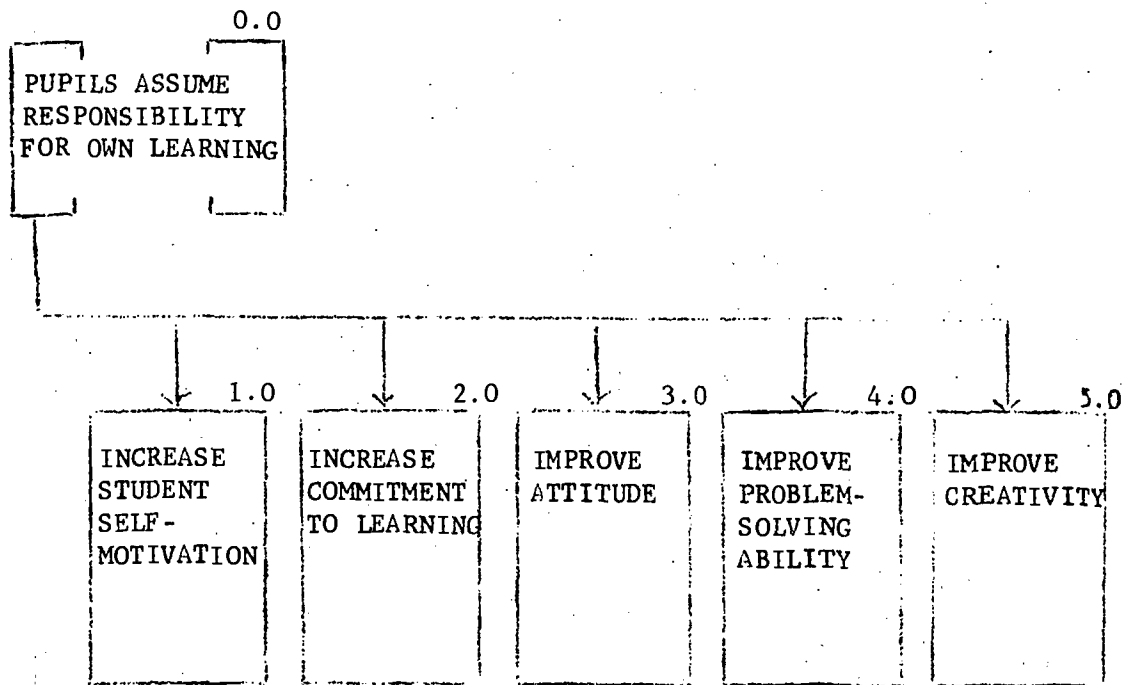
FUNCTION ANALYSES OF PUPIL ASSUMING RESPONSIBILITY FOR OWN LEARNING

1.0 INCREASE STUDENT SELF-MOTIVATION

1.1 Intellectual
1.2 Social
1.3 Physical
1.4 Emotional
1.5 Moral and spiritual

2.0 INCREASE COMMITMENT TO LEARNING

2.1 About self
2.2 About peers
2.3 About teachers
2.4 About school
2.5 About society

          or

2.1 Self-learning
     2.1.1 Increase curiosity
     2.1.2 Abstract reasoning
     2.1.3 Problem solving
2.2 Formal education
     2.2.1 Academic instruction
     2.2.2 Vocational instruction
     2.2.3 Recreational instruction
2.3 Informal social learning
     2.3.1 Political
     2.3.2 Economic
     2.3.3 Recreational

3.0 IMPROVE ATTITUDE

3.1 Self
     3.1.1 Confidence
     3.1.2 Study habits
     3.1.3 Goals and ambitions
3.2 School
     3.2.1 Curriculum
     3.2.2 Methods
3.3 Learning process
     3.3.1 Rote-memory
     3.3.2 Inquiry
3.4 Teachers
     3.4.1 Academic
     3.4.2 Elective
     3.4.3 Vocational
3.5 Peers
     3.5.1 Friends
     3.5.2 Authority

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3.6   Society

              4.0   IMPROVE PROBLEM-SOLVING ABILITY

```
┌─────┐
│4.0  │
└─────┘
   │
   ├──────┬──────┬──────┬──────┐
   ↓      ↓      ↓      ↓      ↓
┌─────┐┌─────┐┌─────┐┌─────┐┌─────┐
│4.1  ││4.2  ││4.3  ││4.4  ││4.5  │
└─────┘└─────┘└─────┘└─────┘└─────┘
```
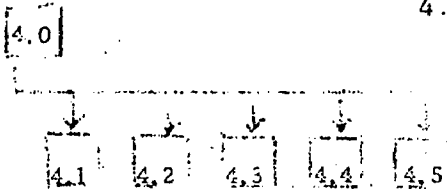
                    4.1   Numbers
                    4.2   Verbal
                    4.3   Social
                    4.4   Physical
                    4.5   Moral and spiritual

              5.0   IMPROVE CREATIVITY

```
┌─────┐
│5.0  │
└─────┘
   │
   ├──────┬──────┬──────┬──────┐
   ↓      ↓      ↓      ↓      ↓
┌─────┐┌─────┐┌─────┐┌─────┐┌─────┐
│5.1  ││5.2  ││5.3  ││5.4  ││5.5  │
└─────┘└─────┘└─────┘└─────┘└─────┘
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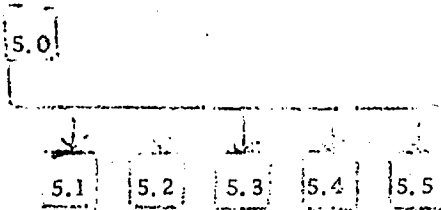
                    5.1   Social
                    5.2   Physical
                    5.3   Moral
                    5.4   Esthetic
                    5.5   Intellectual
                          5.5.1   Science
                          5.5.2   Arts
                          5.5.3   Humanities
                          5.5.4   Language
                          5.5.5   Business

                            or

                          5.5.1   Home work
                          5.5.2   Testing
                          5.5.3   Teaching
                          5.5.4   Reading

MISSION PROFILE FOR RECOGNIZING THE VALUE OF LEARNING

```
                    0.0
┌─ ─ ─ ─ ─ ─┐   ┌─ ─ ─ ─ ─┐
│RECOGNIZE THE        │
│VALUE OF             │
│LEARNING             │
└─ ─ ─ ─ ─ ─┘   └─ ─ ─ ─ ─┘
```

```
              1.0              2.0              3.0              4.0
┌─ ─ ─ ─ ─┐   ┌─ ─ ─ ─ ─┐   ┌─ ─ ─ ─ ─┐   ┌─ ─ ─ ─ ─┐
│VALUE OF  │   │VALUE OF  │   │VALUE OF  │   │VALUE OF  │
│EDUCATION │   │EDUCATION │   │EDUCATION │   │EDUCATION │
│FOR       │   │FOR SOCIAL│   │FOR CIVIC │   │FOR VOC-  │
│LEISURE   │   │ENJOYMENT │   │RESPON-   │   │ATIONAL   │
│ACTIVITIES│   │          │   │SIBILITY  │   │FULFILL-  │
│          │   │          │   │          │   │MENT      │
└─ ─ ─ ─ ─┘   └─ ─ ─ ─ ─┘   └─ ─ ─ ─ ─┘   └─ ─ ─ ─ ─┘
```
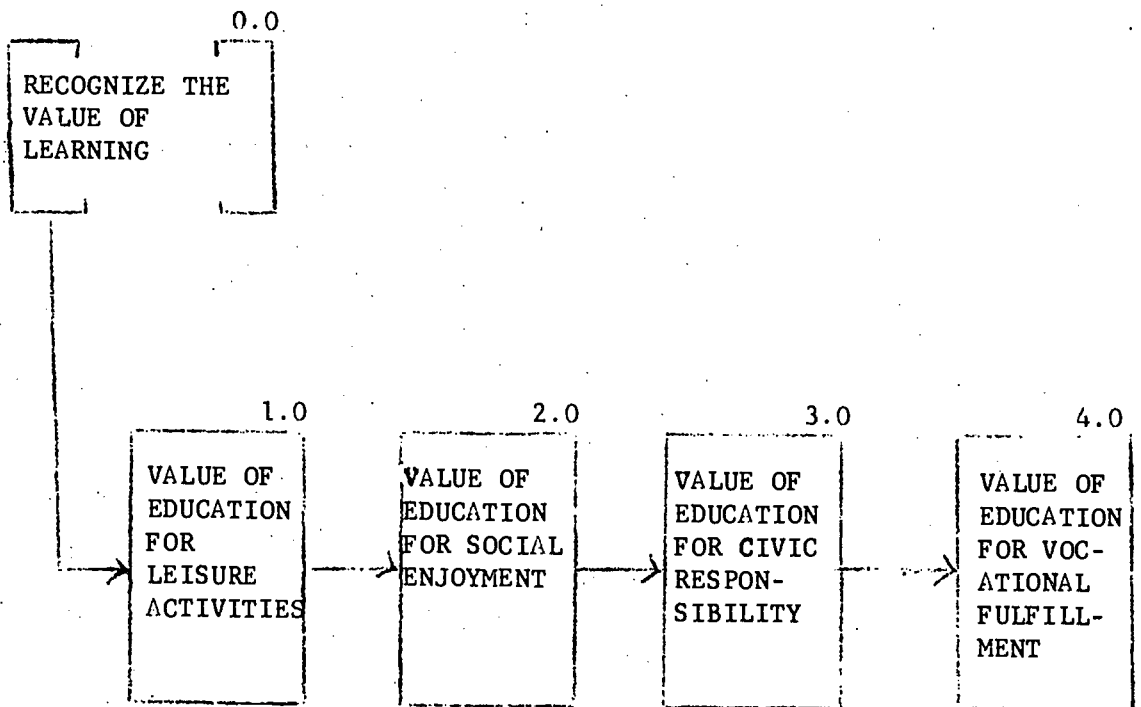
FUNCTION ANALYSES OF RECOGNIZING THE VALUE OF EDUCATION

1.0 VALUE OF EDUCATION FOR LEISURE ACTIVITIES

1.1 With peers
1.2 With family
1.3 In fraternal societies
1.4 In neighborhood associations
1.5 In sports life

2.0 VALUE OF EDUCATION FOR SOCIAL ENJOYMENT

2.1 Within family unit
2.2 Within peer group
2.3 Within service groups
2.4 Within interest groups
2.5 Within business groups

or

2.1 As a participant
    2.1.1 In service clubs
    2.1.2 At athletic events
    2.1.3 At fine arts

3.0 VALUE OF EDUCATION FOR CIVIC RESPONSIBILITY

3.1 Education in youth work
    3.1.1 Boy Scouts
    3.1.2 Girls' organizations
    3.1.3 YMCA groups
    3.1.4 FHA
3.2 Education in beautification of city and parks
    3.2.1 Education in planting
    3.2.2 Education in planning
    3.2.3 Education in maintenance
3.3 Education in helping disadvantaged
    3.3.1 Economically
    3.3.2 Physically
    3.3.3 Emotionally
    3.3.4 Mentally

or

3.1 Politics
3.2 Service Clubs
3.3 Fraternal organizations
3.4 Youth organizations
    3.4.1 Cub Scouts
    3.4.2 Indian guides
    3.4.3 Girl Scouts
    3.4.4 Sports groups

```
 ┌─────┐
 │ 4.0 │
 └──┬──┘
    │
 ┌──┴──────┬──────┬──────┬──────┐
 │         │      │      │      │
 ▼         ▼      ▼      ▼      ▼
┌────┐ ┌────┐ ┌────┐ ┌────┐ ┌────┐
│4.1 │ │4.2 │ │4.3 │ │4.4 │ │4.5 │
└────┘ └────┘ └────┘ └────┘ └────┘
```

4.0   VALUE OF EDUCATION FOR VOCATIONAL FULFILLMENT
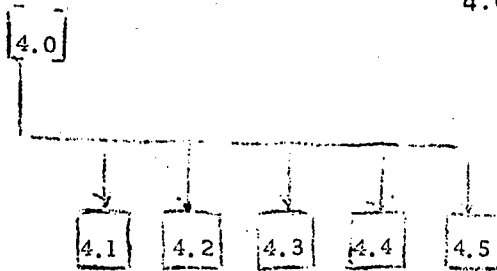
    4.1   Private business
          4.1.1   Wholesale
          4.1.2   Retail
          4.1.3   Manufacturer
    4.2   Governmental positions
          4.2.1   Federal
          4.2.2   State
          4.2.3   County
          4.2.4   City
    4.3   Professions
          4.3.1   Medical
          4.3.2   Legal
          4.3.3   Educational
    4.4   Laborer
          4.4.1   Skilled
          4.4.2   Semi-skilled
          4.4.3   Unskilled
    4.5   Paraprofessional and secretarial

7

MISSION PROFILE FOR DEVELOPING RESPONSIBILITY FOR
ONE'S OWN ACTIONS

0.0

```
DEVELOP RES-
PONSIBILITY
FOR OWN
ACTIONS
```

1.0
```
DEVELOP
THE
ABILITY TO
WORK
INDEPEND-
ENTLY
```

2.0
```
DEVELOP
AN
INCREASE
IN PRO-
DUCTIVITY
```

3.0
```
DEVELOP RESPECT
FOR PERSONAL
PROPERTY
```

4.0
```
DEVELOP RESPECT
FOR PUBLIC
PROPERTY
```

5.0
```
DEVELOP
GOOD
SCHOOL-
ATTEND-
ANCE
HABITS
```

-30-
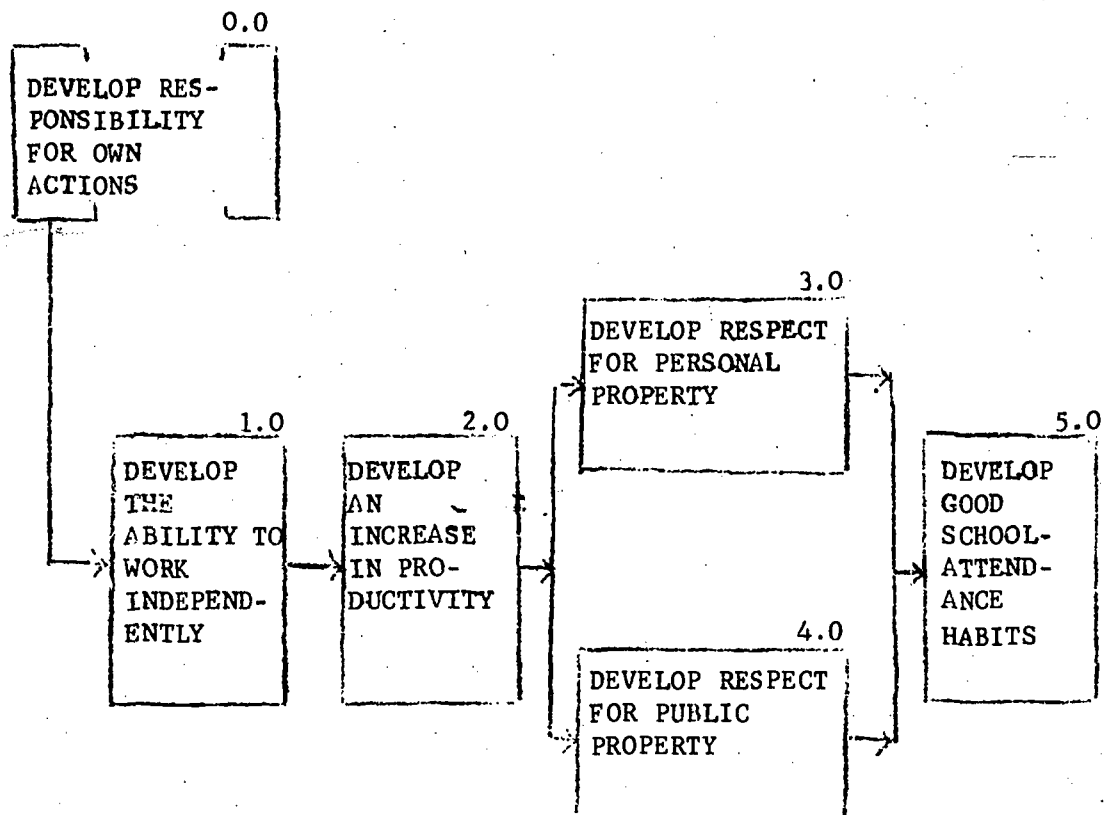
FUNCTION ANALYSES OF DEVELOPING RESPONSIBILITY FOR OWN ACTION

1.0 DEVELOP THE ABILITY TO WORK INDEPENDENTLY

1.1 Work independently on number concepts
1.2 Work independently on word concepts
1.3 Work independently on artistic development
1.4 Work independently on penmanship develop-
ment

2.0 DEVELOP AN INCREASE IN PRODUCTIVITY

2.1 Develop math proficiency to full potential
2.2 Develop reading proficiency to full poten-
tial
2.3 Develop artistic coordination to full
potential
2.4 Develop listening skills to full poten-
tial

3.0 DEVELOP A RESPECT FOR PERSONAL PROPERTY

3.1 Develop a concern for caring for books
3.2 Develop a concern for caring for clothing
3.3 Develop a concern for caring for sports
equipment
3.4 Develop a concern for caring for personal
school supplies

4.0 DEVELOP A RESPECT FOR PUBLIC PROPERTY

4.1 Develop a concern for caring for school
property
4.2 Develop a concern for caring for city
property
4.3 Develop a concern for caring for public
ecology
4.4 Develop a concern for respecting law
enforcement

-31-

0.0

```
┌─────────┐    ┌──────────┐
│ MOTIVATE│    │          │
│ PUPILS TO│   │          │
│ LEARN   │    │          │
└─────────┘    └──────────┘
```

```
        1.0                2.0                3.0                4.0
┌────────────────┐ ┌────────────────┐ ┌────────────────┐ ┌────────────────┐
│ MOTIVATE PUPILS│ │ MOTIVATE PUPILS│ │ MOTIVATE PUPILS│ │ MOTIVATE PUPILS│
│ TO LEARN IN THE│ │ TO LEARN IN THE│ │ TO LEARN IN THE│ │ TO LEARN IN    │
│ COGNITIVE      │ │ AFFECTIVE      │ │ PSYCHOMOTOR    │ │ COMBINATION OF │
│ DOMAIN         │ │ DOMAIN         │ │ DOMAIN         │ │ DOMAINS        │
└────────────────┘ └────────────────┘ └────────────────┘ └────────────────┘
```

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FUNCTION ANALYSES OF MOTIVATING PUPILS TO LEARN
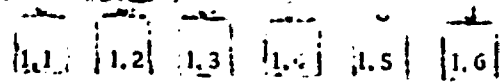
1.0   MOTIVATE PUPILS TO LEARN IN THE COGNITIVE DOMAIN
- 1.1   Motivate pupils to learn to qualify
- 1.2   Motivate pupils to learn to describe
- 1.3   Motivate pupils to learn to structure
- 1.4   Motivate pupils to learn methods of operation
- 1.5   Motivate pupils to learn methods of analysis
- 1.6   Motivate pupils to learn methods of synthesis

2.0   MOTIVATE PUPILS TO LEARN IN THE AFFECTIVE DOMAIN
- 2.1   Motivate pupils to acquire positive attitudes toward self
- 2.2   Motivate pupils to acquire positive attitudes toward others
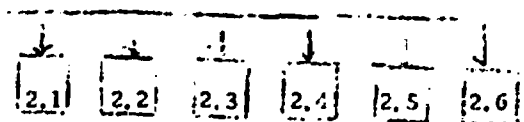- 2.3   Motivate pupils to acquire positive attitudes toward organizations
- 2.4   Motivate pupils to acquire positive attitudes toward the metaphysical
- 2.5   Motivate pupils to acquire positive attitudes toward inanimate things
- 2.6   Motivate pupils to acquire positive attitudes toward relationships

3.0   MOTIVATE PUPILS TO LEARN IN THE PSYCHOMOTOR DOMAIN
- 3.1   Motivate pupils to acquire strength
- 3.2   Motivate pupils to acquire balance
- 3.3   Motivate pupils to acquire coordination
- 3.4   Motivate pupils to acquire stamina
- 3.5   Motivate pupils to acquire flexibility
- 3.6   Motivate pupils to acquire speed
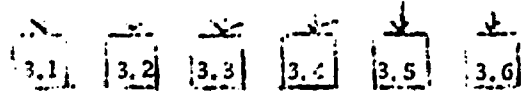
4.0   MOTIVATE PUPILS TO LEARN TO COMBINE AND ORCHESTRATE LEARNING IN ALL DOMAINS
- 4.1   Learning in cognitive and affective areas
- 4.2   Learning in cognitive and psychomotor areas
- 4.3   Learning in affective and psychomotor areas
- 4.4   Learning in affective, cognitive, and psychomotor areas
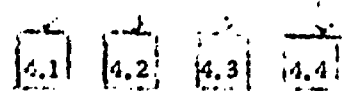
-33-

V. AN ANALYSIS OF PROBLEMS OF PUPIL SECURITY AND SELF-ESTEEM

Problems for pupil security and self-esteem were defined in the areas
of self-image, being loved and esteemed by parents, and parents' caring
and being aware of school curriculum and child development. First-level
function analyses of these problems yielded the following results:

    Improve Self-Image

        Self-confidence
        Perception of acceptance by others
        Self-directed behavior   .
        Tolerance

   Need to be Esteemed and Loved by Parents

        Need to be ready to be loved
        Need for physical love
        Need for psychological love
        Need for spiritual love

   Assisting Parents in Learning About Schools and Children

        Parent-child relations
        Process of learning
        Health care
        School functions

This information and further analyses will be shown on the following
pages in flowchart form.

MISSION PROFILE FOR IMPROVING SELF-IMAGE

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                         0.0
  ┌──────────┐    ┌──────────┐
  │          │    │          │
  │ IMPROVE SELF-  │          │
  │ IMAGE    │    │          │
  │          │    │          │
  └──────────┘    └──────────┘
    │
    │
    │              1.0              2.0              3.0              4.0
    │         ┌──────────┐    ┌──────────┐    ┌──────────┐    ┌──────────┐
    │         │ IMPROVE  │    │IMPROVE   │    │IMPROVE   │    │IMPROVE   │
    │         │ SELF-    │    │PERCEPTION│    │SELF-     │    │TOLERANCE │
    │         │ CONFIDENCE│   │OF ACCEPT-│    │DIRECTED  │    │          │
    └────────→│          │ ──→│ANCE BY   │ ──→│BEHAVIOR  │ ──→│          │
              │          │    │OTHERS    │    │          │    │          │
              └──────────┘    └──────────┘    └──────────┘    └──────────┘
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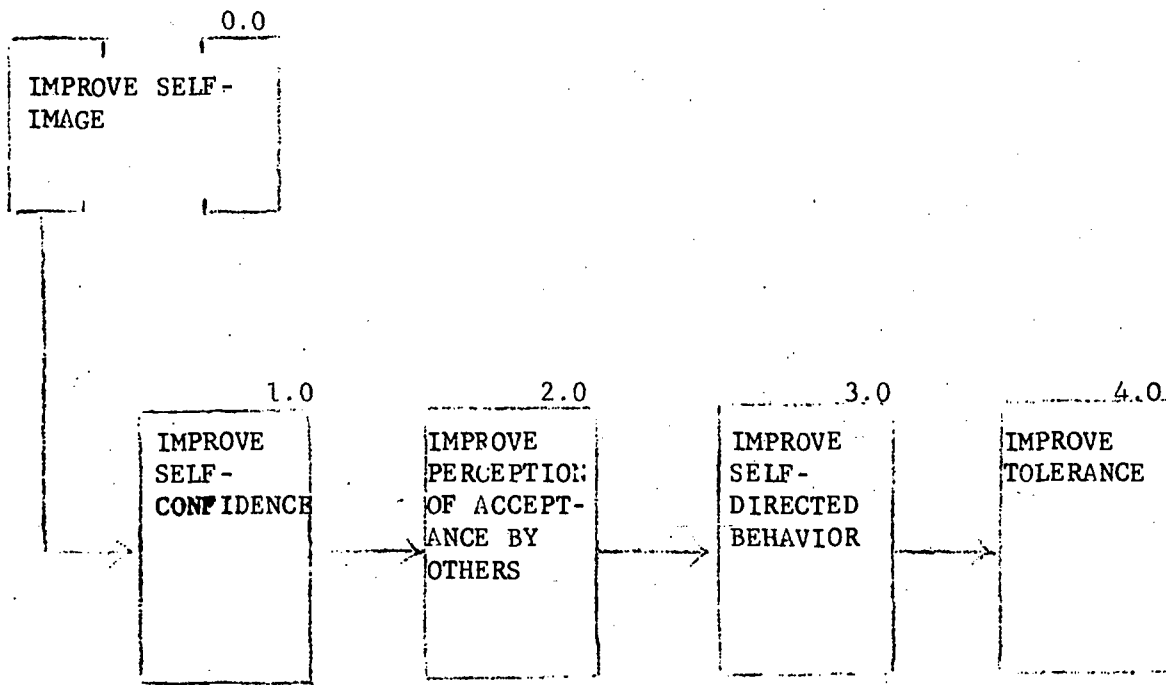
FUNCTION ANALYSES OF IMPROVING STUDENT'S SELF-IMAGE
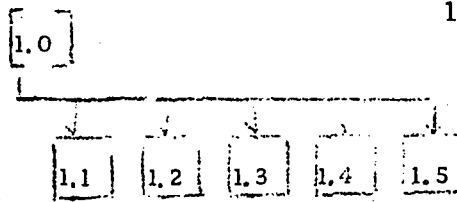
1.0 IMPROVE SELF-CONFIDENCE

1.1 Improve perception of success
1.2 Improve perception of trustworthiness
1.3 Improve perception of usefulness
1.4 Improve perception of social role and skills
1.5 Improve perception of physical appearance
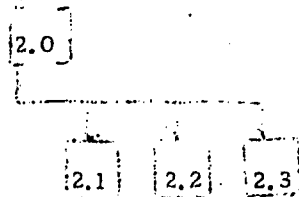
2.0 IMPROVE PERCEPTION OF ACCEPTANCE BY OTHERS

2.1 Improve perception of acceptance by peers
    2.1.1 Improve conception of physical acceptance
    2.1.2 Improve perception of intellectual acceptance
2.2 Improve perception of acceptance by teachers
2.3 Improve perception of acceptance by parents and other adults
    2.3.1 Improve parental understanding
    2.3.2 Improve parental love
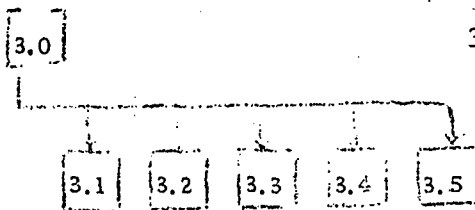
3.0 IMPROVE SELF-DIRECTED BEHAVIOR

3.1 Improve curiosity
    3.1.1 Develop intellectually
    3.1.2 Develop scientific approach
3.2 Improve value system
    3.2.1 Doing your best
    3.2.2 Being on time
    3.2.3 Experience success
3.3 Improve perseverence
3 4 Improve self-starting abilities
    3.4.1 Study habits
3.5 Improve sense of responsibility
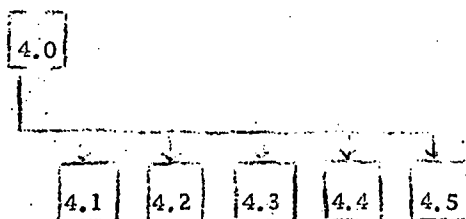
4.0 IMPROVE TOLERANCE

4.1 Improve tolerance of others
4.2 Improve tolerance of self
4.3 Improve tolerance of ambiguous situations
4.4 Improve tolerance of disappointment
4.5 Improve tolerance of failure

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MISSION PROFILE FOR BEING LOVED AND ESTEEMED BY PARENTS

```
                   0.0
 ┌─────────────┐ ┌──────┐
 │ BE ESTEEMED │ │      │                        0.2
 │ AND LOVED BY│ │      │              ┌──────────────────────┐
 │ PARENTS     │ │      │              │ RECEIVE              │
 └─────────────┘ └──────┘              │ PHYSICAL LOVE        │
                                       │                      │
                                       └──────────────────────┘

                          1.0                           0.3
              ┌──────────────────────┐       ┌──────────────────────┐
              │ BE READY TO BE       │       │ RECEIVE              │
              │ LOVED                │       │ PSYCHOLOGICAL        │
              │                      │       │ LOVE                 │
              └──────────────────────┘       └──────────────────────┘

                                                              1.4
                                       ┌──────────────────────┐
                                       │ RECEIVE              │
                                       │ SPIRITUAL LOVE       │
                                       │                      │
                                       └──────────────────────┘
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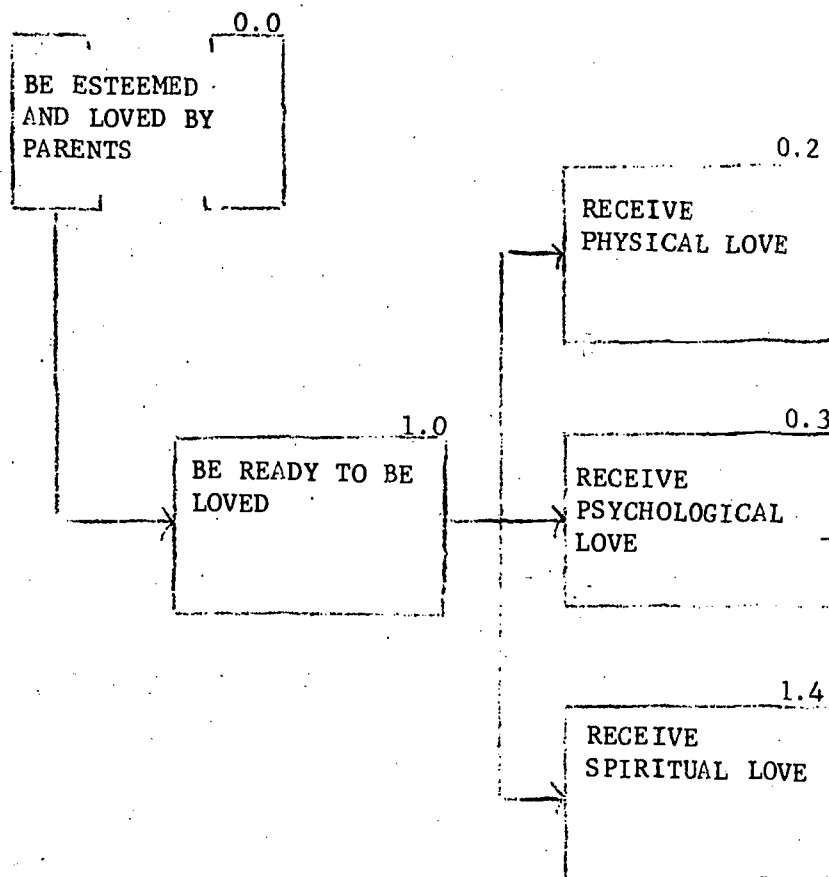
FUNCTION ANALYSES OF STUDENT'S NEEDS TO BE ESTEEMED AND LOVED BY PARENTS

1.0 STUDENT NEEDS TO BE READY TO BE LOVED
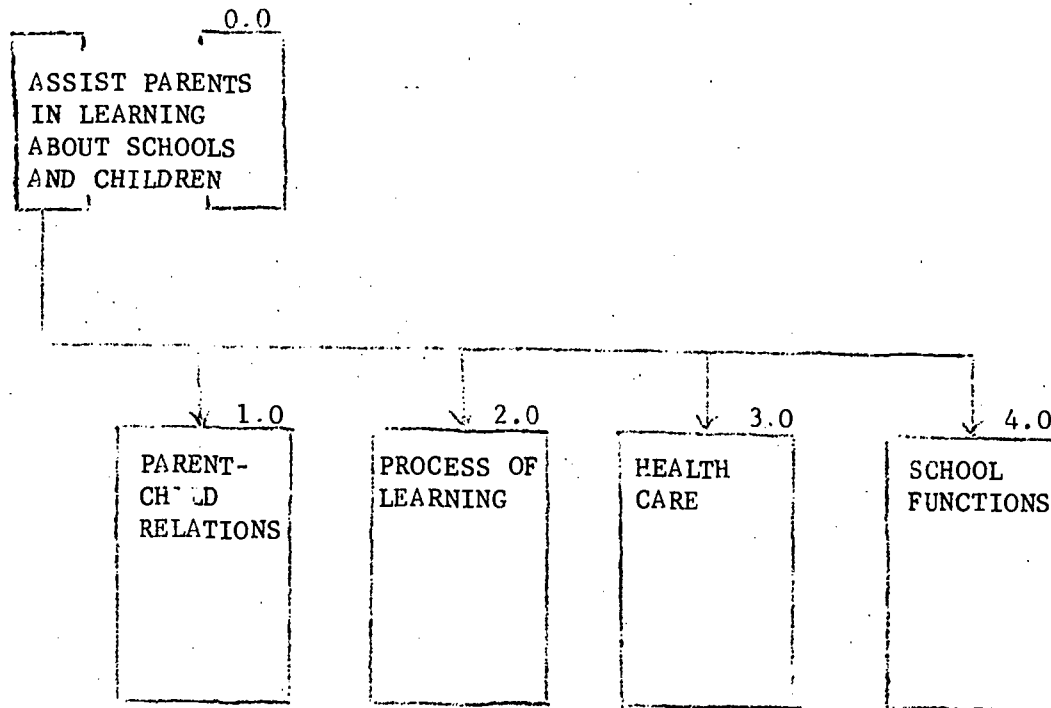
2.0 STUDENT NEEDS PHYSICAL LOVE

3.0 STUDENT NEEDS PSYCHOLOGICAL LOVE

    3.1 Student needs to receive verbal expression
of love

    3.2 Student needs to express his love verbally

MISSION PROFILE FOR ASSISTING PARENTS IN LEARNING ABOUT

SCHOOLS AND CHILDREN

```
           0.0
  ┌─────┐  ┌───────┐
  │ ASSIST PARENTS │
  │ IN LEARNING    │
  │ ABOUT SCHOOLS  │
  │ AND CHILDREN   │
  └─────┴──────────┘
     │
     │
     └───────────┬───────────────┬───────────────┬───────────────┐
            1.0          2.0            3.0             4.0
      ┌──────────┐  ┌──────────┐  ┌──────────┐  ┌──────────┐
      │ PARENT-  │  │PROCESS OF│  │ HEALTH   │  │ SCHOOL   │
      │ CH  LD   │  │LEARNING  │  │ CARE     │  │ FUNCTIONS│
      │ RELATIONS│  │          │  │          │  │          │
      │          │  │          │  │          │  │          │
      └──────────┘  └──────────┘  └──────────┘  └──────────┘
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FUNCTION ANALYSES OF ASSISTING PARENTS IN LEARNING ABOUT SCHOOLS AND CHILDREN
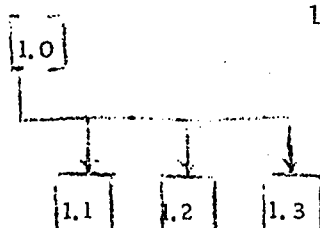
1.0 ASSISTING PARENTS IN LEARNING ABOUT PARENT-CHILD RELATIONS

1.1 Family values
   1.1.1 Spiritual
   1.1.2 Social
1.2 Family interests
   1.2.1 Work
   1.2.2 Pleasure
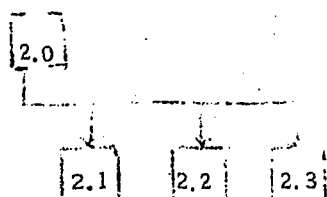1.3 Family goals
   1.3.1 Material
   1.3.2 Success
   1.3.3 Spiritual and moral

2.0 ASSIST PARENTS IN LEARNING ABOUT THE PROCESS OF LEARNING

2.1 Senses
2.2 Experiences
2.3 Example
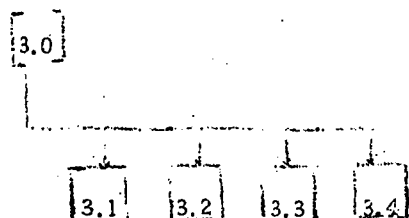
3.0 HEALTH CARE

3.1 Physical
   3.1.1 Dental
   3.1.2 Nutritional
   3.1.3 Exercise and rest
3.2 Mental
3.3 Social
3.4 Spiritual or moral
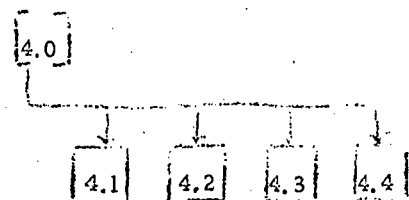
4.0 SCHOOL FUNCTIONS

4.1 Provide learning opportunities
   4.1.1 Materials
   4.1.2 Teachers
4.2 Provide physical environment
   4.2.1 Classrooms or spaces
   4.2.2 Safety
   4.2.3 Comfort
4.3 Provide personnel
4.4 Provide management of resources

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VI.   AN ANALYSIS OF PROBLEMS OF KNOWLEDGE ACQUISITION AND READINESS FOR LEARNING

Problems involving knowledge acquisition and a readiness for learning were defined in the areas of environment, status and progress, and kindergarten readiness. First-level function analyses of these problems yielded the following results:

Successful Adaptation to Environment

Knowledge of physical environment
Knowledge of social environment
Knowledge of emotional bearing on environment
Knowledge of aesthetic values in environment

Improve Self-Evaluation
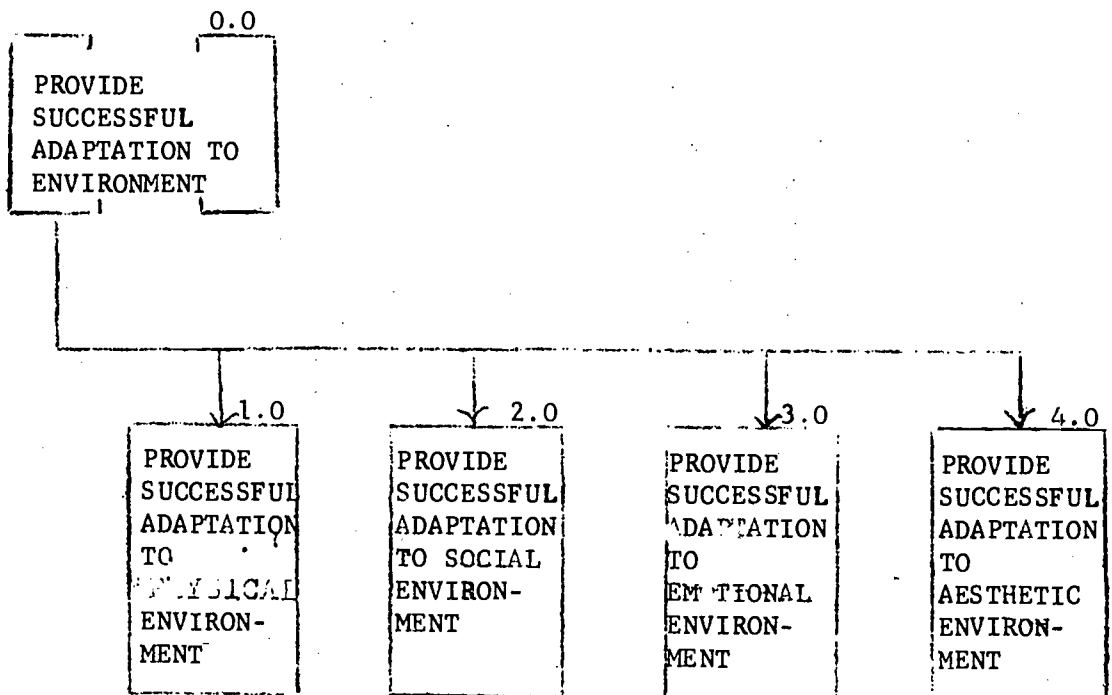
Understanding of present standing
Awareness of progress
Define direction or goals

Improve Kindergarten Readiness

Social interaction
Emotional stability
Motor skills
Visual skills
Readiness for computation skills

This information and further analyses will be shown on the following pages in flowchart form.

MISSION PROFILE FOR PROVIDING SUCCESSFUL ADAPTATION

TO THE ENVIRONMENT

```
          0.0
 ┌─────────┬──┐
 │ PROVIDE │  │
 │ SUCCESSFUL │
 │ ADAPTATION TO │
 │ ENVIRONMENT │
 └──────────┴──┘
      │
      └──────────────┬───────────────┬───────────────┬────────────────┐
                     │               │               │                │
              ↓ 1.0           ↓ 2.0           ↓ 3.0            ↓ 4.0
        ┌──────────┐    ┌──────────┐    ┌──────────┐    ┌──────────┐
        │ PROVIDE  │    │ PROVIDE  │    │ PROVIDE  │    │ PROVIDE  │
        │SUCCESSFUL│    │SUCCESSFUL│    │SUCCESSFUL│    │SUCCESSFUL│
        │ADAPTATION│    │ADAPTATION│    │ADAPTATION│    │ADAPTATION│
        │TO        │    │TO SOCIAL │    │TO        │    │TO        │
        │PHYSICAL  │    │ENVIRON-  │    │EMOTIONAL │    │AESTHETIC │
        │ENVIRON-  │    │MENT      │    │ENVIRON-  │    │ENVIRON-  │
        │MENT      │    │          │    │MENT      │    │MENT      │
        └──────────┘    └──────────┘    └──────────┘    └──────────┘
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FUNCTIONAL ANALYSES OF SUCCESSFUL ADAPTATION

OF STUDENT K-3 TO ENVIRONMENT
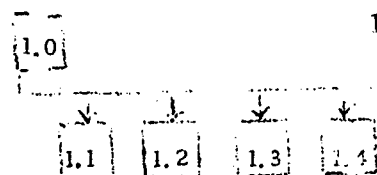
1.0 IMPROVE KNOWLEDGE OF PHYSICAL ENVIRONMENT

    1.1 Improve knowledge of land
    1.2 Improve knowledge of air
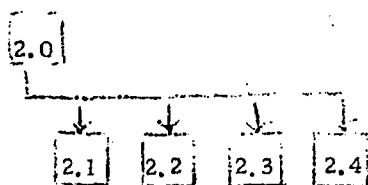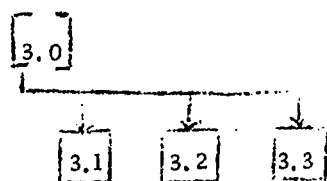   1.3 Improve knowledge of water
    1.4 Improve knowledge of space

2.0 IMPROVE KNOWLEDGE OF SOCIAL ENVIRONMENT

    2.1 Improve knowledge of home
    2.2 Improve knowledge of school
    2.3 Improve knowledge of church
    2.4 Improve knowledge of peer group

3.0 IMPROVE KNOWLEDGE OF EMOTIONAL ASPECTS OF ENVIRONMENT

    3.1 Improve knowledge of self-concept
    3.2 Improve knowledge of personality traits
    3.3 Improve knowledge of basic human needs
        3.3.1 Survival
        3.3.2 Love
        3.3.3 Self-esteem
        3.3.4 Esteem of others
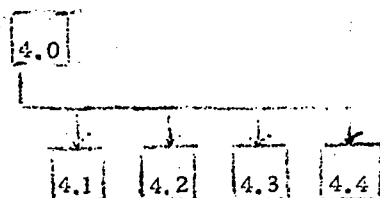
4.0 IMPROVE KNOWLEDGE OF AESTHETIC VALUES OF ENVIRONMENT

    4.1 Improve appreciation of nature through senses
        4.1.1 Improve sharpness of sense of smell
        4.1.2 Improve sharpness of sense of hearing
        4.1.3 Improve sharpness of sense of sight
    4.2 Improve appreciation of scenic beauty
    4.3 Improve appreciation of animal life
    4.4 Improve appreciation of plant life

MISSION PROFILE FOR IMPROVING STUDENT SELF-EVALUATION

```
                            ┌─────────────────┐ 0.0
                            │ ┌───┐       ┌───┐│
                            │ IMPROVE         │
                            │ STUDENT         │
                            │ SELF -          │
                            │ EVALUATION      │
                            └─┴───────────────┘
                              │
                              │
                              │
                              │
                              ▼
    ┌──────────────────┐ 1.0      ┌──────────────────┐ 2.0      ┌──────────────────┐ 3.0
    │                  │          │                  │          │                  │
    │ HELP DEFINE      │          │ INCREASE         │          │ INCREASE         │
  ──▶ DIRECTION OR     │────────▶ │ UNDERSTANDING    │ ─ ─ ─ ─▶ │ AWARENESS OF     │
    │ GOALS            │          │ OF PRESENT       │          │ PROGRESS         │
    │                  │          │ STANDING         │          │                  │
    └──────────────────┘          └──────────────────┘          └──────────────────┘
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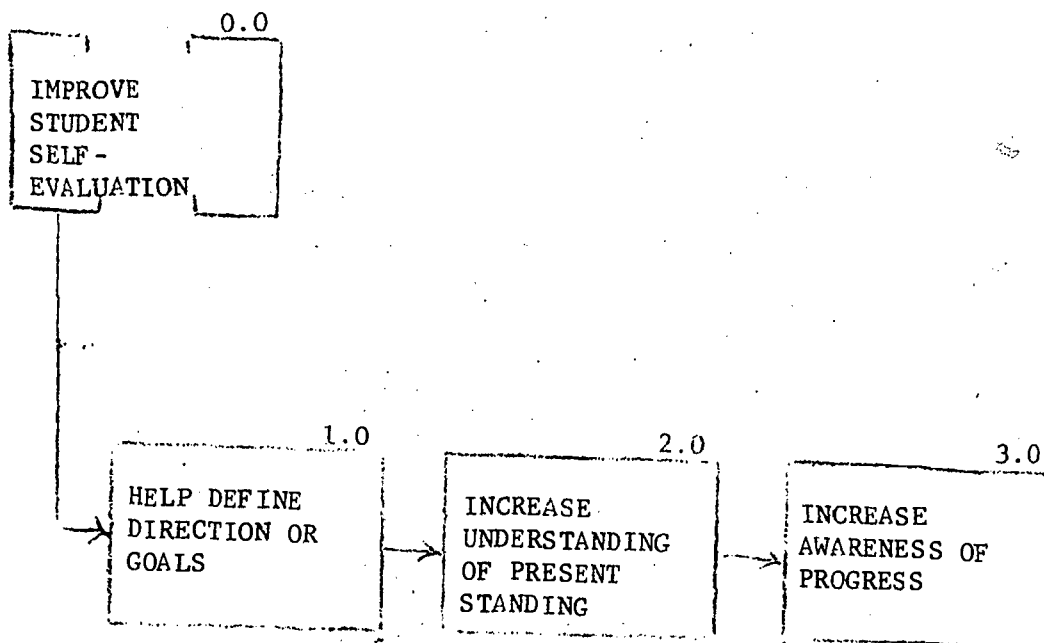
FUNCTIONAL ANALYSES OF IMPROVING LEARNER EVALUATION

1.0 HELP DEFINE DIRECTION OR GOALS

2.0 INCREASE UNDERSTANDING OR PRESENT STANDING

3.0 INCREASE AWARENESS OF PROGRESS

    3.1 Increase understanding of potential
        3.1.1 Learn IQ
        3.1.2 Learn achievement test ranking
        3.1.3 Learn class standing
    3.2 Increase understanding of expected
        gains or progress based on potential
        3.2.1 Learn teacher expectation
        3.2.2 Learn parent expectation
        3.2.3 Learn peer expectations
        3.2.4 Develop individual goals
    3.3 Increase understanding of individual-
        differences concept
        3.3.1 Develop appreciation of individual
              differences
        3.3.2 Develop tolerance and understanding
        3.3.3 Develop understanding of own
              capabilities
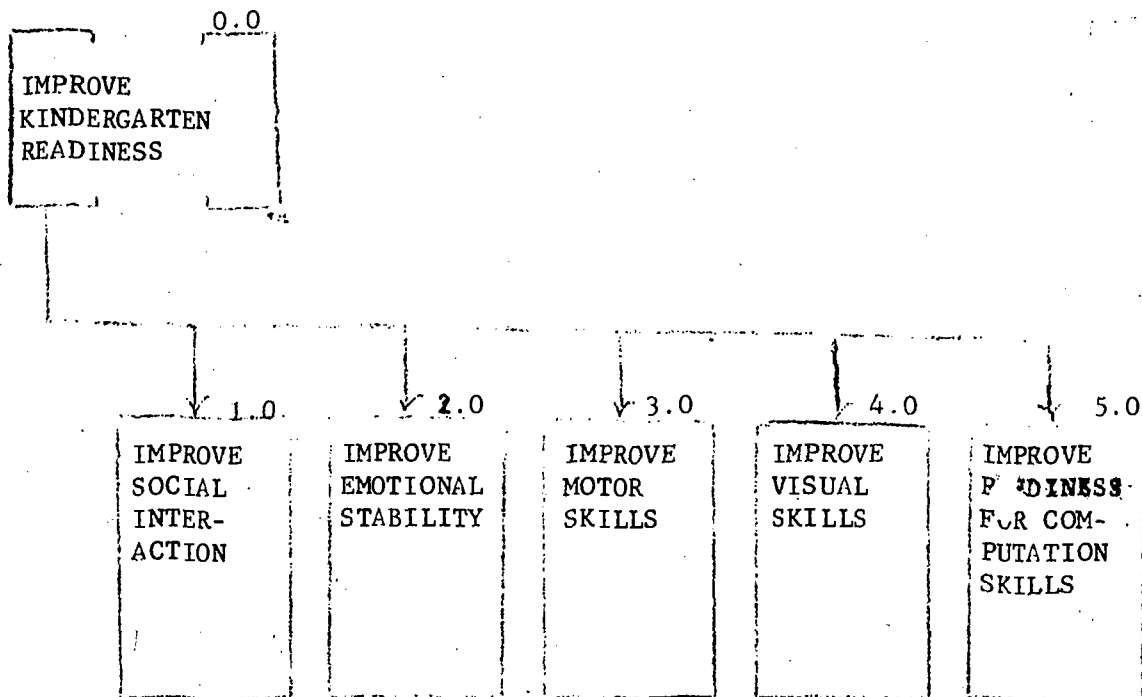   3.4 Increase understanding of alternate
        methods of learning
   3.4.1 Learn different techniques of
              learning
        3.4.2 Develop understanding of teacher
              methods
    3.5 Develop a method for charting progress

MISSION PROFILE FOR IMPROVING KINDERGARTEN READINESS

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         0.0
┌─────┐ ┌──────────┐
│IMPROVE          │
│KINDERGARTEN     │
│READINESS        │
└─────┘ └──────────┘
   │
   │
   ├──────────────┬──────────────┬──────────────┬──────────────┐
   ↓ 1.0          ↓ 2.0          ↓ 3.0          ↓ 4.0          ↓ 5.0
┌──────────┐ ┌──────────┐ ┌──────────┐ ┌──────────┐ ┌──────────┐
│IMPROVE   │ │IMPROVE   │ │IMPROVE   │ │IMPROVE   │ │IMPROVE   │
│SOCIAL    │ │EMOTIONAL │ │MOTOR     │ │VISUAL    │ │P'DINESS  │
│INTER-    │ │STABILITY │ │SKILLS    │ │SKILLS    │ │FUR COM-  │
│ACTION    │ │          │ │          │ │          │ │PUTATION  │
│          │ │          │ │          │ │          │ │SKILLS    │
└──────────┘ └──────────┘ └──────────┘ └──────────┘ └──────────┘
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# FUNCTION ANALYSES OF IMPROVING KINDERGARTEN READINESS
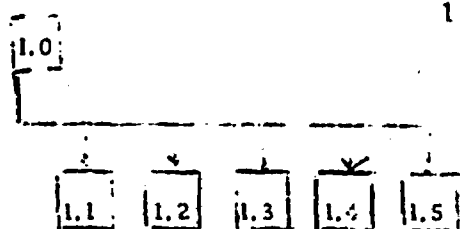
1.0 IMPROVE SOCIAL INTERACTION

1.1 Improve peer relation
    1.1.1 Difference recognition
    1.1.2 Acceptance of power influence in groups
1.2 Improve teacher-pupil relation
    1.2.1 Understand role relationship
    1.2.2 Improve teacher-pupil rapport
1.3 Improve self-concept
    1.3.1 Acceptance of own strengths and weaknesses
    1.3.2 Understanding love of self
1.4 Improve sibling relation
    1.4.1 Acceptance of male sibling
    1.4.2 Acceptance of female sibling
    1.4.3 Acceptance of younger sibling
    1.4.4 Acceptance of older sibling
1.5 Improve parental relation
    1.5.1 Improve mother-child relation
    1.5.2 Improve father-child relation

2.0 IMPROVE EMOTIONAL STABILITY

3.0 IMPROVE MOTOR SKILLS
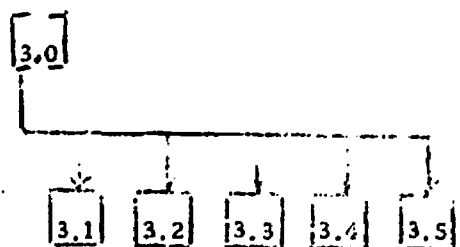
3.1 Develop eye-hand coordination
    3.1.1 Learn left to right
    3.1.2 Learn up and down
3.2 Develop finger manipulation
    3.2.1 Perform paper and pencil exercises
    3.2.2 Perform cutting exercises
3.3 Develop handedness
    3.3.1 Difference between right and left
3.4 Develop leg moving coordination
    3.4.1 Ability to run
    3.4.2 Ability to skip
    3.4.3 Ability to jump
3.5 Develop arm moving coordination
    3.5.1 Ability to throw
    3.5.2 Ability to grasp and hold
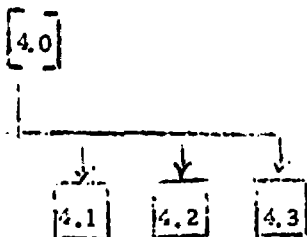
4.0 IMPROVE VISUAL SKILLS

4.1 Improve ability to recognize geometric shapes

-47-

4.1.1	Recognize circles
4.1.2	Recognize triangles
4.1.3	Recognize flat surface
4.1.4	Recognize oval surface

4.2 Improve ability to recognize size relation.nips.
- 4.2.1 Determine "larger than"
- 4.2.2 Determine "smaller than"
- 4.2.3 Recognize sameness

4.3 Improve ability to recognize space relationships
- 4.3.1 See nearness
- 4.3.2 Recognize farness
- 4.3.3 Recognize high
- 4.3.4 Recognize low

5.0 IMPROVE READINESS FOR COMPUTATION SKILLS.

5.1 Develop awareness of world of numbers
- 5.1.1 Relationships of ages of children
- 5.1.2 Develop knowledge of days of week in calendar
- 5.1.3 Develoo awareness of and recognize birthdays
- 5.1.4 Develop awareness of speed of vehicles
- 5.1.5 Develop time concept with watches and clocks

5.2 Develop concept relationships
- 5.2.1 Place of position in family constellation
- 5.2.2 Awareness of larger groups, such as class size
- 5.2.3 Awareness of number concepts in expanding community

5.3 Develop ability to count orally
- 5.3.1 Initially 1-10
- 5.3.2 Develop awareness of the concrete verses the abstract
- 5.3.3 Develop relationship to pages in a book

5.4 Develop ability to write
- 5.4.1 Initially 1-10
- 5.4.2 Then 10-100
- 5.4.3 Develop knowledge that number 1 and word "one" are the same

5.5 Develop ability to measure
- 5.5.1 Use ruler - inches
- 5.5.2 Use yardsticks - yards

5.0

5.1   5.2   5.3   5.4   5.5   5.6

5.5.3 Speedometer - miles
5.5.4 City map - blocks
5.6 Develop vocabulary
5.6.1 "More than," "Less than" "Bigger than" concepts