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A CONTENT ANALYSIS OF SELECTED EDUCATIONAL  
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THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

A CONTENT ANALYSIS OF SELECTED EDUCATIONAL PSYCHOLOGY TEXTBOOKS

PUBLISHED BETWEEN 1970 AND 1974

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF PHILOSOPHY

BY

MING TS LAI

Norman, Oklahoma

1975

A CONTENT ANALYSIS OF SELECTED EDUCATIONAL PSYCHOLOGY TEXTBOOKS

PUBLISHED BETWEEN 1970 AND 1974

APPROVED BY

*P. D. Pappas*  
*Robert Curry*  
*Charles H. Hering*  
*Lynn Williams*

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DISSERTATION COMMITTEE

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A CONTENT ANALYSIS OF SELECTED EDUCATIONAL PSYCHOLOGY  
TEXTBOOKS PUBLISHED BETWEEN 1970 AND 1974

CHAPTER I

INTRODUCTION

One point on which educational psychologists and educators can generally agree is that educational psychology is an integral part of teaching and the preparation of prospective teachers. Disagreement results when actual attempts to initiate or implement psychological principles are made. Goals and processes for improving teaching which meet the perceived purposes of education for all groups have yet to be articulated.

Educational psychology as a field of systematic concern with the domain of behavioral science had origins stemming from the beginning of the twentieth century when E. L. Thorndike began to apply scientific methods to the educational problems. Since that time, the field had reflected activities of both science and technique. During the intervening decade "Many sciences have shown tremendous progress as a result of attempts at application, and a stance for the application of psychology to education seems quite clear at this time."<sup>1</sup> Therefore, there was an obvious need

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<sup>1</sup> Robert Glaser, "Educational Psychology and Education," American Psychologist, 65, (July, 1973), p. 557.

for further development of educational psychology as a science and for further clarification of its implications for educational practice. This obligation to look both ways reflected the impact of major social and economic changes upon educational institutions, school programs, and educators. The influences of social change reflected in the field of educational psychology were noted by Di Vesta and Thompson:

Progressive racial integration within the public schools of culturally and economically underprivilege parents are among the more important of the many social changes that have altered classroom teachers' duties and responsibilities. Moreover, scientific progress during the last ten years has highlighted the significance of a somewhat different set of psychological variables, and has in many instances forced a considerable restructuring of psychological theories.<sup>2</sup>

The behavioral and social sciences were at a point in their development where they required the direction and disciplining effects that came from contact with real-world problems. Knowledge and theories that have been accumulated required the elaboration and correction that could result from innovational or experimental engagement.<sup>3</sup> In educational psychology, the primary goal was to give the teacher an understanding of the way pupils learn. Courses in educational psychology attempted to provide the student with insight into the learning process on which effective classroom practice could be based. George Mouly commented on the field of educational psychology as follows:

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<sup>2</sup>  
Francis J. Di Vesta and George G. Thompson, Educational Psychology: Instruction and Behavioral Change. (New York: Appletion-Century-Crofts, 1970), p. ix.

<sup>3</sup>  
Robert Glaser, op. cit., p. 557.

Educational psychology must promote a thorough grasp of the basic, principles, and view points of psychology and have a bearing on the successful operations. There, in turn, must have a sound basis in research, logic, and other systematic approaches to dependable knowledge."<sup>4</sup>

Textbook authors should consider that psychological principles and findings related to educational problems were in a position to shift into an "interactive relationship among research, development, and application."<sup>5</sup> Therefore, the need to investigate recent trends in educational psychology textbooks seemed essential.

#### Statement of the Problem

The primary problem of the study was to determine the trend in educational psychology as demonstrated by textbooks during the period between 1970 and 1974. A secondary problem was to identify the approach in which authors included in the study attempted to manage the content of the textbooks. More specifically, (1) Did the educational psychology textbooks published during the period between 1970 and 1974 illustrate the applicability of specific learning theories to teaching? (2) What theoretical approaches were employed by the authors in their attempt to organize the content of educational psychology textbooks?

#### Significance of the Study

Teachers have long been concerned with evaluating the effectiveness of their work. Educational psychologist have been

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George J. Mouly, Psychology for Effective Teaching. (New York: Holt, Rinehart and Winston, Inc., 1973), p. vi.

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Robert Glaser, op. cit., p. 565.

no less concerned with the effectiveness of their efforts in the preparation of teachers. Also of primary importance was the necessity to recognize the dynamic nature of educational psychology; what was appropriate even a few years ago is no longer acceptable as new knowledge and new insight as new demands emerge. Also, greater changes have taken place in American schools within the past few years than have occurred in over a century, and the momentum of change is increasing. Presumably, with the increasing knowledge in the area of psychology, changes should occur in the contents of educational psychology textbooks as well. A concise analysis of current textbooks which propose to deal with the applicability of specific learning theories has not received the attention of researchers. Also, the approaches which were used by authors to manage the texts' content have not been investigated recently. Because of the absence of research in these areas, this study was undertaken. The findings would have implication for (1) teacher education, (2) curriculum design, (3) textbook writers, and (4) strategies for teaching processes.

#### Hypotheses

The primary hypothesis was drawn directly from the problem statements.

H<sub>1</sub>: There was a trend for the more recently published textbooks of educational psychology to demonstrate more of the applicability of specific learning theories to teaching in selected areas.

H<sub>2</sub>: There was a trend to emphasize the Stimulus-Response

or Cognitive approach in the organization of the content of educational psychology textbooks.

#### Limitation of the Study

The selection of textbooks to be used in the study were limited to those which were available for use in college courses in educational psychology. This selection was further limited to textbooks published in the United States from 1970 to 1974.

#### Review of the Literature

The purpose of this section was to present a review of related literature to serve as a frame of reference for this study. The study of educational psychology courses have been many and varied. Types of studies reviewed which were relevant to the problem of this investigation were as follows: (1) studies of the function of educational psychology, and (2) studies of the contents of educational psychology textbooks.

#### Studies of the Function of Educational Psychology

Educational psychology has been assigned a major position in the preparation of prospective educators. A relatively recent study in content analysis of educational psychology textbooks was carried on by Sanner<sup>6</sup>. She studies twenty books in the field of educational psychology. All of these books were published between 1951 and 1970, five representative books for each

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R. N. Sanner, "A Trend in Educational Psychology as Demonstrated by Textbooks, 1951-1970." (Unpublished Ph.D. Dissertation, St. Louis University, 1971).

five-year period. Each textbook was examined to determine content management within ten areas. After evaluation of the contents of these books, the author stated:

The educational psychology textbooks published during the period of time between 1951 and 1970 illustrated the application of psychological principles to the practice of teaching. There was more application toward the end of that period than at the beginning of the same period. There was a trend for the more recently published textbooks to demonstrate more of the practical application for teaching.<sup>7</sup>

Sanner presented a rather comprehensive review of the literature and the status of the area of educational psychology in her study. She reviewed literature on educational psychology from 1949 to 1969. She gave special attention to important studies which purported to investigate the role of educational psychology in the preparation of teachers and the evaluation of textbooks. In the process of her review of the role of educational psychology in the preparation of teachers, Sanner's research was concerned with the studies of Trow, Bruce, Gardner, Ausubel, Anderson, and Freeman. In her general findings, she pointed out that:

... many noted educators have agreed that teachers need educational psychology--they need the knowledge and they need to be introduced to the application of that knowledge to the practice of teaching. Whether we call it a professional program, relationship to educational practice in the schools, equipping teachers with techniques and procedures, direct concern with school learning, or technical knowledge; it all come down to the same point: educational psychology courses should illustrate the application of psychological principles to the practice of teaching. Textbooks, as sources of information for the formal study of the subject, should aid this endeavor....<sup>8</sup>

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<sup>7</sup>

Ibid., p. 68.

<sup>8</sup>

Ibid., p. 9.

In her review of literature on the evaluation of educational psychology textbooks, Sanner investigated the following areas: (1) how educational psychology improved the programs of teacher education, (2) how the content of educational psychology textbooks was handled, and (3) how to apply psychological principles to solve practical problems in education. She examined eight major studies which discussed the three areas above. She found from her review that:

... the need for educational psychology courses to aid the prospective teacher in solving classroom problems has been repeatedly specified. The textbooks have been evaluated on the basis of content and there have been great differences in specific topics. At the same time the studies of content have indicated that there is commonality existing in broad areas covered by the textbooks. Two authors have identified an attempt to breach the gap between theory and educational practice. They noted a trend that was based upon examination of six books. The trend was discovered in the area of experimental studies and their interpretation. These same two authors predicted that further application of psychological principles would be demonstrated by the future textbooks. The literature that has been surveyed has not been directed toward examining the validity of this prediction.... No studies have been found that have explored how the content of the educational psychology textbooks is handled....<sup>9</sup>

One of the early studies reported by Lynch<sup>10</sup> pointed out that the common problem in current educational psychology textbooks was too abstract, disconnected, and lacking in practical applicability. He proposed that the function of educational psychology should include both theoretical and practical concerns. This

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Ibid., pp. 15-16.

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W.W. Lynch, Jr., "How Can We Improve the Psychological Preparation of Teachers?" The Journal of Teacher Education, 8, (December, 1957), pp. 409-414.



approach was found on the kind of conclusions presented as follows:

There is little evidence to substantiate the assumption that even the most thorough intellectual grasp of valid psychological facts and principles in a course can be expected to result in a correspondingly high degree of "face-to-face", "deliberative", and "philosophical" competence expected of the professional teacher.<sup>11</sup>

This fundamental concern indicated that neither theory nor practice alone produced a more effective teacher. He also proposed that teachers were required to have psychological competence for teaching in three areas<sup>12</sup>: (1) skill in the face-to-face relationship, (2) ability in deliberation, and (3) philosophic competence. He recognized that educational psychology should provide teachers with these skills.

Aspy<sup>13</sup> had supplied the majority of research on the course of educational psychology. He described three different positions which educational psychologists emphasized in the field of educational psychology. The first position was that educational psychologist should be increasingly occupied with theory and less with practice. The second position suggested that courses in educational psychology are too theoretical and do not enhance teacher effectiveness. The third position emphasized theory development and practical problem solving. In conclusion he made the statement that, "Educational psychology is moving into a

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<sup>11</sup>

Ibid., p. 412.

<sup>12</sup>

Ibid., p. 410.

<sup>13</sup>

David N. Aspy, "Educational Psychology: Challenged or Challenging?" The Journal of Teacher Education, XXI No. 1 (Spring, 1970), pp. 5-23.

period where it has an opportunity to prove that it can deliver in terms of improving classroom teaching."<sup>14</sup>

In summary, the function of educational psychology was that educational psychology could provide for effective teaching. Most educators agreed that the value of educational psychology was the foundation course required of all teacher trainees. Further the course in educational psychology which should present the application of psychological principles into the practice in classroom teaching had reflected attention by educational psychologist and textbook authors.

#### Studies of the Contents of Educational Psychology Textbooks

Studies with respect to the content of educational psychology has been revealed in the early years of this century. The best known was Worcester.<sup>15</sup> He attempted to study the agreement or lack of agreement with respect to the subject matter which was presented by five generally used textbooks of the 1920's. The results indicated that there was an amazing lack of agreement among textbook authors as to what ought to constitute the subject matter of educational psychology. In 1942, Emme<sup>16</sup> used content analysis to examine nineteen textbooks in educational psychology which had been published from 1933 to 1941. He gave special

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<sup>14</sup>

Ibid., p. 11.

<sup>15</sup>

D. A. Worcester, "The Wide Diversities of Practice in First Course in Educational Psychology," Journal of Educational Psychology, 18, (1927), pp. 11-17.

<sup>16</sup>

Earle E. Emme, "Content Analysis of Nineteen Textbooks in Educational Psychology," Education, 63, (1942), pp. 168-171.

attention to the reorganization of sixty different topics into a final nineteen. In his findings, Emme noted that "Learning is still the topic discussed most in textbooks of educational psychology,"<sup>17</sup> while other topics had changed in their importance of rank during the period between 1933 and 1941. This study did not indicate how the content was handled in specific areas of learning.

Lyon<sup>18</sup> attempted to analyze the difficulties of students at a state teachers college and to apply to the organization of educational psychology some of the principles taught therein. He reported that "most textbooks in the field concur in the opinion that the heart of educational psychology is learning."<sup>19</sup> In 1958, Hountras<sup>20</sup> presented the problem of course content in the field of educational psychology. He stressed that much overlapping occurred between educational psychology and elementary psychology, and reorganized subject matter should be undertaken. He proposed a course outline which consisted of four major areas: (1) Introduction, (2) Growth, (3) Learning, and (4) Adjustment. Again, these studies failed to show the way in which the authors handled the textbooks' content.

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<sup>17</sup>

Ibid., p. 171.

<sup>18</sup>

Margaret C. Lyon, "Tailoring Educational Psychology to Fit Students," The Journal of Teacher Education, 4, (December, 1953), pp. 310-313.

<sup>19</sup>

Ibid., p. 311.

<sup>20</sup>

P. T. Hountras, "Suggested Course Content for Introductory Educational Psychology," Junior College Journal, 28, (March, 1958), pp. 398-403.

A rather comprehensive review of literature concerned with the content of educational psychology textbooks was presented by Sanner as mentioned in the last section. From the review of literature it appeared that educational psychology courses should provide prospective teachers with practical learning principles. Textbooks, as sources of information for the formal study of the subject, should include the applications of specific learning theories to teaching.

## CHAPTER II

### DESIGN OF THE STUDY

The testing of the stated hypotheses of this study required six segments as follows: (1) selection of random textbooks for analysis and evaluation, (2) selection of specific learning theories for analysis and evaluation, (3) selection of areas within the textbooks for investigating the degree of applicability of the learning theories, (4) delineation of these areas, (5) establishment of evaluation criteria, and (6) analysis of the textbooks. Several of the procedures in this study were similar to that of Sanner's<sup>1</sup> in that this study was somewhat of a replication, but with textbooks published more recently and with the intent and scope of the study being different. The intent of Sanner's study was to determine if the educational psychology textbooks published between 1951-1970 illustrated the application of psychological principles to the practice of teaching, while the intent of this study was to determine if the educational psychology textbooks published between 1970 and 1974 illustrated the applicability of specific learning theories to teaching, and what theoretical approaches were employed by the authors in their attempts to organize the content of these textbooks.

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<sup>1</sup> Sanner, op. cit., p. 17.

### Selection of the Textbooks

The titles of textbooks selected for analysis in this study were secured from the Cumulative Index, Books in Print, Publishers' Catalogs, Bibliographies, and other reference sources. Eighteen textbooks were published in the first edition during the period from 1970 to 1974. These textbooks met the requirements of being suitable for college courses in educational psychology. The textbooks appropriate for use as basal texts, only, were considered and all books of readings and contributions were eliminated.

A random selection of 15 textbooks used in this study was made from a total of 18 books. There were two textbooks published in 1970, four in 1971, four in 1972, three in 1973, and two in 1974. These textbooks are listed in Appendix A.

### Selection of the Specific Learning Theories

The psychology of learning is the study of the process of behavior changes through experience. Most psychologists and professional educators agree that the effective classroom depends on the effective application of the principles of learning and experiences with them.

Learning theories roughly fall into two major families: Stimulus-Response and Cognitive theories. It was recognized, however, that not all theories belonged to these two families. Because of overlapping of theories and problems in classification, six contemporary learning theories were selected for use in the

analysis and evaluation of the selected educational psychology texts. Consideration was given to the application of these specific theories to the teaching-learning process as presented in the chosen texts. The six theories were:

1. Stimulus-Response theory
2. Cognitive theory
3. Motivation and Personality theory
4. Drive-Reinforcement theory
5. Hierarchical Model
6. Observational Learning

These learning theories represented important information about the various types of learning processes which could be applied to classroom practice.

The way in which a problem was formulated, determined in large measure the methodology used by researchers. Similarly, the design or organization of a book was determined by the approach of the writer. Many times no single approach was conceded to by any of the textbook writers.

In the analysis of textbooks of educational psychology this writer planned his approach to provide the major contributions from psychology for educational practice. He presented the content in a manner that could be both understood and used by educators and teachers. The broad and classical theoretical approaches which represented current ideas to manage the content of textbooks were the Stimulus-Response approach and the Cognitive approach.

The Cognitive approach was of special interest in view of the increasing emphasis on meaningfulness, structure, and understanding. The writer, for example, presented the ideas of Gestalt psychology and discovery learning in which both would be recognized in the representation of the Cognitive approach. The emphasis on conditioning, the shaping method, and behavior modification as a learning process was classified under the Stimulus-Response approach.

#### Selection of Areas

The areas within each textbook that were selected for investigation and evaluation were:

- A. Subject Matter Learning
- B. Objectives
- C. Research Reporting
- D. Instructional Strategies
- E. Individual Differences Relating to Adaptation
- F. Teaching Models
- G. Motivation
- H. Human Relationship

This selection of areas which presented possibilities for covering the range of applicability of learning theories seemed plausible. Sanner presented two basic reasons for selection areas for study which she quoted from other sources, those based on recent research and those based on empirical knowledge:

When Blair (1949) reported content studies of educational psychology textbooks, he wrote of grouping the topic into four broad areas. Those areas were Human Growth and



Development, Learning, Personality and Adjustment, and Tests and Measurements. ... Nunney (1964) demonstrated five broad areas that were consistent in content studies. They included the four noted above plus one additional area: Techniques and Method in Educational Psychology. Logically, the areas to be analyzed and evaluated should be within this consistently demonstrated scope of typical and representative textbooks. The second reason for selection of these areas for analysis and evaluation was based upon empirical knowledge.<sup>2</sup>

Similarly, the basic reasons for choosing the areas in this study were in terms of recent research and empirical experience which reflected the intent of leaders in the field of educational psychology. These areas appeared to be most valuable to service in school practice.

#### Delineation of Areas

In the collection of data from each of the fifteen textbooks, the researcher delineated the areas as a specific guide for analysis and evaluation. The process was followed for testing the first hypothesis. Two constituents of each area were identified as concept and application. An example was presented in the identification of the constituents of each area. Representative examples were extracted from the selected textbooks.

#### Subject Matter Learning

Concept and application were identified where definition and interpretation were included in each concept. Two aspects regarding application were discussed: (1) the structure and sequence of school subject matters and (2) how knowledge was organized.

Example: "The first and most obvious problem is how to construct curricula that can be taught by ordinary teachers to ordinary students and that at the same time reflect clearly the basic or underlying principles of various fields of inquiry. The problem is twofold: first, how to have the basic subjects rewritten and their teaching materials revamped in such a way that the pervading and powerful ideas and attitudes relating to them are given a central role; second, how to match the levels of these materials to the capacities of students."<sup>3</sup>  
 "The term 'subject matter' or 'content' are used in fairly broad sense, as their level of specificity is highly variable, depending upon the characteristics of the curricular unit."<sup>4</sup>

### Objectives

Concepts of the instructional objective were identified as definition and interpretation. For application, three constituents were indicated. These contained methods of utilization for teachers, helping students to understand instructional procedure, and evaluation of teaching tasks.

Example: "This book has taken the position that behavioral objectives are highly instrumental in the teaching-learning process. As we have learned, if the teacher specifies the expected student learning behaviors, such statement will (1) assist the teacher's instructional sequence, (2) serve as a reference point for student in understanding the instructional procedures, and give both teacher and students a basis for evaluation upon completion of the teaching-learning tasks. In short, behavioral objective can broaden student and teacher perception of the learning process and therefore result in more varied methods of teaching and evaluation and more effective learning."<sup>5</sup>

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Robert F. Biehler, Psychology Applied to Teaching.  
 (Boston: Houghton Mifflin Company, 1971), p. 7.

4

Hershel D. Thornburg, School Learning and Instruction.  
 (California: Brooks/Cole Publishing Co., 1973), p. 356.

5

Ibid., pp. 307-309.

"Usually, an instructionally usable objective must state the intended outcome in terms of terminal behavior (that is, behavior following instruction); the activities and conditions that the student is to follow in order to achieve the objective; and the minimal, required standards of performance."<sup>6</sup>

### Research Reporting

The reporting of learning theories research was identified by the reference provided. For application, the explanation of the research which presented the specific learning theories was identified as a component in this area.

Example: "In this writing we have presented supplementary materials of special interest set off from the main text by a green border. It is our hope that these summaries of research, theoretical points of view, and philosophical stances will stimulate reflection and colloquy among students who may use this volume as a textbook in their introduction to educational psychology. We believe that students should have the privilege of confrontation with the basic issues as they are viewed by our most productive and respected theoreticians and investigators. In our selection of research studies to support psychological generalizations and to illustrate scientific principles we attempted a representative sampling--choosing some classic but mostly recent reports, presenting some correlational but a much greater number of experimental findings, citing some findings obtained from animal studies but the larger bulk from research with children and adolescents. We also sampled freely from diverse theoretical orientations, in the belief that no single one is adequate for meeting the teacher's needs and that the availability of some educated hunches, however fragmentary, is generally better than no knowledge. ... the finding of psychological research at best usually have only implications for modifying the teaching arts."<sup>7</sup>

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Richard J. Mueller, Principles of Classroom Learning and Perception: An Introduction to Educational Psychology. (New York: Praeger Publishers, 1974), p. 222.

7

Francis J. Di Vesta and George G. Thompson, Educational Psychology: Instruction and Behavioral Change. (New York: Appleton-Century-Crofts, 1970), pp. x-xi.

## Instructional Strategies

Definition and interpretation were identified in the concept. For application three components were identified, such as, programmed instruction, procedures, and techniques. The programmed instruction was considered in terms of the format of programmed texts or teaching machines. Instructional materials that were programmed to specifically meet certain learning tasks were a unique form of educational media. The procedures of instruction were related to the various teaching processes where techniques of instruction included the discussion of various teaching, planning, skill, verbal sequence, and problem solving.

### Examples:

Programmed Instruction: "The term 'Teaching Machine' was initially popularized by Skinner himself in an article he wrote entitled 'Teaching Machines'. In reality, though, the heart of the teaching machine, the only really important part of it, was the programmed material that went inside. Soon the machine part faded from the science, and what we had left were the printed programmed materials. Programmed means that the content to be learned is broken into small sequential steps. Completion of all the small steps, accompanied by reinforcement in the form of 'being right', leads students through successive approximations to the overall desired behavior."<sup>8</sup>

Procedures of Instruction: "... the final goal of teaching is to promote the general understanding of the structure of the subject matter. Bruner stresses the importance in learning of forming global concepts, of building coherent generalizations, of creating cognitive gestalts. Bruner tells the teacher to help promote conditions in which the student can perceive the structure of a given subject. When learning is based on a structure, it is more long-lasting and less easily forgotten."<sup>9</sup>

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C. M. Charles, Educational Psychology. (St. Louis: Mosby, 1972), p. 132.

9

Richard C. Sprinthall and Norman A. Sprinthall, Educational Psychology: A Developmental Approach. (Mass.: Addison-Wesley Publishing Co. Inc., 1974), p. 219.

The Techniques of Instruction: Chapter two. How to Plan Instruction: a section of four manichapters whose purpose is to present ideas, make suggestions, and fling exhortation, all having to do with preparing for instruction."<sup>10</sup>

#### Individual Differences Relating to Adaptation

The components of abilities and behavior were identified in the concept. Children grew and developed according to certain principles, but there were wide differences in the rate of development, behavioral characteristics, and aptitudes and abilities of any group of children or adults. For application, two aspects of suggestion were identified for helping teachers to understand individual differences in children. These were diagnosis and remedial processes and method of adjustment.

#### Examples:

Abilities: "Teachers at all grade levels must recognize and provide for individual difference among a group of pupils. One of the major findings of child study is to provide the teacher with a better understanding of differences that will appear among the pupils in her classroom. Through different expectation, differentiated or flexible assignments, and intraclass grouping for special assignments, teachers are able to meet this problem more effectively. No basic idea belongs exclusively to a particular age level or grade. The real problem is when certain types of understanding and performance can be taught by using appropriate method of instruction. However, the idea of uniform assignments, uniform curriculum, and uniform expectations must give way to increased flexibility, if each child is to be given the opportunity to his capabilities, background of experiences, and present needs."<sup>11</sup>

Behavior: "Every organism strives to satisfy its needs by seeking appropriate relationships with a variety of preferred environmental conditions. The physiologist speaks

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<sup>10</sup>

C. M. Charles, op. cit., p. 33.

<sup>11</sup>

Karl Garrison and Robert A. Magoon, Educational Psychology: An Intergration of Psychology and Educational Practices. (Ohio: Merrill Publishing Co., 1972), pp. 385-386.

of homeostatic processes whereby the organism normally maintains a stable internal state in its interactions with the external world.... The psychologist has developed a somewhat similar concept called psychological adjustment whereby the organism tries to satisfy its native and acquired needs by varying patterns of behavior."<sup>12</sup>

### Teaching Models

The concept of models which was basic to the organization of any learning experience to enhance effective teaching in the classroom was identified. The concept of application consisted of types of teaching models and the process of enhancing effective teaching in the classroom.

Example: "... the entire process of teaching can nonetheless be reduced to something simple enough to be both understandable and useful. This reduction is provided in the form of a teaching model. The model consists of the teacher, the student, the goals of the educative process, and instructional and evaluation procedures. The teaching process begins when the teacher decides what the specific goal for a particular lesson are. He must then ask himself what instructional strategies are most likely to lead to these goals. The answer will depend on the student's present level in relation to the goals. The teaching process proper involves employing the chosen strategies. It terminates with evaluation, designed to determine whether the goals were attained. This text is primarily intended to increase the teacher's understanding of the child so that he can make better decision relation to instructional strategies."<sup>13</sup>

### Motivation

The concept and interpretation of motivation were

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<sup>12</sup>

Di Vesta and Thompson, op. cit., p. 87.

<sup>13</sup>

Guy R. Lefrancois, Psychology for Teaching: A Bear Always Faces the Front. (California: Wadsworth Publishing Co., 1972), pp. 11-12.

identified as various theories and processes related to the teaching-learning situation. Methods for utilization of the concept and modes of guidance for the teacher in the classroom were included in the application.

Example: "In common usage the term 'motivation' refers to what makes us 'go'. As such, motivation is basic to all human activity; thus it is an integral component of learning in the classroom....

The classroom teacher's task is to facilitate students' growth toward goals. Thus, the teacher must somehow guide, direct, and maintain his students' attention toward certain goals. Obviously the goals of the students may differ from those of teachers. The basic and pervasive job of the teacher, then is to have his goals become the goals of the learners....

Educational psychologists consider motivation an intervening variable not directly observable. It refers to a generalized state of the learner to respond in particular way. Its character is inferred from observed behavior.... From such observations, at least two components can be noted. First, something is energizing the students to work, and second, something is lending direction to their activity...."<sup>14</sup>

#### Human Relationship

The concept of human relationship contained both the definition and interpretation. The interpretation of the concept was confined to the classroom situation which included the climate of the classroom, types of relationship, and utilization of the concept to teaching.

Example: "The three most important variables in a classroom situation are the individual learner, teacher, and other pupils. Each of these has his unique characteristics. Special attention is given in this section to teacher-pupil interactions and to classroom interaction in general.... How a teacher interacts with pupil will

depend largely upon what she believes is expected of her in her various roles as a teacher. Some of these expectations are fairly well defined or understood; other, related to teacher personality, are vague; other are affected by the character of the community and school. The manner in which the teacher interacts with pupils will affect the interests, motives, social development, and cognitive outcome of classroom instruction."<sup>15</sup>

### Evaluation Criteria

In order to analyze and evaluate the applicability of learning theories the following scale was devised after that of Sanner:<sup>16</sup>

<u>Coding Number</u>	<u>Qualification</u>
0.0	No mention of learning theory
1.0	Mentioned as a learning concept
1.1	Discussed as a separate learning concept
2.0	Mentioned as applicable to teaching practice
2.1	Mentioned as separate application to teaching
3.0	Discussed for specific application to teaching and relevance explained
3.1	Discussed for specific application to teaching, relevance explained, methods suggested or examples provided

The examples for evaluation criteria were as follows:

- 1.0 Motivation "Directly resultant from Thorndike's work came the drive reduction theory of Hull. Hull concluded that all motives were related to basic physiological needs and that these physiological needs gave rise to certain psychological or social drives which were learned by the organism. Hull termed the physiological needs primary drives, which

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<sup>15</sup>

Karl Garrison and Robert A. Magoon, op. cit., p. 455.

<sup>16</sup>

Sanner, op. cit., p. 31.



he defined as an aroused state of the organism (motivation) produced by basic physiological needs. ... that compelled the organism to act to reduce the drive and restore equilibrium. The psychological or social drives were termed secondary drives, and Hull postulated that these secondary drive are learned by the organism as they accompany a primary drive and are associated by the organism with the physiological drive reduction.... These roles are then associated with the drive reduction of eating and are learned as a secondary drive. Upon subsequent occasion, then the individual's newly learned social behavior may determine the way in which he reduces his hunger drive. Thus, the individual is not only motivated by hunger to eat (primary drive) but also to eat the food in a socially accepted way (secondary drive)."<sup>17</sup>

- 1.1 Individual Difference---Behavior. "The teacher must operate on the general behaviorist assumption that children can benefit from changes in their environment effected by school authorities. Nevertheless, the teacher must also regard each child as unique, important, and central to the learning process. Manipulation of the environment is vital, but it won't work unless the teacher takes careful note of the ways in which each child perceives and reacts to these environmental changes."<sup>18</sup>
- 2.0 Subject Learning "... we do agree with Piaget's belief in the child's autonomy and his active participation in his own cognitive growth. We would hope that the theory would help make educators more aware of the child's development and would guide them to attempt to make appropriate changes in curricular ...."<sup>19</sup>
- 2.1 Motivation "One of the principal aids a teacher can use to accomplish the task of effective communication is utilization of present knowledge about how children learn. Psychologists have gathered a great deal of information about the learning process, using both observational and experimental methods. Much of this data has direct implications for education, and dissemination of results of such psychological inquiry

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<sup>17</sup>

Hershel D. Thornburg, op. cit., p. 240

<sup>18</sup>

Richard J. Mueller, op. cit., p. 124.

<sup>19</sup>

Marvin Powell and Robert E. Mangum, op. cit., p. 22.

may inspire change not only in what is taught but innovations in the way material is presented. The same principles of learning that are relevant in the educational setting also contribute substantially to the child's development outside the school. Knowledge of these principles should thus aid teachers not only in arranging the immediate classroom environment but in understanding children's behaviors in general."<sup>20</sup>

### 3.0 Instructional Strategies---Relevance Explanation.

"Whereas the teaching machine is the S-R educational method par excellence, the discovery approach is perhaps the best example of the field theorist's pedagogic technique. If, as a teacher, you were to become an advocate of the discovery approach, you would try to provide situations which would encourage insight so that your pupils could discover ideas on their own. You would supply subtle assistance but would not try to manipulate or shape behavior. The new math and science curricula exemplify the discovery approach; pupils are encouraged to develop their own ways of solving problems and thereby gain insight into the basic processes of mathematics and physical science. In all subject areas the discovery approach usually involves considerable class discussion whereas in programmed learning the student works independently on a program."<sup>21</sup>

### 3.1 Programmed---Relevance explained and methods suggested. "Taking all the these points into account, you may decide that the most realistic approach is to use selected aspects of programmed learning within the framework of the traditional classroom. In this section you will find some suggestions on how to do this--how to apply the principles and techniques of operant conditioning in your own classes. These suggestions are derived from the experiments described at the beginning of this section, and they have been developed in an attempt to make the most of the advantages and to minimize the disadvantage of programmed learning just described. A summary of suggestion is given below to assist you to grasp the overall structure of this section in advance and to provide a concise list for future reference....

1. Remain aware of the extent and disadvantage aversive control.

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<sup>20</sup>

CRM Books, Educational Psychology: A Contemporary View. (California: CRM Books, 1973), p. 145.

<sup>21</sup>

Robert F. Biehler, op. cit., p. 30.

2. Provide as much reinforcement as possible--in most cases, immediately after a pupil responds.
3. If students generalize erroneously, use selective reinforcement to teach them to discriminate.
4. If you are teaching a subject which has clearly specified terminal behavior, organize the work into units, or steps, and present these in sequence.
5. If you are attempting to shape behavior by leading your students through a progressive of stages, vanish your prompts properly.
6. Keep in mind the impact of different schedules of reinforcement on the rate of extinction.
7. Be sure to consider the potential value of programmed instruction when working with the disadvantaged, slow learners, or pupils who lack self-confidence.
8. When appropriate, apply programmed learning principles to the handling of discipline problems."<sup>22</sup>

This scale was used to evaluate the applicability of the learning theory to the selected areas. It did not apply itself to the analysis of the approaches with which the authors managed the content of their textbooks.

#### Analysis of the Textbooks

The first step in the analysis was a broad examination of each textbook. Chapter headings, topic headings, and indexes were checked for references to the areas, as well as for indications of where the areas were located within the textbook.

After the initial examination a set of check sheets was made for each textbook analyzed. Statements of learning theories and established delineations of the area selected for analysis were listed on the sheets. As the analysis progressed, a proposed

scale of measurement was used to evaluate the content of each area in order to collect data for testing hypothesis one of the study. The preface and introduction chapter in each textbook were analyzed thoroughly in an attempt to investigate the references which might present the theoretical approach taken by the author in the preparation of his text.

## CHAPTER III

### THE FINDINGS

In order to test the hypothesis that a trend existed in the more recently published textbooks of educational psychology which demonstrated more applicability of specific learning theories to teaching in selected areas, three steps were included. These steps were: (1) analysis of content, (2) analysis of the management of the content in which each of the eight selected areas were discussed separately, and (3) analysis of the general trend.

Hypothesis two stated that there was a trend to emphasize the Stimulus-Response or Cognitive approach in the organization of the content of educational psychology textbooks. The procedure used to test this hypothesis was an analysis of the presentation in which authors attempted to emphasize the content of the textbooks and the approach used in explaining the learning process.

#### Analysis of Content

Prior to analysis of the management of the content of the selected textbooks, it was necessary to demonstrate the actual presence or absence of the areas in which the selected specific learning theories were discussed by the authors in their respective textbooks. In order to determine how the content was

presented, the data obtained from the individual analysis of each area of each textbook were tabulated in accordance with the five selected time periods. The presence or absence of the areas for the entire five-year period are presented in Table 1 by year. The individual analysis of each area of each textbook is presented in Tables 12 through 16 in Appendix B.

#### Subject Matter Learning

The area of application in subject matter learning was discussed more frequently in the texts than concepts. In 1972 and 1974, all the selected textbooks contained subject matter learning. Fifty percent of the textbooks had covered this area in 1970 and 1971 with a slight increase in 1973. In 1970 and 1974, the concept of this area was not discussed.

#### Objectives

In the four textbooks selected from 1971, and four others selected from 1972, two books contained the application of objectives in 1971 and one book in 1972 covered the application of objectives. None of the textbooks in 1970 and 1973 contained this area. In 1974 all selected textbooks discussed the area of objectives. In the area of concept of objectives there were no books that covered it in all the periods.

#### Research Reporting

All of the textbooks analyzed within all five time periods presented references to appropriate research.

TABLE 1

NUMBER OF TEXTBOOKS REPRESENTING EACH AREA  
OF ANALYSIS BY YEAR OF PUBLICATION

	1970 n=2	1971 n=4	1972 n=4	1973 n=3	1974 n=2
Subject Matter Learning					
Concept	0	1	1	1	0
Application	1	2	4	2	2
Objectives					
Concept	0	0	0	0	0
Application	0	2	1	0	2
Research Reporting					
Reference Provided	2	4	4	3	2
Instructional Strategies					
Concept	1	0	0	1	0
Application	2	3	4	3	2
Individual Differences					
Relating to Adaptation					
Concept	2	1	4	3	2
Application	1	3	4	3	2
Teaching Models					
Concept	0	0	0	0	0
Application	0	0	2	2	1
Motivation					
Concept	2	4	3	2	1
Application	1	2	1	1	1
Human Relationship					
Concept	0	0	0	0	0
Application	1	1	1	0	0

### Instructional Strategies

All of the textbooks examined within the time period of five years represented the area of application of instructional strategies, except one book published in 1971. Only two textbooks discussed the concept of instructional strategies, one in 1970 and one in 1973.

### Individual Differences Relating to Adaptation

All the selected textbooks in the period of 1972 through 1974 included the area of concept and application of individual differences relating to adaptation. Thus, there was a trend toward increased attention to this area by authors. Two textbooks did not show the application of this area, one in 1970 and the other in 1971. Three textbooks did not show the concept of this area in 1971.

### Teaching Models

Only five textbooks considered the area of the application of models. Two textbooks presented teaching models in both 1972 and 1973. In 1974, one textbook covered this area. However, there was a trend toward increased discussion in the area of teaching models, but no books showed the actual concept.

### Motivation

Most textbooks subsumed the concept of motivation. A void was evident in only three books in this area. There was one in 1972, one in 1973, and one in 1974. In view of the application



of motivation only one book in each period with the exception of 1971 contained this area. In 1971 two of the books emphasized motivation.

#### Human Relationship

The area of human relationship was ignored more than teaching models. Only three textbooks presented the application of human relationship, one in 1970, one in 1971, and one in 1972.

The investigation of the presence or absence of the areas indicated that subject matter learning, instructional strategies, individual differences relating to adaptation, and teaching models showed a slight trend in support of the hypothesis of this study. The second step based upon the manner of managing the various areas will be presented in the following section.

#### The Analysis of Management of Individual Areas

The textbooks selected for this study had been evaluated in accordance with the established scale of measurement previously described. The data obtained from the individual analysis of each area in each textbook was tabulated in accordance with the five selected time periods. A descriptive table was presented in order to indicate the degree of management of specific learning theories over the entire five-year period. Each area was discussed separately wherein the six specific learning theories were demonstrated and presented in Tables 12 through 16 in Appendix B.

#### Subject Matter Learning

Table 2 reflected that there was gradual increase in the

TABLE 2

THE EXTENT OF THE APPLICATION OF LEARNING THEORIES  
REPRESENTED IN THE AREA OF SUBJECT MATTER  
LEARNING IN SELECTED TEXTBOOKS

Subject Matter Learning												
Concept						Application						
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)	
1970												
Di Vesta & Thompson Travers						2.0	2.0			2.0		
1971												
Biehler Johnson Pitts Powell & Mangum		1.0				2.0	3.0			3.0		
						3.0			3.1			
1972												
Charles Garrison & Magoon Lefrancois Schwartz		2.0						2.0				
						3.0				2.0		
						3.1						
						3.0						
1973												
Anderson & Faust CRM Books Thornburg		3.0				3.0				2.0		
1974												
Mueller Sprinthall & Sprinthall						3.1						
						3.0						

Note:

The number in parenthesis is representative of learning theories presented on page 14.

degree of application of learning theory to subject matter learning. Five learning theories were represented in this area. Two textbooks contained the theory of Stimulus-Response. One textbook published in 1973 received a coding of 3.0 in reference to the concept of subject matter learning. The other textbook was assigned a coding of 2.0 in terms of covering the application of this area.

Eleven textbooks subsumed the Cognitive learning theory. The two textbooks that presented the concept of subject matter learning received the codings of 1.0 and 2.0. Of the nine textbooks covering the application of subject matter learning eight received a coding higher than 2.0. Six of the 8 textbooks received a coding of 3.0. In 1972 and 1974 there was one coded 3.1 in each period. There was a trend toward increased application of Cognitive learning theory.

Two textbooks included Motivation and Personality theory, one in 1970 and one in 1972. They each received a coding of 2.0. Only one textbook mentioned the Drive-Reinforcement theory which was published in 1971 and the coding of 3.1 was assigned to it. Four textbooks contained the Hierarchical Model learning theory. Of the four textbooks that presented the application of this concept to teaching only one existed in the second time period which received a coding of 3.0.

The evaluation of the management of subject matter learning revealed a trend toward more specific application of the Cognitive learning theory to teaching. The other learning

theories did not show a trend toward more specific application to the practice of teaching.

### Objectives

Table 3 showed that instructional objectives were not mentioned frequently. Of the five textbooks that presented this concept to the specific application to teaching, two books, both in 1974 received codings of at least 3.0. One received a coding of 3.0 in Cognitive theory and the other received a 3.1 in Stimulus-Response theory. Thus, there was more specific application of learning theories to the area of instructional objectives in the last period than in earlier periods.

Three textbooks, two in 1971 and one in 1972, contained the Hierarchical Model learning theory. All three of these textbooks received the coding of 2.0. Only one book presented Drive-Reinforcement theory in 1971 and it received a coding of 2.0. The concept of instructional objectives was not mentioned in any of these textbooks.

There was a trend toward more specific application of Stimulus-Response and Cognitive theories to the practice of teaching.

### Research Reporting

Table 4 reflected the utilization of research references within the textbooks. Twelve textbooks mentioned the Stimulus-Response learning theory. There was one coding of 3.1 in 1971, one coding of 3.1 in 1972, and one of 3.0 in 1973. Cognitive

TABLE 3

THE EXTENT OF THE APPLICATION OF LEARNING THEORIES  
REPRESENTED IN THE AREA OF OBJECTIVES  
IN SELECTED TEXTBOOKS

		Objectives											
		Concept						Application					
		(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
1970	Di Vesta & Thompson Travers												
1971	Biehler Johnson Pitts Powell & Mangum											2.0	
											2.0	2.0	
1972	Charles Garrison & Magoon Lefrancois Schwartz											2.0	
1973	Anderson & Faust CRM Books Thornburg												
1974	Mueller Sprinthall & Sprinthall								3.0				
								3.1					

## Note:

The number in parenthesis is representative of learning theories presented on page 14.

TABLE 4

THE EXTENT OF THE APPLICATION OF LEARNING THEORIES  
REPRESENTED IN THE AREA OF RESEARCH  
REPORTING IN SELECTED TEXTBOOKS

	Research Reporting Reference Provided					
	(1)	(2)	(3)	(4)	(5)	(6)
1970						
Di Vesta & Thompson	1.0	3.1	2.0		1.0	
Travers	1.0					
1971						
Biehler	1.0	1.0				
Johnson	1.0					
Pitts	3.1					
Powell & Mangum	2.0					
1972						
Charles	1.0					
Garrison & Magoon	1.0	3.0				2.0
Lefrancois	3.1			1.0		
Schwartz	2.0	3.0				
1973						
Anderson & Faust	3.0				3.0	1.0
CRM Books		3.0			3.0	2.0
Thornburg	2.0				2.0	3.1
1974						
Mueller				3.0		
Sprinthall & Sprinthall		2.0				

Note:

The number in parenthesis is representative of learning theories presented on page 14.

theory was mentioned in six textbooks. Four of these six textbooks received a high level coding: one of 3.1 in 1970, two of 3.0 in 1972, and one of 3.0 in 1973.

Two textbooks covered the Drive-Reinforcement learning theory where only one textbook received a coding of 3.0 which was published in 1974. Four textbooks presented the Hierarchical Model learning theory. Two of the textbooks which were both published in 1973 received coding of 3.0. Observational learning was mentioned in four books, but only one of the textbooks, 1973, received a coding of 3.1. One textbook presented the Motivation and Personality theory, and received a coding of 2.0.

There was no trend toward increased application of learning theories to the practice of teaching in the area of research reporting. The Stimulus-Response learning theory presented more application in 1973 than in any other period.

#### Instructional Strategies

As reflected in Table 5, the application of instructional strategies was mentioned frequently. All of the textbooks, except one in 1971 included this area. Two textbooks covered Cognitive theory, one in 1970 and one in 1973, received coding for concept of instructional strategies. The 1973 textbook received a coding of 3.1.

Of the 14 textbooks presenting the application of the Stimulus-Response theory, only two, one in 1970 and one in 1972, received low codings. There were two codings of 3.0 in 1971. All the rest of the textbooks received codings of 3.1.

The high codings of 12 textbooks mentioning the Cognitive

TABLE 5

THE EXTENT OF THE APPLICATION OF LEARNING THEORIES  
REPRESENTED IN THE AREA OF INSTRUCTIONAL  
STRATEGIES IN SELECTED TEXTBOOKS

Instructional Strategies													
		Concept						Application					
		(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
1970													
	Di Vesta & Thompson							3.1	3.0	3.1		3.1	3.0
	Travers		2.0					2.0				2.0	
1971													
	Biehler							3.1	3.1			3.1	
	Johnshon												
	Pitts							3.0					
	Powell & Mangum							3.0	3.0		3.1		
1972													
	Charles							2.0	3.0	3.0		3.0	2.0
	Garrison & Magoon							3.1	3.0			3.1	
	Lefrancois							3.1	3.1		2.0		2.0
	Schwartz							3.1	3.0			3.0	
1973													
	Anderson & Faust							3.1	3.0			3.0	
	CRM Books							3.1	3.0			3.1	2.0
	Thornburg		3.1					3.1	3.1			3.1	3.1
1974													
	Mueller							3.1	3.1				
	Sprinthall & Sprinthall							3.1	3.0				

## Note:

The number in parenthesis is representative of learning theories presented on page 14.



theory in application of instructional strategies remained unchanged. All of the textbooks received codings above 2.1 for this application. There was one coding of 3.0 in 1970; one of 3.0, and one of 3.1 in 1971; three of 3.0 and one of 3.1 in 1972; two of 3.0 and one of 3.1 in 1973; and one of 3.0 and one of 3.1 in 1974.

Two books covered Motivation and Personality theory, one in 1970 and one in 1972. The coding of the 1970 book was 3.1 and the other was 3.0. Nine textbooks presented the Hierarchical Model learning theory. Only one textbook, published in 1970, received a coding lower than 3.0. Of the other textbooks receiving coding for the degree of application two received 3.1 and one 3.0 in 1973, two received 3.0 and one 3.1 in 1972. In the periods of 1970 and 1971, one textbook in each year received the coding of 3.1. There were five textbooks mentioning Observational learning in the application of instructional strategies. Two of the five textbooks received high codings, one was 3.0 in 1970, and one was 3.1 in 1973. Two textbooks contained the theory of Drive-Reinforcement. One textbook published in 1971 received a coding of 3.1. The other textbook was assigned a coding of 2.0 in 1972.

In summary, all specific learning theories were mentioned in this area. Most textbooks dealt with the application of learning theories to instructional strategies and they maintained a high level of coding for the entire time period. In the area of instructional strategies there was a trend toward increased application of Stimulus-Response and Cognitive theories to teaching.

### Individual Differences Relating to Adaptation

Table 6 showed the degree of management in this area where 12 textbooks discussed the concept of individual differences relating to adaptation which pertained to specific learning theories. Five textbooks which mentioned Stimulus-Response theory received codings. Four of the five textbooks received high codings. There were two codings of 3.0 in 1972, one of 3.0 in 1973, and one 3.1 in 1974. With respect to Cognitive theory only one textbook accrued the coding of 3.0 which was in 1972. The other eight textbooks pocketed a coding below 3.0. The theories of Motivation and Personality, Drive-Reinforcement, and Observational learning received a coding below 3.0.

In the application of individual differences relating to adaptation 12 textbooks received codings in Stimulus-Response learning theory. Eleven of the 12 textbooks received codings above 2.1. There were two codings of 3.1 in 1971; two of 3.1 and two of 3.0 in 1972; two of 3.1 and one of 3.0 in 1973; and two of 3.1 in 1974. Two textbooks exhibited the Cognitive theory and received codings for their application. One of the two textbooks received a coding of 3.1 in 1971 and the other a 3.0 in 1974. The Motivation and Personality theory which was presented in only one textbook, 1970, received a coding of 2.0. The Observational learning increased slightly more in 1973 than in earlier years. The coding of the textbook in 1973 was 3.0.

In summary, there was a trend toward increased application of the Stimulus-Response theory to the whole area in the practice

TABLE 6

THE EXTENT OF THE APPLICATION OF LEARNING THEORIES  
REPRESENTED IN THE AREA OF INDIVIDUAL DIFFERENCES  
RELATING TO ADAPTATION IN SELECTED TEXTBOOKS

Individual Differences Relating to Adaptation												
	Concept						Application					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
1970												
Di Vesta & Thompson			2.0						2.0			2.0
Travers	1.0	1.0	2.0									
1971												
Biehler		1.0					3.1	3.1				
Johnson							2.1					
Pitts							3.1					
Powell & Mangum												
1972												
Charles	3.0						3.1					
Garrison & Magoon	3.0	1.0					3.0					
Lefrancois		1.0					3.1					2.0
Schwartz		3.0					3.0					
1973												
Anderson & Faust					1.0		3.1					
CRM Books	3.0	1.0			1.0		3.0					
Thornburg		1.0					3.1					3.0
1974												
Mueller	3.1	1.0		2.0			3.1	3.0				
Sprinthall & Sprinthall		2.0					3.1					

## Note:

The number in parenthesis is representative of learning theories presented on page 14.

of teaching. The degree of application of the Observational learning theory to the practice of teaching increased only slightly in 1973.

#### Teaching Models

The coding for management of the area of teaching models is presented in Table 7. None of 15 textbooks received a coding for the concept of teaching models but five textbooks received a code in the area of the application. Only one textbook received the coding of 2.0 where three textbooks obtained a high coding of 3.1, one in 1974 and two in 1973. The textbook published in 1972 received a coding of 3.0.

To summarize, three learning theories appeared in textbooks discussing teaching models. All of the theories after 1971 received codings which suggested that there was a trend toward increased application of Stimulus-Response, Cognitive, and Observational learning theories to the area of teaching models in the practice of teaching.

#### Motivation

Table 8 demonstrated the management of the learning theories in the area of Motivation. The concept of Motivation received a low coding in 1970, 1973 and 1974. All of the textbooks received a coding of 1.0. In 1971, four textbooks presented the concept of Motivation. Only one of the four textbooks received a coding of 3.0. Three textbooks received a coding in 1972, two of which received the coding of 1.0. The other textbook received two

TABLE 7

THE EXTENT OF THE APPLICATION OF LEARNING THEORIES  
REPRESENTED IN THE AREA OF TEACHING MODELS  
IN SELECTED TEXTBOOKS

		Teaching Models											
		Concept						Application					
		(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
1970	Di Vesta & Thompson Travers												
1971	Biehler Johnson Pitts Powell & Mangum												
1972	Charles Garrison & Magoon Lefrancois Schwartz							3.0					2.0
1973	Anderson & Faust CRM Books Thornburg							3.1					3.1
1974	Mueller Sprinthall & Sprinthall							3.1					

## Note:

The number in parenthesis is representative of learning theories presented on page 14.

TABLE 8

THE EXTENT OF THE APPLICATION OF LEARNING THEORIES  
REPRESENTED IN THE AREA OF MOTIVATION  
IN SELECTED TEXTBOOKS

		Motivation											
		Concept						Application					
		(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
1970													
	Di Vesta & Thompson	1.0	1.0		1.0					3.0			
	Travers	1.0											
1971													
	Biehler		1.0					3.0	3.1	3.0			
	Johnson	1.0											
	Pitts	2.0											
	Powell & Mangum	1.0			3.0						3.1		
1972													
	Charles Garrison & Magoon	2.0	1.0							3.0			
	Lefrancois	1.0											
	Schwartz		1.0										
1973													
	Anderson & Faust	1.0											
	CRM Books												
	Thornburg	1.0											3.0
1974													
	Mueller	1.0	1.0										3.0
	Sprinthall & Sprinthall												

## Note:

The number in parenthesis is representative of learning theories presented on page 14.

codings, one of 2.0 and one of 1.0.

The application of Motivation as presented by the textbooks revealed a high level of coding. The Stimulus-Response theory received a coding of 3.0 in 1971. The Cognitive theory received two codings, one was 3.1 in 1971 and one was 3.0 in 1972. There was one coding of 3.0 in 1970 and 1971 respectively for Motivation and Personality theory. Two textbooks, one in 1973 and 1974, each received the coding of 3.0 for discussing the theory of Observational Learning. The Drive-Reinforcement theory received a coding of 3.1 in 1971.

In summary, the theory of Observational Learning as presented by two books received a coding of 3.0 in the last two year periods. This indicated that there was more application of this theory to Motivation in the practice of teaching.

#### Human Relationship

Table 9 showed that only three textbooks received a coding in the area of Human Relationship. All of the textbooks discussed only the application of Human Relationship. One textbook mentioned the theory of Motivation and Personality which received the coding of 3.0. The remaining two textbooks contained the Cognitive theory where one received a coding of 3.1 in 1971 and the other showed a 3.0 in 1972.

No trend was evident toward more application of learning theory to Human Relationship in the practice of teaching. The results showed a rather meager and stable treatment of learning theory with respect to Human Relationship.

TABLE 9

THE EXTENT OF THE APPLICATION OF LEARNING THEORIES  
REPRESENTED IN THE AREA OF HUMAN RELATIONSHIP  
IN SELECTED TEXTBOOKS

Human Relationship												
	Concept						Application					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
1970												
Di Vesta & Thompson Travers									3.0			
1971												
Biehler Johnson Pitts Powell & Mangum									3.1			
1972												
Charles Garrison & Magoon Lefrancois Schwartz									3.0			
1973												
Anderson & Faust CRM Books Thornburg												
1974												
Mueller Sprinthall & Sprinthall												

## Note:

The number in parenthesis is representative of learning theories presented on page 14.



### Analysis of General Trend

Some specific learning theories mentioned in the textbooks revealed a trend toward more application to the practice of teaching within the specified individual areas. In order to adequately test hypothesis one it was essential to analyze general trends in the selected textbooks.

Upon examining Table 2 through Table 9, the number of actual possibilities for demonstrating the specific application of any learning theory to teaching was determined. The results were as follows: in 1970 there were 28 actual discussions, in 1971 there were 36, in 1972 there were 48, in 1973 there were 38, and in 1974 there were 21. As indicated in Chapter two the specific application had been evaluated by the coding numbers of 3.0 and 3.1. The total number of specific application coding was tabulated for each time period. The percentages of the number of actual possibilities and specific applications are shown in Table 10. This table indicated that there was a steady increase in the percentage of specific application of learning theories for teaching from 1970 through 1974. The average percentage for the entire five-year period of specific application to teaching was not reached in the 1970 or 1971 period. It was reached in 1972 and surpassed in both 1973 and 1974.

The total number of textbooks which mentioned various learning theories in the eight areas are presented in Tables 17 and 18 in Appendix C. The tables showed that in regard to the theory of Stimulus-Response there were 55 applications across all

TABLE 10

THE PERCENTAGE OF THE SPECIFIC APPLICATION OF LEARNING  
THEORIES TO TEACHING REPRESENTED IN EACH TIME PERIOD

	Years					Total
	1970	1971	1972	1973	1974	
Number of actual possibilities	28	36	48	38	21	171
Total number of specific application codings	8	20	27	26	15	96
Percentages	28.57	55.55	56.25	68.42	71.43	56.14

areas, in Cognitive theory there were 49, in the theory of Motivation and Personality there were 10, in the theory of Drive-Reinforcement there were 9, in the theory of Hierarchical Model there were 21, and in the theory of Observational Learning there were a total of 17 applications. The largest number of applications across all areas was alluded to within the Stimulus-Response learning theory. Subject matter learning was emphasized most often through the Cognitive theory.

The learning theorists who were mentioned frequently in the selected textbooks were tabulated in Appendix D. Eight theorists who were most frequently represented in the various learning theories were Skinner, Pavlov, Bruner, Piaget, Gagné, Bandura, Miller and Dollard.

#### The Trend of Emphasis on Learning Theory Approach

The second hypothesis of the study stated that there was a trend toward emphasizing the Stimulus-Response or Cognitive approach in the organization of the content of educational psychology textbooks. The analysis of the textbooks author's method of managing content was determined. The results are presented in Table 11.

Of the total 15 selected textbooks there were eight textbooks that emphasized the Stimulus-Response approach, and six the Cognitive approach. One of the textbooks included both the Stimulus-Response and Cognitive approaches. Two textbooks were not clearly associated with either the Stimulus-Response or Cognitive approach. Of the textbooks that emphasized the Stimulus-Response

TABLE 11

TEXTBOOKS SHOWING LEARNING THEORY APPROACH TO  
ORGANIZATION BY TIME PERIOD

	Stimulus-Response Approach	Cognitive Approach	Eclectic Approach
1970			
Di Vesta & Thompson Travers		X	X
1971			
Biehler		X	
Johnson	X		
Pitts	X		
Powell & Mangum	X		
1972			
Charles Garrison & Magoon		X	X
Lefrancois	X		
Schwartz		X	
1973			
Anderson & Faust	X		
CRM Books		X	
Thornburg	X		
1974			
Mueller	X	X	
Sprinthall & Sprinthall	X		

approach, there were three published in 1971, one in 1972, two in 1973, and two in 1974. The number of textbooks which used the Cognitive approach remained relatively unchanged over the five-year period.

In summary, the first hypothesis of the study stated that there was a trend in the more recently published textbooks of educational psychology to demonstrate more of the applicability of specific learning theories to teaching in selected areas. The results of the analysis and evaluation of the content indicated that the educational psychology textbooks published during the period between 1970 and 1974 illustrated the applicability of specific learning theories to teaching. There was more application of specific learning theories in the year of 1974 than in 1970.

The second hypothesis of the study was confirmed through the analysis of the method in which the authors attempted to organize the content of educational psychology textbooks. The results demonstrated that there was a greater trend toward emphasizing the Stimulus-Response approach in managing the content of the textbooks than any other. The remaining theories of learning were not significantly represented throughout the content of the selected books in terms of the specific areas investigated.

## CHAPTER IV

### SUMMARY, CONCLUSIONS, AND IMPLICATIONS

#### Summary

Fifteen educational psychology textbooks published during the period between 1970 and 1974 were analyzed and evaluated in order to determine if there was a trend in educational psychology textbooks which illustrated the applicability of specific learning theories to the practice of teaching. Also, the study was designed to determine the theoretical approaches employed by the authors in their attempt to organize and manage the content of the textbooks. These 15 textbooks were randomly selected from a list of 18 books obtained from the Cumulative Index, Books in Print, Publishers' Catalogs, Bibliographies, and other reference sources. There were two textbooks which were published in each of the two periods of 1970 and 1974, four in 1971 and 1972, respectively, and three in 1973.

The testing of the stated hypotheses demanded the use of several different procedures. In testing the first hypothesis that a trend existed which showed greater applicability of specific learning theories to teaching the content was analyzed to determine the management of specific areas. These areas were comprised of Subject Matter Learning, Objectives, Research Reporting, Instructional Strategies, Individual Differences Relating to Adaptation,

Teaching Models, Motivation, and Human Relationship. The specific learning theories which were evaluated in these respective areas were: Stimulus-Response, Cognitive, Motivation and Personality, Drive-Reinforcement, Hierarchical Model, and Observational Learning.

The concept of applicational components of the areas of the 15 selected textbooks were evaluated and recorded by the use of a coding scale. This scale consisted of seven codings which presented the extent of applicability of learning theory. Its range was 0, 1.0, 1.1, 2.0, 2.1, 3.0 and 3.1. The codings of 3.0 and 3.1 were assigned to a high level of coding which used to demonstrate specific application of learning theory to teaching. The coding of 2.0 mentioned learning theory as applicable to teaching, while the coding of 2.1 mentioned as a separate application to teaching practice. The codings of 1.0 and 1.1 were low level of codings which did not mention the application of learning theory to teaching. The zero coding showed that there was no learning theory presenting in selected areas. The data included the analysis of content, management of individual areas, and the general trend which were presented in tabular form.

In testing the second hypothesis the preface and introductory chapter of each textbook were examined in order to determine what theoretical approach was mentioned or implied by the respective authors. The results were presented in tabular form, also.

In view of the first hypothesis it was determined that a trend existed in the more recently published textbooks of

educational psychology which demonstrated more of the applicability of specific learning theories to the practice of teaching. From the analysis of content the areas of subject matter learning, instructional strategies, individual differences relating to adaptation, and teaching models showed a slight increase of application in the last three years. The areas of Objectives, Research Reporting, Motivation, and Human Relationship remained relatively unchanged. In the analysis of the individual areas, all except Human Relationship and Research Reporting increased in application of specific learning theories to teaching presented in subject matter learning, objectives, instructional strategies, individual differences relating to adaptation, teaching models, and motivation. The area of Research Reporting remained unchanged. Most learning theories disregarded the area of Human Relationship. In the analysis of the material to determine the existence of a general trend, a comprehensive examination of all eight areas showed that 56.14 percent of the actual discussion of learning theories was directed toward the practice of teaching. The actual discussion of specific learning theories to the practice of teaching increased during the period of 1970 to 1974 as the following percentages illustrated: 28.57 in 1970, 55.55 in 1971, 56.25 in 1972, 68.42 in 1973, and 71.43 in 1974.

In testing the second hypothesis it was found that eight textbooks emphasized the Stimulus-Response approach and that this theoretical approach had increased steadily in recent years. Six textbooks subsumed the Cognitive approach and remained relatively unchanged.



### Conclusions

The findings from this investigation seemed to warrant the following conclusions:

(1) There is a trend in recently published educational psychology textbooks toward applying the principles of learning to the practice of teaching. Of the six specific learning theories presented, three showed more application to teaching in the six of the total eight selected areas. The Stimulus-Response theory is presented in the area of objectives, instructional strategies, individual differences relating to adaptation, and teaching models. The Cognitive theory is revealed in the areas of subject matter learning, instructional strategies, and teaching models. The areas of teaching models and motivation also reflected the application of Observational Learning theory.

(2) Most textbooks discussed principles of learning applying to teaching, focusing on the learning theorists of Skinner, Pavlov, Paiget, Bruner, Gagné, and Bandura.

(3) Various kinds of learning in the eight selected areas have not been embraced successfully by any single learning theory. It might be expected that the teaching-learning process is too broad and varied to be the subject of a single theory.

(4) Most textbook authors use the Stimulus-Response approach for the basic method to organize the content of the textbook.

### Implications

An analysis of the data in this study has revealed several interesting conclusions which appear to suggest certain implications for future educational psychology studies. This study indicates that the heart of educational psychology is learning. A better understanding of the principles and practical applications of current learning theory would be advantageous for teachers in training. Results of the study indicate that the trend to press for relevance of learning theory in application is healthy. There is a need for a learning technologist to continually bridge the gap between theory and application.

Further investigation is needed to identify the characteristics of approach, which is an essential base for textbook authors to handle the content of educational psychology textbooks. Possibly, through such an investigation, more profitable textbooks could be construed in order to help students in the practice of teaching.

The final implication is that continued and expanded research must be initiated to identify areas of subject matter in educational psychology textbooks which are more appropriate to applicability of some learning theories. Those current new learning theories may initiate the necessary action to develop this goal in the field of educational psychology.

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APPENDIX A  
THE FIFTEEN SELECTED EDUCATIONAL  
PSYCHOLOGY TEXTBOOKS

## SELECTED TEXTBOOKS LISTING

- Anderson, R. C. and Faust, C. W. Educational Psychology: The Science of Instruction and Learning. New York: Dodd, Mead & Co., 1973.
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APPENDIX B

THE CODING OF THE EIGHT AREAS TREATED  
BY LEARNING THEORIES AS PRESENTED  
IN EACH TEXTBOOK

TABLE 12

THE EXTENT OF APPLICATION OF LEARNING THEORIES  
REPRESENTING EIGHT AREAS IN 1970 TEXTBOOKS

Area	Textbooks	
	Di Vesta & Thompson	Travers
Subject Matter Learning		
Concept		
Definition	0	0
Interpretation	0	0
Application		
Structure and Sequence of		
School Materials	(2) 2.0	0
	(3) 2.0	
	(5) 2.0	
Organization of Knowledge	(2) 2.0	0
	(3) 2.0	
	(5) 2.0	
Objectives		
Concept		
Definition	0	0
Interpretation	0	0
Application		
Methods of Utilization for		
Teacher	0	0
Student Understands in		
Instructional Procedure	0	0
Evaluation of Teaching Tasks	0	0

TABLE 12-Continued

Area	Textbooks	
Research Reporting		
Reference Provided	(1) 1.0	(1) 1.0
	(2) 3.1	
	(3) 2.0	
	(5) 1.0	
Instruction Strategies		
Concept		
Definition	0	0
Interpretation	0	(2) 2.0
Application		
Programmed Instruction	(1) 3.1	(1) 2.0
	(2) 3.0	
	(5) 2.0	
Procedure	(1) 2.0	
	(2) 3.0	
	(3) 3.1	
	(5) 2.0	(5) 2.0
	(6) 3.0	
Technique		
	(3) 2.0	(1) 2.0
	(5) 3.1	(5) 2.0
Individual Differences Relating to Adaptation		
Concept		
Abilities	0	(1) 1.0
		(2) 1.0
Behavior		(1) 1.0
	(3) 2.0	(3) 2.0
Application		
Diagnosis and Remedial		
Process	(6) 2.0	0
Suggestion of Methods for		
Adjustment	(3) 2.0	0
	(6) 2.0	

TABLE 12-Continued

Area	Textbooks	
Teaching Models		
Concept Interpretation	0	0
Application Types of Models The Process of Helping Effective Teaching in Classroom	0 0 0	0 0 0
Motivation		
Concept Interpretation	(1) 1.0 (2) 1.0 (4) 1.0	(1) 1.0
Application Methods for Utilization of the Concept Modes of Guiding for Teacher in Classroom	(3) 3.0 (3) 3.0	0 0
Human Relationship		
Concept Definition Interpretation	0 0	0 0
Application The Climate of Classroom Types of Relationship Utilization of the Concept to Teaching	(3) 3.0 0 (3) 3.0	0 0 0

**Note:**

The number in parenthesis is representative of learning theories presented on page 14.

TABLE 13

THE EXTENT OF APPLICATION OF LEARNING THEORIES  
REPRESENTING EIGHT AREAS IN 1971 TEXTBOOKS

Area	Textbooks			
Subject Matter Learning	Biehler	Johnson	Pitts	Powell & Mangum
Concept				
Definition	0	0	0	0
Interpretation	0	(2) 1.0	0	0
Application				
Structure and Sequence of				
School Materials	(1) 2.0	0	0	
	(2) 3.0			(2) 3.0
				(4) 3.1
	(5) 3.0			
Organization of Knowledge	(2) 3.0	0	0	(2) 3.0
				(4) 3.1
Objectives				
Concept				
Definition	0	0	0	0
Interpretation	0	0	0	0
Application				
Methods of Utilization				
for Teacher	(5) 2.0	0	0	0
Student Understands in				
Instructional Procedure	(5) 2.0	0	0	(4) 2.0
				(5) 2.0
Evaluation of Teaching				
Tasks	0	0	0	0

TABLE 13-Continued

Area	Textbooks			
	Biehler	Johnson	Pitts	Powell & Mangum
Research Reporting				
Application Reference Provided	(1) 1.0 (2) 1.0	(1) 1.0	(1) 3.1	(1) 2.0
Instruction Strategies				
Concept				
Definition	0	0	0	0
Interpretation	0	0	0	0
Application				
Programmed Instruction	(1) 3.1 (1) 3.1 (2) 3.1	0 0	(1) 3.0 (1) 3.0	(1) 2.0 (1) 3.0 (2) 3.0 (4) 3.1
Procedure	(5) 3.1			
Technique	(1) 3.1 (2) 3.1	0	(1) 3.0	(1) 3.0 (2) 3.0 (4) 3.1
	(5) 3.1			
Individual Differences Relating to Adaptation				
Concept				
Abilities	(2) 1.0	0	0	0
Behavior	(2) 1.0	0	0	0
Application				
Diagnosis and Remedial Process	(1) 3.1 (2) 3.1	(1) 2.1	(1) 3.1	0
Suggestion of Methods for Adjustment	(1) 3.1 (2) 3.1	(1) 2.1	(1) 3.1	0

TABLE 13-Continued

Area	Textbooks			
Teaching Models	Biehler	Johnson	Pitts	Powell & Mangum
Concept Interpretation	0	0	0	0
Application Types of Models	0	0	0	0
The Process of Helping Effective Teaching in Classroom	0	0	0	0
Motivation				
Concept Interpretation	(2) 1.0	(1) 1.0	(1) 2.0	(1) 1.0 (4) 3.0
Application Methods for Utilization of the Concept	(1) 3.0 (2) 3.1 (3) 3.0	0	0	(4) 3.1
Modes of Guiding for Teacher in Classroom	(2) 3.1 (3) 3.0	0	0	(4) 3.1
Human Relationship				
Concept Definition Interpretation	0 0	0 0	0 0	0 0
Application The Climate of Class- room	(2) 3.1	0	0	0
Types of Relationship	0	0	0	0
Utilization of the Concept to Teaching	(2) 3.0	0	0	0

## Note:

The number in parenthesis is representative of learning theories presented on page 14.

TABLE 14

THE EXTENT OF APPLICATION OF LEARNING THEORIES  
REPRESENTING EIGHT AREAS IN 1972 TEXTBOOKS

Area	Textbooks			
	Charles	Garrison & Magoon	Lefrancois	Schwartz
Subject Matter Learning				
Concept				
Definition	0	0	0	0
Interpretation	(2) 2.0	0	0	0
Application				
Structure and Sequence of School Materials	(3) 2.0	(2) 3.0 (5) 2.0	(2) 3.1	(2) 3.0
Organization of Knowledge	(3) 2.0	(2) 3.0 (5) 2.0	(2) 3.1	(2) 3.0
Objectives				
Concept				
Definition	0	0	0	0
Interpretation	0	0	0	0
Application				
Methods of Utilization for Teacher	0	0	0	0
Student Understands in Instructional Procedure	0	(5) 2.0	0	0
Evaluation of Teaching Tasks	0	0	0	0



TABLE 14-Continued

Area	Textbooks			
	Charles	Garrison & Magoon	Lefrancois	Schwartz
Research Reporting				
Application				
Reference Provided	(1) 1.0	(1) 1.0 (2) 3.0 (6) 2.0	(1) 3.0 (4) 1.0	(1) 2.0 (2) 3.0
Instruction Strategies				
Concept				
Definition	0	0	0	0
Interpretation	0	0	0	0
Application				
Programmed Instruc- tion	(1) 2.0	(1) 3.1 (1) 2.0 (2) 3.0	(1) 3.1 (2) 3.1 (4) 2.0	0 (1) 3.1 (2) 3.0
Procedure	(3) 3.0 (5) 3.0 (6) 2.0	(5) 3.1	(6) 2.0	
Technique	(2) 3.0 (3) 3.0 (5) 3.0	(2) 3.0 (5) 3.1	(1) 3.1 (2) 3.0 (6) 2.0	(1) 3.1 (2) 3.0 (5) 3.0
Individual Differences Relating to Adaptation				
Concept				
Abilities	0	(2) 1.0	(2) 1.0	(2) 3.0
Behavior	(1) 3.0	(1) 3.0	0	0
Application				
Diagnosis and Remedial Process	(1) 3.0	0	(1) 3.0 (6) 2.0	(1) 3.0
Suggestion of Methods for Adjustment	(1) 3.1	(1) 3.0	(1) 3.0 (6) 2.0	0

TABLE 14-Continued

Area	Textbooks			
	Charles	Garrison & Magoon	Lefrancois	Schwartz
Teaching Models				
Concept				
Interpretation	0	0	0	0
Application				
Types of Models	0	0	0	0
The Process of Help- ing Effective Teaching in Class- room	(1) 3.0	0	(6) 2.0	0
Motivation				
Concept				
Interpretation	0	(1) 2.0 (2) 1.0	(1) 1.0	(2) 1.0
Application				
Methods for Utiliza- tion of the Con- cept	0	(2) 3.0	0	0
Modes of Guiding for Teacher in Class- room	0	(2) 3.0	0	0
Human Relationship				
Concept				
Definition	0	0	0	0
Interpretation	0	0	0	0
Application				
The Climate of Class- room	0	0	0	0
Types of Relationship	0	0	0	0
Utilization of the Concept to Teaching	0	0	(2) 3.0	0

## Note:

The number in parenthesis is representative of learning theories presented on page 14.

TABLE 15

THE EXTENT OF APPLICATION OF LEARNING THEORIES  
REPRESENTING EIGHT AREAS IN 1973 TEXTBOOKS

Area	Textbooks		
	Anderson & Faust	CRM Books	Thornburg
Subject Matter Learning			
Concept			
Definition	0	0	0
Interpretation	(1) 3.0	0	0
Application			
Structure and Sequence of School Materials	0	(5) 2.0	0
Organization of Knowledge	(2) 3.0	(5) 2.0	0
Objectives			
Concept			
Definition	0	0	0
Interpretation	0	0	0
Application			
Methods of Utilization for Teacher	0	0	0
Student Understands in Instructional Procedure	0	0	0
Evaluation of Teaching Tasks	0	0	0

TABLE 15-Continued

Area	Textbooks		
	Anderson & Faust	CRM Books	Thornburg
Research Reporting			
Application			
Reference Provided	(1) 3.0		(1) 2.0
		(2) 3.0	
	(5) 3.0	(5) 3.0	(5) 2.0
	(6) 1.0	(6) 2.0	(6) 3.1
Instruction Strategies			
Concept			
Definition	0	0	(2) 3.1
Interpretation	0	0	(2) 3.1
Application			
Programmed Instruction	0	(1) 3.1	(1) 3.1
Procedure	(1) 3.1		
	(2) 3.0	(2) 2.0	(2) 3.1
	(5) 3.0	(5) 3.1	(5) 3.1
		(6) 2.0	(6) 3.1
Technique	(1) 3.1		(1) 2.0
	(2) 3.0	(2) 3.0	(2) 3.1
	(5) 3.0	(5) 2.0	(5) 3.1
			(6) 3.1
Individual Differences Relating to Adaptation			
Concept			
Abilities	0	(1) 3.0	
		(2) 1.0	(2) 1.0
		(6) 1.0	
Behavior	(6) 1.0	0	0
Application			
Diagnosis and Remedial			
Process	(1) 3.1	0	(1) 3.1
			(6) 3.0
Suggestion of Methods for Adjustment	(1) 3.1	(1) 3.0	(1) 3.1
			(6) 3.0

TABLE 15-Continued

Area	Textbooks		
	Anderson & Faust	CRM Books	Thornburg
Teaching Models			
Concept Interpretation	0	0	0
Application			
Types of Models	0	0	0
The Process of Helping Effective Teaching in Classroom	(1) 3.1	0	(6) 3.1
Motivation			
Concept Interpretation	(1) 1.0	0	(1) 1.0
Application			
Methods for Utilization of the Concept	0	0	(6) 3.0
Modes of Guiding for Teacher in Classroom	0	0	(6) 3.0
Human Relationship			
Concept			
Definition	0	0	0
Interpretation	0	0	0
Application			
The Climate of Classroom	0	0	0
Types of Relationship	0	0	0
Utilization of the Concept to Teaching	0	0	0

## Note:

The number in parenthesis is representative of learning theories presented on page 14.

TABLE 16

THE EXTENT OF APPLICATION OF LEARNING THEORIES  
REPRESENTING EIGHT AREAS IN 1974 TEXTBOOKS

Area	Textbooks	
	Mueller	Sprinthall & Sprinthall
Subject Matter Learning		
Concept		
Definition	0	0
Interpretation	0	0
Application		
Structure and Sequence of		
School Materials	(2) 3.1	(2) 3.0
Organization of Knowledge	(2) 3.1	(2) 3.0
Objectives		
Concept		
Definition	0	0
Interpretation	0	0
Application		
Methods of Utilization		
for Teacher	(2) 3.0	(1) 3.1
Student Understands in		
Instructional Procedure	0	0
Evaluation of Teaching		
Tasks	0	0

TABLE 16-Continued

Area	Textbooks	
	Mueller	Sprinthall & Sprinthall
Research Reporting		
Application		
Reference Provided	(4) 3.0	(2) 2.0
Instruction Strategies		
Concept		
Definition	0	0
Interpretation	0	0
Application		
Programmed Instruction	(1) 3.1	0
Procedure	(1) 3.1	(1) 3.1
	(2) 3.1	(2) 3.0
Technique	(1) 3.1	(1) 3.1
	(2) 3.1	(2) 3.0
Individual Differences		
Relating to Adaptation		
Concept		
Abilities	(2) 1.0	(2) 2.0
Behavior	(1) 3.1	0
	(4) 2.0	
Application		
Diagnosis and Remedial		
Process	(1) 3.1	(1) 3.1
	(2) 3.0	
Suggestion of Methods of		
Adjustment	(1) 3.1	(1) 3.1

TABLE 16-Continued

Area	Textbooks	
	Mueller	Sprinthall & Sprinthall
Teaching Models		
Concept		
Interpretation	0	0
Application		
Types of Models	0	(2) 3.1
The Process of Helping Effective Teaching in Classroom	0	(2) 3.1
Motivation		
Concept		
Interpretation	(1) 1.0 (2) 1.0	0
Application		
Methods for Utilization of the Concept	0	0
Modes of Guiding for Teacher in Classroom	(6) 3.0	0
Human Relationship		
Concept		
Definition	0	0
Interpretation	0	0
Application		
The Climate of Classroom	0	0
Types of Relationship	0	0
Utilization of the Concept to Teaching	0	0

## Note:

The number in parenthesis is representative of learning theories presented on page 14.



APPENDIX C

NUMBER OF LEARNING THEORIES DISCUSSED  
IN TEXTBOOKS BY SELECTED AREAS

TABLE 17

NUMBER OF TEXTBOOKS REPRESENTING THE APPLICATION OF  
LEARNING THEORIES BY AREA

Area	Stimulus- Response	Cognitive	Motivation & Personality	Drive & Reinforcement	Hierarchical Model	Observational Learning
Subject Matter Learning	2	11	2	1	4	0
Objectives	1	2	0	1	3	0
Research Reporting	12	6	1	2	4	4
Instructional Strategies	14	13	2	2	9	5
Individual Differences Relating to Adapta- tion	13	9	2	1	1	4
Teaching Models	2	1	0	0	0	2
Motivation	11	5	2	2	0	2
Human Relationship	0	2	1	0	0	0
Total Number of Applications	55	49	10	9	21	17

TABLE 18

## LEARNING THEORIES PRESENTED IN VARIOUS AREAS OF EACH TEXTBOOKS

Time Period & Author	Learning Theories							
	A <sup>a</sup>	B <sup>b</sup>	C <sup>c</sup>	D <sup>d</sup>	E <sup>e</sup>	F <sup>f</sup>	G <sup>g</sup>	H <sup>h</sup>
1970								
Di Vesta & Thompson	(2) (3) (5)		(1) (2) (3) (5)	(1) (2) (3) (5) (6)	(3) (6)		(1) (2) (3) (4)	(3)
Travers			(1)	(1) (2) (5)	(1) (2) (3)		(1)	
1971								
Biehler	(1) (2) (5)	(5)	(1) (2)	(1) (2) (5)	(1) (2)		(1) (2) (3)	(2)
Johnson	(2)		(1)	(1)	(1)		(1)	
Pitts			(1)	(1)	(1)		(1)	
Powell & Mangum	(2) (4)	(4) (5)	(1)	(1) (2) (4)			(1) (4)	
1972								
Charles	(2) (3)		(1)	(1) (2) (3) (5) (6)	(1)	(1)		
Garrison & Magoon	(2)	(5)	(1) (2) (6)	(1) (2) (5)	(1) (2)		(1) (2)	
Lefrancois	(2)		(1) (4)	(1) (2) (4) (6)	(1) (2) (6)	(6)	(1)	(2)
Schwartz	(2)		(1) (2)	(1) (2) (5)	(1) (2)		(2)	
1973								
Anderson & Faust	(1) (2)		(1) (5) (6)	(1) (2) (5)	(1) (6)	(1)	(1)	
CRM Books	(5)		(2) (5) (6)	(1) (2) (5) (6)	(1) (2) (5)			
Thornburg			(1) (5) (6)	(1) (2) (5) (6)	(1) (2) (6)	(6)	(1) (6)	
1974								
Mueller	(2)	(2)	(4)	(1) (2)	(1) (2) (4)		(1) (2) (6)	
Sprinthal & Sprinthal	(2)	(1)	(2)	(1) (2)	(1) (2)	(2)		

a- Subject Matter Learning  
d- Instructional Strategies  
g- Motivation

b- Objectives  
e- Individual Differences Relating to  
Adaptation  
h- Human Relationship

c- Research Reporting  
f- Teaching Models

APPENDIX D

LEARNING THEORISTS DISCUSSED IN  
TEXTBOOKS BY SELECTED AREAS

TABLE 19

## STIMULUS-RESPONSE LEARNING THEORY

Time Period & Author	Learning Theorists							
	a <sup>a</sup>	b <sup>b</sup>	c <sup>c</sup>	d <sup>d</sup>	e <sup>e</sup>	f <sup>f</sup>	g <sup>g</sup>	h <sup>h</sup>
1970								
Di Vesta & Thompson	0	0	Estes 1.0	Skinner 3.1	0	0	Hull 1.0	0
Travers	0	0	Pavlov 1.0	Hull 2.0	Watson 1.0	0	Hull 1.0	0
			Skinner 1.0	Thorndike 2.0	Thorndike 1.0			
			Guthrie 1.0	Skinner 2.0	Skinner 1.0			
1971								
Biehler	Skinner 2.0	0	Pavlov 1.0	Skinner 3.1	Skinner 3.1	0	(3.0)	0
			Thorndike 1.0					
			Watson 1.0					
Johnson	0	0	(1.0)	0	Skinner 2.1	0	Skinner 1.0	0
Pitts	0	0	(3.1)	(3.0)	(3.1)	0	(2.0)	0
Powell & Mangum	0	0	Thorndike 2.0	Skinner 3.0	0	0	Hull 1.0	0
1972								
Charles	0	0	Skinner 1.0	Skinner 2.0	(3.1)	(3.0)	0	0
Garrison & Magoon	0	0	Thorndike 1.0	Skinner 3.1	(3.0)	0	Skinner 2.0	0
Lefrancois	0	0	(3.1)	(3.1)	Skinner 3.1	0	Hull 1.0	0
Schwartz	0	0	(2.0)	Skinner 3.1	(3.0)	0	0	0
1973								
Anderson & Faust	Pavlov 3.0	0	Pavlov 3.0	Skinner 3.1	Skinner 3.1	Skinner 3.1	Hull 1.0	0
CRM Books	0	0	0	Skinner 3.1	Skinner 3.0	0	0	0
Thornburg	0	0	Pavlov 2.0	Skinner 3.1	Pavlov 3.0	0	Hull 1.0	0
			Skinner 2.0		Skinner 3.1		Skinner 1.0	0
							Thorndike 1.0	0
1974								
Mueller	0	0	0	(3.1)	(3.1)	0	(1.0)	0
Sprinthall & Sprinthall	0	Skinner 3.1	0	Skinner 3.1	Skinner 3.1	0	0	0

a- Subject Matter Learning  
 i- Instructional Strategies  
 g- Motivation

b- Objectives  
 e- Individual Differences Relating to  
 Adaptation  
 h- Human Relationship

c- Research Reporting  
 f- Teaching Models

Note:

The coding in parenthesis indicates that the author does not mention the learning theorist.

TABLE 20

## COGNITIVE THEORY

Time Period & Author	Learning Theorists							
	A <sup>a</sup>	B <sup>b</sup>	C <sup>c</sup>	D <sup>d</sup>	E <sup>e</sup>	F <sup>f</sup>	G <sup>g</sup>	H <sup>h</sup>
1970 Di Vesta & Thompson Travers	Bruner 2.0 0	0 0	Piaget 3.1 0	Piaget 3.0 Bruner 2.0	0 Piaget 1.0 Tolman 1.0	0 0	Tolman 1.0 0	0 0
1971 Biehler	Bruner 3.0	0	Kohler 1.0 Lewin 1.0	(3.1)	Bruner 3.1 Piaget 1.0	0	(3.1)	(3.1)
Johnson	(1.0)	0	0	0	0	0	0	0
Pitts	0	0	0	0	0	0	0	0
Powell & Mangum	(3.0)	0	0	(3.0)	0	0	0	0
1972 Charles Garrison & Magoon	Piaget 2.0 Bruner 3.0 Gestalt 3.0	0 0	0 Bruner 3.0	Piaget 3.0 Gestalt 3.0	0 Piaget 1.0	0 0	0 Bruner 3.0 Piaget 1.0	0 0
Lefrancois	Piaget 3.0 Ausubel 3.1 Bruner 3.1	0	0	Bruner 3.1	Piaget 1.0	0	0	Piaget 3.0
Schwartz	Gestalt 3.0	0	Gestalt 3.0 Piaget 3.0	Bruner 3.0 Gestalt 3.0	Piaget 3.0	0	Lewin 1.0	0
1973 Anderson & Faust CRM Books	Bruner 3.0 0	0 0	0 Bruner 3.0	Bruner 3.0 Bruner 3.0	0 Bruner 1.0 Piaget 1.0	0 0	0 0	0 0
Thornburg	0	0	0	Bruner 3.1	Piaget 1.0	0	0	0
1974 Mueller	Combs 3.1	Gestalt 3.0	0	Bruner 3.1 Piaget 3.1	Gestalt 3.0	0	Gestalt 1.0	0
Sprinthall & Sprinthall	Bruner 3.0 Piaget 3.0	0	Piaget 2.0	Bruner 3.0	Bruner 2.0 Piaget 2.0	Bruner 3.1	0	0

a- Subject Matter Learning  
d- Instructional Strategies  
g- Motivation

b- Objectives  
e- Individual Differences Relating to  
Adaptation  
h- Human Relationship

c- Research Reporting  
f- Teaching Models

Note:

The coding in parenthesis indicates that the author does not mention the learning theorist.

TABLE 21

## MOTIVATION AND PERSONALITY THEORY

Time Period & Author	Learning Theorists							
	A <sup>a</sup>	B <sup>b</sup>	C <sup>c</sup>	D <sup>d</sup>	E <sup>e</sup>	F <sup>f</sup>	G <sup>g</sup>	H <sup>h</sup>
1970 Di Vesta & Thompson Travers	Wright 2.0 0	0 0	Atkinson 2.0 0	(3.1) 0	(3.0) (2.0)	0 0	(3.0) 0	(3.0) 0
1971 Biehler Johnson Pitts Powell & Mangum	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	(3.0) 0 0 0	0 0 0 0
1972 Charles Garrison & Magoon Lefrancois Schwartz	Harlow 2.0 0 0 0	0 0 0 0	0 0 0 0	Maslow 3.0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
1973 Anderson & Faust CRM Books Thornburg	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
1974 Mueller Sprinthall & Sprinthall	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0

a- Subject Matter Learning  
d- Instructional Strategies  
g- Motivation

b- Objectives  
e- Individual Differences Relating to Adapta-  
tion  
h- Human Relationship

c- Research Reporting  
f- Teaching Models

## Note:

The coding in parenthesis indicates that the author does not mention the learning theorist.

TABLE 22

## DRIVE-REINFORCEMENT THEORY

Time Period & Author	Learning Theorists							
	A <sup>a</sup>	B <sup>b</sup>	C <sup>c</sup>	D <sup>d</sup>	E <sup>e</sup>	F <sup>f</sup>	G <sup>g</sup>	H <sup>h</sup>
1970								
Di Vesta & Thompson	0	0	0	0	0	0	Miller & Dollard 1.0	0
Travers	0	0	0	0	0	0	0	0
1971								
Biehler	0	0	0	0	0	0	0	0
Johnson	0	0	0	0	0	0	0	0
Pitts	0	0	0	0	0	0	0	0
Powell & Mangum	Miller & Dollard 3.1	Miller & Dollard 2.0	0	Miller & Dollard 3.1	0	0	Miller & Dollard 3.1	0
1972								
Charles	0	0	0	0	0	0	0	0
Garrison & Magoon	0	0	0	0	0	0	0	0
Lefrancois	0	0	Miller & Dollard 2.0	Miller & Dollard 2.0	Miller & Dollard 2.0	0	0	0
Schwartz	0	0	0	0	0	0	0	0
1973								
Anderson & Faust	0	0	0	0	0	0	0	0
CKM Books	0	0	0	0	0	0	0	0
Thornburg	0	0	0	0	0	0	0	0
1974								
Mueller	0	0	Miller & Dollard 3.0	0	Miller & Dollard 2.0	0	0	0
Sprinthall & Sprinthall	0	0	0	0	0	0	0	0

a- Subject Matter Learning  
d- Instructional Strategies  
g- Motivation

b- Objectives  
e- Individual Differences Relating to  
Adaptation  
h- Human Relationship

c- Research Reporting  
f- Teaching Models



TABLE 23

## HIERARCHICAL MODEL

Time Period & Author	Learning Theorist							
	A <sup>a</sup>	B <sup>b</sup>	C <sup>c</sup>	D <sup>d</sup>	E <sup>e</sup>	F <sup>f</sup>	G <sup>g</sup>	H <sup>h</sup>
1970 Di Vesta & Thompson Travers	Gagne 2.0 0	0 0	Gagne 1.0 0	Gagne 3.1 Gagne 2.0	0 0	0 0	0 0	0 0
1971 Biehler Johnson Pitts Powell & Mangum	Gagne 3.0 0 0 0	Gagne 2.0 0 0 Gagne 2.0	0 0 0 0	Gagne 3.1 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
1972 Charles Garrison & Magoon Lefrancois Schwartz	0 Gagne 2.0 0 0	0 Gagne 2.0 0 0	0 0 0 0	Gagne 3.0 Gagne 3.1 0 Gagne 3.0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
1973 Anderson & Faust CRM Books Thornburg	0 Gagne 2.0 0	0 0 0	Gagne 3.0 Gagne 3.0 Gagne 2.0	Gagne 3.0 Gagne 3.1 Gagne 3.1	0 Gagne 1.0 0	0 0 0	0 0 0	0 0 0
1974 Mueller Sprinthall & Sprinthall	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0

a- Subject Matter Learning  
d- Instructional Strategies  
g- Motivation

b- Objectives  
e- Individual Differences Relating to  
Adaptation  
h- Human Relationship

c- Research Reporting  
f- Teaching Models

TABLE 24

## OBSERVATIONAL LEARNING

Time Period & Author	Learning Theorists							
	A <sup>a</sup>	B <sup>b</sup>	C <sup>c</sup>	D <sup>d</sup>	E <sup>e</sup>	F <sup>f</sup>	G <sup>g</sup>	H <sup>h</sup>
1970								
Di Vesta & Thompson	0	0	0	Bandura & Walters 3.0	Coopersmith 2.0	0	0	0
Travers	0	0	0	0	0	0	0	0
1971								
Biehler	0	0	0	0	0	0	0	0
Johnson	0	0	0	0	0	0	0	0
Pitts	0	0	0	0	0	0	0	0
Powell & Mangum	0	0	0	0	0	0	0	0
1972								
Charles	0	0	0	Bandura 2.0	0	0	0	0
Garrison & Magoon	0	0	Katz 2.0	0	0	0	0	0
Lefrancois	0	0	0	Bandura & Walters 2.0	Bandura 2.0	Bandura & Walters 2.0	0	0
Schwartz	0	0	0	0	0	0	0	0
1973								
Anderson & Faust	0	0	Bandura 1.0	Bandura 2.0	0	0	0	0
CRM Books	0	0	Bandura 2.0	Bandura 3.1	0	0	0	0
Thornburg	0	0	Bandura 3.1	0	Bandura 3.0	Bandura 3.1	Bandura 3.0	0
1974								
Mueller	0	0	0	0	0	0	Bandura 3.0	0
Sprinthall & Sprinthall	0	0	0	0	0	0	0	0

a- Subject Matter Learning  
d- Instructional Strategies  
g- Motivation

b- Objectives  
e- Individual Differences Relating to  
Adaptation  
h- Human Relationship

c- Research Reporting  
f- Teaching Models